HARTSHILL COPSE
UPPER BUCKLEBURY
WEST BERKSHIRE

POST-EXCAVATION ASSESSMENT AND UPDATED PROJECT DESIGN

CA PROJECT: 1494
CA REPORT: 03096

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SUMMARY

Site Name:	Hartshill Copse
Location:	Upper Bucklebury, West Berkshire
NGR:	SU 5310 6850
Type:	Excavation
Date:	January-April 2003
Location of Archive:	Newbury District Museum/West Berkshire Heritage Service
Accession no.	2001.1
Site Code:	HCB 03

An archaeological excavation was undertaken by Cotswold Archaeology from January to April 2003 at Hartshill Quarry, Hartshill Copse, Upper Bucklebury, West Berkshire. The project was funded by English Heritage through the Aggregates Levy Sustainability Fund. The excavation followed previous excavations conducted in 2002 prior to gravel extraction elsewhere within the gravel quarry which were carried out as a result of the findings of an archaeological evaluation undertaken in 1986.

The excavation identified extensive settlement activity throughout the area of ALSF-funded fieldwork including a ditched enclosure, two long post alignments, three roundhouses and a single cremation, as well as numerous pits and postholes. The majority of these features date to the Late Bronze Age and Late Bronze Age to Early Iron Age. In addition, a small number of features have been dated to the Early Iron Age, the Middle Iron Age and the Roman periods.

This document presents a quantification and assessment of the evidence recovered from the excavation. It considers the evidence in its local, regional and national context, and presents an updated project design for a programme of post-excavation analysis to bring the results to appropriate publication.

1. INTRODUCTION

1.1 Between January and April 2003 Cotswold Archaeology (CA) carried out an archaeological excavation funded by the Aggregates Levy Sustainability Fund (ALSF) at Hartshill Copse, Upper Bucklebury, West Berkshire (centred on NGR: SU 5310 6850; Fig. 1). The site comprises part of an active gravel quarry which is located to the east of Hartshill Copse and Dunston Wood, west of Burden's Heath Plantation, and bounded to the south by Harts Hill Road. The whole quarry site is *c.*15ha in area and lies on a ridge (131m AOD) above the Kennet Valley. The area of the excavation carried out in 2003 occupies approximately 1 ha in the south-western corner of the site. The underlying geology is plateau gravel.

Planning background

1.2 The whole site of the proposed gravel quarry was evaluated on behalf of ARC in September 1986 by Oxford Archaeological Unit (Miles & Collard 1986). Following the evaluation, planning consent for mineral extraction was subsequently granted in July 1989 by Berkshire County Council, subject to an Agreement under Section 106 of the Town and Country Planning Act, prior to the introduction of *PPG 16: Archaeology and Planning* by the Department of the Environment.

1.3 Subsequently, the site was acquired by Harleyford Aggregates Limited, who proposed a phased programme of works comprising the extraction of gravel from four areas, each to be dealt with in consecutive order, and each requiring archaeological recording prior to extraction, in accordance with the Section 106 Agreement. Phase 1, occupying the south-western corner of the site, was stripped of topsoil in early 2001 and was found to contain considerable archaeological remains, far in excess of what would reasonably have been anticipated from the evaluation. Discussions over the course of 2001 and 2002 between the West Berkshire Archaeological Officer (for the Local Planning Authority), Cotswold Archaeology (on behalf of the quarry operators) and English Heritage resulted ultimately in an approach to the Aggregates Levy Sustainability Fund for resources to finance the excavation of this phase, and consequently any fieldwork in this area was delayed, pending the result of the application.

1.4 In the interim, while the issue of Phase 1 was resolved, the quarry operators proceeded with Phase 2 of extraction, in the eastern part of the site. Topsoil stripping commenced in the latter part of 2001, proceeding in a general north-

westerly direction from the south-eastern corner of the site. The operators subsequently decided to continue the topsoil removal programme, and consequently a large part of Phase 3 and the whole of Phase 4 were stripped. In advance of extraction in these areas a total area of some 6ha was subject to archaeological excavation, which was carried out by Cotswold Archaeology between January and May 2002. The extent of the works is shown on Fig. 2, and the excavated features from Phases 2 to 4 are also plotted on this figure.

Archaeological background

1.5 The 1986 evaluation, which took the form of machine-excavated trial trenches, identified the remains of a Late Bronze Age settlement covering an area of *c*. 200m x 100m on the summit of the ridge. Within this area, to the west, pottery cremation vessels of Middle to Late Bronze Age date were found. Smaller, discrete areas of prehistoric features were located further north, and Romano-British features were identified to the south-west; the latter lies beyond the currently proposed extraction area.

1.6 The 2002 excavations identified archaeological deposits across extensive areas of much of the site. No post-excavation assessment or analysis has as yet been carried out on the data or artefacts recovered from the excavations, but a preliminary interpretation may be based on the spot-dates of pottery recovered. The earliest features comprised Late Bronze Age to Early Iron Age pits located in two distinct parts of the site. Iron Age activity was recorded across the site, but concentrated in the same two areas of previous activity. These features mostly comprised pits and postholes with no clear structural associations, although a ring ditch and several lengths of ditch were also identified. A number of features close to the ring ditch represented an area of industrial activity, including ironworking. In addition, two urned cremations of Iron Age date were also identified as well as a number of unurned cremations. Several tree-boles were also investigated and in some instances were found to contain evidence of activity represented by burning together with Iron Age artefactual material.

1.7 A number of Roman ditches were revealed, including three phases of an enclosure. Two ironsmelting hearths were also identified, one of which contained the *in situ* slag produced from the (last) firing of the furnace, as well as a small amount of pottery; a small quantity of Roman pottery was found in the soil deposit in the upper fill of this hearth, but it is possible that the hearths belong to an earlier phase of

occupation. All of the dateable Roman deposits dated from the mid 1st to 2nd century AD.

1.8 Medieval activity was represented by a small enclosure containing the beam slots of a building within a ditched enclosure, a series of pits and postholes and a number of other ditches forming an associated field system. Many of these features produced artefactual material, all of which dated to the 11th to 13th centuries AD. The latest features encountered in the 2002 excavation were three large post-medieval field boundary ditches. Cartographic and documentary research shows that the whole site was under arable cultivation from at least the earlier part of the 19th century.

1.9 Formal application was made to the ALSF in 2002 and funding was agreed for the preparation of a Project Design. Following approval of the Project Design and the associated costs in December 2002, excavation of the archaeological remains in the Phase 1 extraction area was carried out between January and April 2003.

2. AIMS AND OBJECTIVES

2.1 The Project Design prepared for the excavation by CA (2002) and approved by English Heritage, identified that the key objectives of the data gathering were to:

A. establish the dates, chronology and character of the settlement activity

was it continuous or episodic?
how extensive was the activity over time?
when did it start and end? is there continuity of activity through to the Middle Iron Age settlement activity elsewhere on the site?
what can be discovered about the nature of the structures on the site? how were they built? what function did thy perform?

B. determine the nature of the patterning of settlement activity within the excavated area

is there intra-site variation in deposit, structure and feature type and function?
does artefact and ecofact distribution match that patterning?
is there significance in the deposition of artefactual/ecofactual material?
how does the activity relate to the features of similar date excavated elsewhere within the quarry?
how are the secular, funerary and ritual elements of the landscape arranged in the excavated site? how do these fit into the wider contemporary landscape?

C. analyse the economic base and resource exploitation of the settlement

what technological and craft processes were carried out?

is there any evidence to allow environmental reconstruction and how reliable is that evidence? what categories of material are present/absent and why?
what was the source of raw materials?
is there any evidence for trade relationships in the artefactual material or raw materials? how local or extensive were any such links?

D. test the model of early prehistoric settlement in the Kennet valley

does the site have a specialist function within that model?
how does it fit within the chronology of sites in the area?
is the settlement activity seasonal?/episodic?/marginal?

E determine the date, nature and extent of the Roman period activity

F provide information on the survival and quality of the archaeological resource to assist in the management of the resource in similar physical locations

how truncated are features and deposits?
what types of material evidence may be expected and what has survived?
what is the best method of prospection for such sites?

G test feature-sampling strategies

H disseminate the results of the work to the widest possible audience

3. METHODOLOGY

3.1 Following unsuccessful trials of clearing by hand weed growth which had accumulated since the site was originally stripped, the site was very lightly mechanically stripped under constant archaeological supervision by a mechanical excavator fitted with a toothless ditching bucket, thus providing a surface conducive to the clear identification of the archaeological features. This revised methodology was approved by English Heritage (*per* T. Cromwell).

3.2 The excavation subsequently proceeded in accordance with the excavation methodology set out in the revised project design.

4. RESULTS

4.1 Archaeological deposits were identified across extensive areas of the stripped gravel surface. These comprised a range of features, with dateable contexts falling exclusively into three chronological periods;

Period 1: Late Bronze Age to Early Iron Age
Period 2: Romano-British
Period 3: Post-medieval

4.2 In addition, there were numerous features throughout the site that produced no artefactual material but which may be provisionally dated by association with the other features on the site.

4.3 Brief summaries of the fieldwork results, artefactual evidence and biological evidence are given below. More detailed artefactual and biological information is provided in appendices 1 to 9.

4.4 Excavated features have been provisionally grouped according to initial functional interpretation and association with other features. Each discrete identifiable group was allocated an individual identifying letter for ease of identification within the following text and on Fig. 3.

Fieldwork summary (Fig. 3)

Period 1: Late Bronze Age to Early Iron Age

4.5 Four phases of prehistoric activity were identified during the excavation, discernible either stratigraphically or by artefactual dating.

4.6 The earliest features stratigraphically were two long post alignments (H and J). These comprised closely spaced postholes, rarely more than 0.1m apart, forming slightly sinuous lines across the site. Alignment H comprised a total of 97 postholes and could be traced from the western central part of the site, extending east-south-east and turning south-eastwards where it crossed Alignment J. A narrow gully at its south-eastern end seems to represent an extension of the line. The alignment itself had a total length of some 63m and Late Bronze Age pottery was recovered from six of the postholes.

4.7 Alignment J could also be traced from the western central part of the site, slightly south of H, extending eastwards for approximately 23m before turning slightly to the north. A break in the line may represent an entrance, however given the slightness of the individual features, it is also possible that any postholes here have not survived truncation by later ploughing and erosion The alignment resumed towards

the northern edge of the site, continuing in an east-north-easterly direction beyond the limit of excavation. In total the line could be traced for a distance of approximately 81m. As in H, six postholes contained sherds of late Bronze Age pottery.

4.8 A further physically separate group of closely spaced, but more substantial postholes (E) immediately west of Roundhouse B may have been part of this phase of activity also. Burnt flint was recovered from the fills of several of the features but no artefactual dating.

4.9 A pair of roundhouses, C and D, were identified towards the south-eastern corner of the site. It was apparent in excavation that roundhouse D was stratigraphically later than the post alignment J. On the basis of the provisional dating provided by assessment of the ceramic assemblage, this pair of structures appear to represent a discrete settlement focus, distinct from a further, later, roundhouse (B) located within enclosure ditch G.

4.10 Structure C is represented by a single ring of postholes, with a few internal features. A porch was represented by two small postholes and two pits, and the entrance faced east-south-east. It was noticeable that many of the postholes along the western side of the structure contained highly carbon-rich fills, which themselves contained good quantities of dating evidence; posthole 1241 produced almost an entire vessel. A crescent-shaped pit located adjacent to the northern side of the roundhouse also contained a carbon-rich deposit which included a concentration of heat-fractured flint throughout.

4.11 Roundhouse D, to the west of C, comprised a double-ring post-built structure, with its porch facing south-east. A number of features internally were investigated and appear to represent further postholes, although their function and relationship to the internal structural layout remains unknown at present. Similarly to Structure C, a number of the postholes contained highly carbon-rich fills, from which useful amounts of dating evidence were recovered. Also, as in C, a crescent shaped pit with a carbon-rich fill containing a large amount of heat-cracked flint was identified along its northern edge, although this feature was not as substantial as its counterpart there.

4.12 Slightly to the north-west of Roundhouse C an arc of undated postholes (A) was identified. Although initial interpretation of these features suggested the remnant half of a further roundhouse, the possibility of a type of screen or windbreak associated with the roundhouse cannot be dismissed. It is likely that other postholes and pits located in this area, even if undated, form part of a contemporary activity group around the roundhouses.

4.13 The most visually distinct, and certainly the most substantial, element of the site was s the ditched enclosure (G). The excavation area included only the southern part of the enclosure, and so its full shape and dimensions remain uncertain. The enclosure is defined by three separate lengths of ditch, with entrances on the eastern and southern sides. The excavation demonstrated that the post alignments H and J both pre-dated the ditched enclosure, as the south-eastern length of ditch was found to cut across both. The provisional evidence from the artefactual assessment suggest that this enclosure ditch is later than the pair of roundhouses to the south-east.

4.14 The easternmost lengths of ditch contained two or three separate fills and were never more than 0.4m deep. They had a broad profile, with generally moderately sloping sides and a shallow rounded base. The profile and nature of the western length of ditch however, differed considerably. Excavation demonstrated that it was up to 0.85m deep, with much steeper sides descending to a 'slotted' base. A number of the excavated sections demonstrated that there had been an episode of slumping into the ditch, possibly representing bank material, before it eventually filled up through natural weathering processes. Pottery sherds were recovered from a number of the sections, a complete bi-conical spindlewhorl was also recovered from the ditch fill.

4.15 A single human cremation (P) was excavated, centrally placed between the two terminals of the eastern entrance. It was unclear in excavation whether the cremation had been contained within the pottery found in association with the cremated bone, or whether it was deposited as a separate entity within the cremation burial.

4.16 Within the enclosure, and centrally placed (in relation to the excavated part of the enclosure), Roundhouse B appeared to comprise a double-ring post-built structure, although a number of postholes associated with the external ring along the western side did not survive. Two pits outside the external ring evidently represent a porch

which faced east-south-east. Internally, several features were investigated and the majority appear to represent further postholes, although it is unclear at this stage what function these fulfilled. An anomalous feature towards the centre of the structure was found to be a tree-bole, although it is unclear whether this pre- or post-dates the roundhouse. Dating evidence, including pottery was recovered from a number of features associated with the structure, and suggest that this was contemporary with the enclosure, but later than both post alignments and the pair of roundhouses to the south-east. Other activity, mostly in the form of pits, postholes and 'scoops', was recorded across the interior of the enclosure, becoming noticeably more concentrated towards its southern end. A small number contained quantities of daub or fired clay, and one appeared to be lined with clay. A cluster of pits (T) was recorded just inside the southern entrance to the enclosure, within a concentration of postholes and stakeholes. A probable hearth (U), containing a concentration of burnt material, was recorded inside the south-western corner of the enclosure. Numerous features contained quantities of pottery, and a triangular loomweight was recovered from pit V.

4.17 Provisionally, individual structures are hard to distinguish, however a series of three probable four-post structures (Group F) have been provisionally identified within the enclosure, one of these comprising substantial post settings, and two of which produced artefactual material. A further area of scattered activity associated with this phase was recorded towards the western periphery of the excavation area. Again, a number of these contained useful amounts of dating evidence, including a further triangular loomweight.

4.18 A small number of pits were excavated which contained Middle and later Iron Age pottery, but no clear focus of activity was discernible.

Period 2: Romano-British

4.19 A small number of Roman features, dated broadly from the 2nd to 4th centuries were identified, mostly located along the southern end, and towards the south-eastern corner, of the site. A small ditch (K) crossed the site on a north-north-east/south-south-west alignment. At its southernmost visible extent an arrangement of features of contemporary date was revealed (L). This included a small ditch on a perpendicular alignment to ditch K, a pit, a posthole and two short ditch lengths. Artefactual material was recovered from the westernmost of the latter, including a brooch dated to the 2nd to 3rd centuries, and from the pit.

4.20 Two pits and a posthole dated to the Roman period were identified to the north of Roundhouse D. In addition, two further pits containing Roman pottery were recorded slightly to the west, including one in a line of three intercutting pits (S). Further Roman features were recorded towards the southern periphery of the site, including a regularly-shaped feature (Q), which was relatively large in plan, but was found to be very shallow. A substantial amount of artefactual material was recovered from its fill.

Period 3: Post-medieval

4.21 Although it contained no dating evidence itself, ditch M, which was located towards the eastern side of the excavation area and ran parallel to, and slightly to the east of, ditch K probably represents a relatively modern field boundary, as it clearly cut through a deposit containing fragments of brick.

Undated features

4.22 A considerable number of features yielded no artefactual material, however many of these can be provisionally dated by their location within the site, or in relation to other dateable features nearby; or occasionally, by their physical relationships with dateable features. Ditch N is the only feature of its type that remains undated. It is interesting to note that ditches K, M and N all share the same north-north-east/south-south-west alignment.

4.23 A large area, approximately 35m x 45m, in the south-western corner of the site had been subject to gravel extraction previously, probably in relatively recent times. In addition to the archaeological deposits identified throughout the site, a number of tree-boles were also recorded, including several that were subject to excavation. None of these features contained any evidence of an archaeological nature.

Stratigraphic record: factual data

4.24 Following the completion of the excavation an ordered, indexed, and internally consistent site archive was compiled in accordance with specification contained within Appendix 3 of MAP2 (EH 1991). A database of all contextual and artefactual evidence was also compiled and cross-referenced to spot-dating. The archive comprises the following records:

Context sheets	1696
Plans (1:100)	40
Sections (1:10, 1:20)	356
Sample sheets	197
Black and white films	25
Colour slide films	25

4.25 The survival and intelligibility of the site stratigraphy was good with archaeological remains having survived as negative features, although moderate truncation by later cultivation was apparent. Despite a relative paucity of stratigraphic relationships, most features have been assigned a preliminary phase.

Artefactual record: factual data

4.26 All finds collected during the excavation have been cleaned, marked, quantified and catalogued by context. All metalwork has been x-rayed and stabilised where appropriate.

Type	**Category**	**Sherd/frag. Count**	**Weight (g)**
Pottery	Prehistoric	2065	17270
	Roman	182	1599
	medieval	5	20
	Total	2252	18889
Fired/burnt clay	Objects	167	4375
	Miscellaneous	711	4087
CBM	Tile (Roman)	25	725
Flint	Worked	82	-
	Burnt	-	74071
Metals	Copper-alloy coin	1	
	Copper-alloy obj.	1	-
	Iron	9	
Metallurgical residues	Slag	-	2262
	Hammerscale	82	-
Stone	Worked	9	-
	Building stone	1	-
	Burnt stone	1	-

Pottery

4.27 A total of 2252 sherds of pottery weighing 18.89kg was recovered from 208 contexts. The pottery spans the Middle Bronze Age to the medieval periods.

4.28 Prehistoric pottery makes up the largest period component. The assemblage is predominantly of Late Bronze Age and Late Bronze Age to Early Iron Age date, with small quantities of Early to Middle Iron Age date and one possible sherd from a Middle Bronze Age urn. The range of fabric types appears to be chronologically specific based on distinctively different wares associated in spatially discrete locations. Visual examination of the fabrics, which are dominated by flint-tempered wares and wares with quartz sand and iron oxides, include a range of possible glauconite-bearing sandy fabrics (which cannot have been made from immediately local resources) and several fabrics bearing various amounts of vegetable matter usually in association with quartz sand or mica. The pottery is in good condition with clear evidence of usewear and surface treatments visible.

4.29 Roman pottery is present in small quantities, and mainly restricted to feature clusters on the south-eastern side of the site. A small proportion is of 1st and 2nd century date, however the bulk of the Roman pottery dates to the Late Roman period after *c.* AD 250. Almost all the Roman pottery comes from local or regional sources. Condition of the Roman pottery is generally poor.

4.30 Medieval pottery consists of a handful of mainly unstratified sherds. An earlier medieval date (12th to 13th centuries) for this material is suggested.

Fired and burnt clay

4.31 Fired clay objects comprise a single complete spindlewhorl of Late Bronze Age or Early Iron Age type and fragments of a number of clay weights of mixed Late Bronze Age and Iron Age types.

4.32 Quantities of miscellaneous fragmentary material were also recovered, including daub. A small quantity of fired clay with flint tempering has been identified as ‘pit lining’ and corresponds to material found elsewhere on contemporary (Late Bronze Age) sites.

Ceramic Building Material

4.33 Small quantities of Roman ceramic building material, including roof tile, were recovered.

Flint

4.34 A total of 82 pieces of worked flint was recovered. Pieces with secondary working are restricted to 5 retouched flakes. The remaining material comprises flakes or chips, shatter pieces, cores and 2 fragments of possible building stone (from probable Roman contexts). The overall 'fresh' condition as well as the general character of this material suggests most is contemporary with the later prehistoric settlement activity.

4.35 Large quantities of burnt flint were also recovered, overwhelmingly from later prehistoric contexts.

Metal Artefacts

4.36 All metal artefacts have been assessed by a specialist conservator and stabilised. Where appropriate metal objects have been x-rayed to facilitate identification and constructional/compositional details. All items are extremely corroded and incomplete but appear to be stable.

4.37 Metal items are small in number and consist mainly of Roman objects including iron nails and a coin and brooch of copper alloy. Of note is an iron knife of probable Early Iron Age type with traces of mineral-preserved organic material adhering to the tang.

Metallurgical Residues

4.38 The assemblage includes both micro- and macroscopic metallurgical residues. The total quantity of residue is very small, suggesting that the excavated area was probably not the focus of the metallurgical operations which were occurring in the vicinity.

4.39 Some 31 environmental samples yielded spherical hammerscale, and four samples contained flake hammerscale. The macroscopic slags include several large pieces which are best interpreted as slags from iron smelting within a non-slag tapping furnace. These smelting slags were mainly (apart from one in an Romano-British pit) found within the area enclosed by ditch G. A few slag pieces were probably from blacksmithing, and one large piece might either be from bloomsmithing or smelting.

Worked stone

4.40 Items of worked stone include quern and whetstone fragments. Single fragments of probable building stone and burnt stone were also recovered. Nearly all the finds of stone are fragmentary, but are otherwise in good condition, so that petrological identifications can readily be made.

4.41 Five of the worked stone objects are from Late Bronze Age/Early Iron Age contexts and consist of four saddle querns or fragments and one hammerstone. All are of sarsen stone and were probably sourced locally. Two saddle quern fragments from Romano-British contexts most likely represent residual later prehistoric material. A Kentish ragstone whetstone and a quartzite pivot stone, both of Roman date, complete the worked stone assemblage.

Biological record: factual data

4.42 Large-scale ecofacts are entirely absent from the material present on site and almost all biological material was recovered from the 197 bulk samples taken during the excavation, ranging in volume from 4 litres to 40 litres. Processing was undertaken on site using standard flotation methods utilising meshes of 250µm and 500µm for the flot and residue respectively. Residues were sorted under a low power binocular microscope for charred plant, charcoal and artefacts.

Type	Category	Quantity
Human bone	Cremated	1 deposit
Animal Bone	Burnt fragments	<25g
Samples	Environmental	197

Cremated Human Bone

4.43 A single deposit of cremated human bone was recovered from a Late Bronze Age/Early Iron Age context. The remains appear to represent a single adult, possibly male. The bone is in relatively good condition, with no indications of erosion or abrasion.

Burnt ?Animal Bone

4.44 Animal bone was restricted to a very small number of fragments (mostly <5mm), preserved by burning but in no case identifiable to species. Such material was recovered exclusively from bulk paleoenvironmental samples taken from a variety of

features across the site. The complete absence of unburnt faunal remains almost certainly was due to the relative acidity of soil conditions.

Charred Plant Remains

4.45 Some 75 samples produced charred plant remains, ranging from single cereal grains or seeds to fairly large quantities of material including cereals, weed seeds and hazelnut shell. The charred plant remains were in a reasonably good state of preservation, with little evidence of weathering.

4.46 The range of cereal taxa observed during scanning of the residues was not particularly great or unusual. Similarly the range of weed taxa was fairly restricted, and typical of many prehistoric assemblages. Hawthorn, elder and sloe remains were present, and although these only amounted to one or two seeds. Hazelnut shell fragments and a few other hedgerow/scrub/woodland remains are relatively well represented.

Charcoal

4.47 Quantities of charcoal were recovered from 194 samples. The charcoal was generally well preserved although many of the samples were either too comminuted or else contained insufficient material to enable species identification. Intact radial segments of roundwood were infrequent. A relatively wide range of taxa was identified including field maple, European alder, hazel, oak, ash, alder buckthorn and anatomically similar subfamilies including blackthorn and hawthorn types.

5. STORAGE AND CURATION

5.1 Artefactual material, including pottery, worked flint, and fired clay is stable and requires no further treatment for long-term storage. Such material is stored by context in plastic bags within acid-free, brass wire-stitched cardboard boxes. Metal artefacts have been assessed and stabilised by a specialist conservator and are currently stored in sealed, plastic boxes with humidity controlled, in accordance with the guidelines of the Society for Museum Archaeologists (1993). Suitable arrangements will be made for transfer of the site archives to West Berkshire Museum.

6. SUMMARY STATEMENT OF POTENTIAL

6.1 The data recovered from the archaeological excavation at Hartshill Copse is at present capable of resolving objectives (v), (vi) and (vii), as set out in the revised project design (section 2 above). In addition, a number of questions pertinent to the remaining individual objectives are also capable of resolution at this stage. Examples of this are; relative to objective (i), it can be demonstrated that there is very limited evidence to suggest continuity of activity through to the Middle Iron Age settlement activity elsewhere on the site; regarding objective (iii), there is evidence of domestic cereal processing in the form of several fragments of local sarsen saddle querns and carbonised seeds; evidence that iron making and iron working were undertaken on the site, from the presence of hammerscale and slag; evidence of weaving in the form of loomweights and other clay weights, which may also indicate thatching, and evidence of wool making from the discovery of a spindlewhorl.

6.2 Further analysis is required to satisfactorily answer the majority of questions pertaining to each objective and consequently to achieve each objective as fully as possible. The principal purpose of this section is to summarise the work required to achieve the objectives as set out in the revised project design.

Stratigraphic record: statement of potential

6.3 A secure stratigraphic sequence for the site is essential in determining the form, purpose, date, organisation and development of the activity represented. This can be achieved through detailed analysis of each stratigraphic sequence and further integration of the artefactual and, where appropriate, radiocarbon dating evidence. The refined sequence will also provide the temporal and spatial framework on which all other types of evidence depend.

Artefactual record: statement of potential

The Pottery

6.4 Full integration of the (entire) pottery assemblage with the stratigraphic record and the dating framework of the radiocarbon dating programme is essential in order to establish a secure structural sequence. The late prehistoric assemblage is highly significant and deserving of full detailed analysis in order to be able to characterise the material and catalogue any variation systematically, as recommended by the Prehistoric Ceramics Research Group (PCRG 1997). The size of this assemblage,

derived from a variety of settlement features, will allow a detailed investigation of vessel form and function across the excavated area by clusters of features. Potential also exists, through a programme of lipids analysis, for the further investigation of the relationships between form and function. The range of fabric types appears to be chronologically specific based on distinctively different wares associated in spatially discrete locations. Petrological analysis of 15 thin-sectioned samples of pottery and five samples of fired clay material, representative of the major fabric types identified, is required to identify any fabrics which are non-local in character and to compare background clay matrices of fabrics with local materials.

6.5 This is an outstanding assemblage for determining absolute dating of specific vessel forms and fabrics, combined with evidence of their use, as well as the nature of the production and trade of pottery in the first millennium BC in the rich settlement area of the River Kennet and Middle Thames Valley region. Between six and eight different vessels may be suitable for radiocarbon determinations due to the presence of burnt food residues on their interiors [four vessels were in fact selected as part of the first group of materials submitted for radiocarbon dating in July 2003]. It is possible to determine the temperature and duration of the fire which re-burnt the sherds found in the postholes of roundhouse C using scanning electron microscopy, equipped with an energy-dispersive x-ray analyser for elemental analysis (Morris 1993, 13). In addition, this assemblage would be suitable for conducting a programme of absorbed lipid residue analysis on Late Bronze Age to Middle Iron Age pottery.

6.6 It is appreciated that SEM and lipids analyses are time consuming and it may not be possible to undertake such work in the time available before the required submission date of the publication text (March 2004).

6.7 Potential for further analysis of the Roman and medieval pottery is limited by the small size of the assemblage. Nonetheless a short report should be prepared for this material with the primary aims of characterisation and understanding of chronology. To this end the pottery should be recorded in accordance with Study Group for Roman Pottery guidelines (SGRP 1994).

6.8 A maximum of 120 vessels should be illustrated.

Additional ceramic material

6.9 The objects of fired clay are of significance as chronological markers and as indicators of crafts processes undertaken on site. A report needs to be prepared incorporating descriptions of fabrics and forms, together with illustration of selected pieces. Limited potential exists for spatial analysis to examine possible zoning of crafts activities and general/phase-based distribution of structural daub.

6.10 The small quantities of Roman brick and tile are of minimal significance and require no more than a summary descriptive statement.

Non-ceramic material

6.11 The worked flint is of significance as a stratified late prehistoric group, with little obvious evidence for residual material. A report needs to be prepared with the aim of characterising this material. There is potential for spatial and final phase-based analysis to investigate distribution and use through time. Burnt flint is notable for the large quantities recovered. Potential for further analysis of (unworked) burnt flint is however restricted to spatial analysis and phase-based investigation. Determination of mode of use would be of primary interest, as would ascertaining whether apparent concentrations of material in (certain) post-built structures hold up to scrutiny or are products of the sampling strategy.

6.12 The metalwork is restricted in size and range and predominantly Romano-British in date. One or two items are of chronological or intrinsic interest although, overall, potential for further analysis is very low. The metal objects will however require basic archiving/reporting to include full catalogue description and/or classification. Two metal items merit illustration.

6.13 The volume of metallurgical residue from the site is very small, but indicates that both iron-smelting and ironworking took place somewhere in the vicinity. Despite the small size of this group of material its significance is increased in view of the overall scarcity of securely dated evidence for early ironworking in the region. Moreover, additional significance results from the apparent correspondence of some ferrous metallurgical residues with pottery dated (on the basis of fabric and vessel form) to the Late Bronze Age. Extensive further analysis of this small assemblage would probably not be justifiable, but in view of the scarcity of earlier Iron Age smelting operations in lowland Britain, full chemical analysis of the macroscopic smelting slags would be desirable. Spatial analysis of the distribution of the metallurgical

residues will assist in the determination of structural function and land-use within the site.

6.14 The later prehistoric worked stone appears to be typical for what is known for the sites in the region; Roman material too can be readily paralleled. The assemblage has the potential to provide specific information regarding the technology of on-site crop-processing as well as trade contacts and spatial distribution of the assemblage will assist in identification of structural function and landuse. A full catalogue and report should be prepared to record measurements and weights for the catalogue, and to note any further descriptive details; further research will be required for a saddle quern fragment to confirm provisional identification as old red sandstone.

Biological record: statement of potential

Cremated Human Bone

6.15 There exists good potential for further analysis of cremated human bone. Such analysis, following standard procedure (McKinley 1994, 2000), would be directed at recovery of further data pertaining to the age and sex of the individual. Pathological lesions may be revealed with more detailed analysis and aspects of pyre technology and the rituals attendant on the mortuary rite will be considered from a combination of the osteological and stratigraphic data, including the nature of the deposit.

Other Burnt Bone

6.16 There exists no potential for further analysis of this small quantity of material.

Charred plant remains and charcoal

6.17 In the absence of animal bone and pollen, carbonised material represents the primary source of evidence for site 'economy' and wider environment. The site was not especially productive in terms of charred plant remains, however full analysis of material from selected (more productive) samples is likely to provide sufficient data to address questions relating to the nature of crop plants; whether crop processing was undertaken locally; and whether the economy was based more on pastoral rather than arable agriculture, as suggested by the evidence from other sites studied in the Kennet Valley (Lobb & Rose, 1996).

6.18 Assessment of the charcoal was based on identifications selected randomly from viable samples. Further targeted analysis of charcoal is recommended to provide evidence for the following: characterization of the during the Late Bronze Age/ Early

Iron Age based on tree and shrub species and correlated with that from contemporary sites in the Kennet valley; spatial differences in the type of fuel used/ deposited across the site; the type and character of fuel used to construct the cremation pyre; comparison with residues from domestic contexts at the site and/ or evidence from contemporary cremations from elsewhere in the region may indicate ritual/ practical applications; evidence of woodland management and the use of local resources. The procurement of industrial fuel for metal working on a long-term basis and its impact local wood resources should also be considered.

7. UPDATED AIMS AND OBJECTIVES

7.1 The original project aims and objectives have been reviewed in the light if the assessment and specific comments are appended to each below; further objectives have also been identified, based on the results of the assessment.

A. establish the dates, chronology and character of the settlement activity

was it continuous or episodic?
how extensive was the activity over time?
when did it start and end? is there continuity of activity through to the Middle Iron Age settlement activity elsewhere on the site?
what can be discovered about the nature of the structures on the site? how were they built? what function did thy perform?

B. determine the nature of the patterning of settlement activity within the excavated area

is there intra-site variation in deposit, structure and feature type and function?
does artefact and ecofact distribution match that patterning?
is there significance in the deposition of artefactual/ecofactual material?
how does the activity relate to the features of similar date excavated elsewhere within the quarry?
how are the secular, funerary and ritual elements of the landscape arranged in the excavated site? how do these fit into the wider contemporary landscape?

C. analyse the economic base and resource exploitation of the settlement

what technological and craft processes were carried out?
is there any evidence to allow environmental reconstruction and how reliable is that evidence? what categories of material are present/absent and why?
what was the source of raw materials?
is there any evidence for trade relationships in the artefactual material or raw materials? how local or extensive were any such links?

D. test the model of early prehistoric settlement in the Kennet valley

does the site have a specialist function within that model?
how does it fit within the chronology of sites in the area?

is the settlement activity seasonal?/episodic?/marginal?

E determine the date, nature and extent of the Roman period activity

F provide information on the survival and quality of the archaeological resource to assist in the management of the resource in similar physical locations

how truncated are features and deposits?
what types of material evidence may be expected and what has survived?
what is the best method of prospection for such sites?

G test feature-sampling strategies

H disseminate the results of the work to the widest possible audienceThe

8. PUBLICATION AND DISSEMINATION

8.1 The results of the excavation merit publication. The stratigraphic, artefactual and biological information recovered from the site is of sufficient quantity, quality and significance to provide an important and robust resource for the study of the Late Bronze Age/Early Iron Age period, particularly as its chronological framework will be secured by extensive radiocarbon dating. It offers the opportunity for the reworking of the existing regional settlement model and will provide a reference for regional sites, particularly in terms of the settlement form, technology in use, and the large associated ceramic assemblage.

8.2 It is proposed that publication is achieved within the *Cotswold Archaeology Occasional Paper* series, which will allow rapid dissemination of the results to the archaeological and wider community. The series is distributed free to all university libraraies that serve an archaeology department, to the national copyright libraries and libraries of the appropriate national museums, sites and monuments records and national and regional amenity societies and local library services. Volumes are also available from Cotswold Archaeology free of charge to any other established archaeological library which wishes to receive a copy and for sale to the general public at printing cost.

8.3 Detailed results of the post-excavation analysis and will be disseminated through on the internet, for the use of the

8.4 The results of the work will be disseminated through Popular publication will be produced to accompany this will form Copies will be distributed in the local community around the site.

Synopsis of proposed report

Excavation at Hartshill Copse, Upper Bucklebury, West Berkshire 2003
Late Bronze Age and Early Iron Age settlement

By Mark Brett, Laurent Coleman, Mark Collard and Ed McSloy

Contents etc.	1000 words
Abstract	
Brief summary of the main findings of the project	300 words
Introduction	
Project background, archaeological background, topography, geology	1000 words
Excavation Results	7500 words
The Finds	
Prehistoric Pottery (Elaine Morris)	3500 words
Roman Pottery (Ed McSloy)	100 words
Metallurgical Residues (Tim Young)	1000 words
Stone Artefacts (Fiona Roe)	400 words
Worked Flint (Ed McSloy)	400 words
Burnt Flint (Ed McSloy)	200 words
Fired/Burnt Clay (Ed McSloy)	400 words
Coins (Ed McSloy)	100 words
Metalwork (Ed McSloy)	400 words
Biological Evidence	
Cremated Bone (Jacqueline McKinley)	400 words
Charred Plant Remains (Wendy Carruthers)	1500 words
Charcoal (Rowena Gale)	1500 words
Radiocarbon Dating (Alex Bayliss)	1000 words

Discussion	
Late Bronze Age/Early Iron Age	3000 words
Romano-British	200 words
Conclusions	1500 words
Acknowledgements	300 words
Bibliography	3000 words
	28,700 words
	(*c* .57 pages)
Illustrations:	
Site location plan	0.5 page
Plan of extraction phasing and other excavations	0.5 page
Plan of excavation area	1 page
Plans and sections	10 pages
Pottery	6 pages
Loomweights, brooch, knife, spindlewhorl, worked stone	1 pages
	19 pages
Tables:	
Pottery	4 pages
Radiocarbon dating	2 pages
Charred plant remains	4 pages
Wood charcoal	2 pages
	14 pages
Total publication estimate	**71 pages**

9.3 The final publication report will be edited and refereed internally by CA senior project managers and will be externally copy-edited and externally refereed by Professor Timothy Darvill, Bournemouth University). Professor Richard Bradley, Reading University, will be invited to referee the report.

submission will be completed by 14 March 2004.

9.7 Other dissemination - exhibition, popular publication;

10. TASK LIST10. TASK LIST

TASK	PERSONNEL	DURATION
Project management	DD	
Stratigraphic analysis	PO	5 days
	FO	1 day
	DD	1day
Research, comparanda	PO	2 days
Preparation and dispatch of artefacts and ecofacts	FO	1 day
Liaison with specialists	FO	2 days
Specialist reports		
Prehistoric Pottery		
Full pottery recording and report writing	EM	36 days
Thin sections x 15	EM	2 days
Selection of pottery for RCD (6-8 vessels)	EM	
Prehistoric pottery illustration (120 vessels)	SI	12 days
Roman pottery		
Research/ Quantification and database	FO	0.5 day
Report	FO	0.5 day
Roman pottery illustration	SI	1 day
Fired clay/burnt clay		
Catalogue/Report/Recording	FO	1.5 days
Thin sections x 5		1 day
Weights illustration	SI	1 day
Ceramic building material	FO	0.25 day
Metal artefacts		
Catalogue and report	FO	1.5 days
Conservation	IA	0.25 day
Illustration of 2 items	SI	1 day
Worked stone		
Catalogue and report	FR	3 days
Illustration of 2 items	SI	1 day
Flint		
Struck flint	FO	3 days
Burnt flint	FO	3 days
Illustration of flint	SI	2 days
Charred plant remains		
Full sorting, identification and quantification (27 samples)	WC	12 days
Analysis and report writing	WC	6 days
Cremated Human bone		

Report writing	JM	1 day
Charcoal		
Full sorting, identification and quantification (23 samples)	RG	3 days
Analysis and report writing	RG	5 days
Metallurgical residues		
Chemical analysis and report writing	TY	4 days
Radiocarbon dates	EH	-
Selection of samples	PO	0.5 day
Preparation of documentation	PO	2 days
Preparation of samples	FO	1 day
Preparation of publication report		
Abstract and introduction	PO	
Excavation results	PO	
Integration of specialist report, tables and figures	PO	
	FO	
Discussion, conclusions	PO	
	DD	
Acknowledgements, bibliography	PO	
Illustration	SI	
First publication draft		
Editing		
Preliminary editing	DD	
Revisions	PO	
Copy editing	Copy editor	
Secondary editing		
Submission to external referees		
Final editing	PO	
Archive		
Research archive compilation	PO	
	FO	
Microfilm		Fee
Deposition		Fee
Publication		
Typesetting	SI	
Printing		Fee
Dissemination	DD	

12. BUDGET

12.1 The following allocation of resources is proposed. All figures are exclusive of VAT. This quote assumes all work will be commissioned by March 2004.

Staff Costs:

CA Grade	Person	Per day	Days	Total

DD				
PO				
FO	E.R. M		14.25 to date	
SI	P. M.		18 to date	
Total				

Need to add in your final figures here Mark

Non-Staff Internal Costs:

Publication	
Transport	
NMR microfilm copy:	
Archive deposition:	
Total:	

External Specialist Fees:

Specialism	**Person**	**Per day**	**Days**	**Total**
Conservation	Esther Cameron (EC)	£30/hour	2 hours	£60
Prehistoric Pottery	Elaine Morris (EM)	£200/day	36	£7200
Creamted Human Bone	Jackie McKinley (JM)	£200/day	1	£200
Worked stone	Fiona Roe (FR)	£120/day	3	£360
Charred Plant remains	Wendy Carruthers (WC)	£130/day	18	£2340
Charcoal	Rowena Gale (RG)	£155/day	8	£1240
Industrial waste	Tim Young (TY)	£115/day	4	£460
Thin-sections (20)	Southampton University	£13.50 each	20 samples	£270
Total:				**£12,130**
Plus 10%				**£13,343**

Gross Total for Project: £

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APPENDIX 1: WORKED AND BURNT FLINT BY E.R. MCSLOY

Worked Flint

Quantity and provenance
The worked flint was scanned by context and fully recorded. Recorded attributes include type, count, flint colour, condition, source and aspects of process (degree of cortex present on removals).

A total of 82 pieces of worked flint was recovered from 52 contexts, of which 17 pieces were extracted from soil sample residues. The bulk of the worked flint comes from pits and postholes (90%), with the remainder coming from ditches (9%) and tree boles (1%). Pieces with secondary working are restricted to five undiagnostic retouched flakes. The remaining material comprises flakes/chips, shatter pieces, cores and two large trimmed nodules which perhaps represent building stone of Romano-British or later date.

Table *, below, shows the distribution of the worked flint relative to provisional set. Material from pit group T is notable. This is a group of relatively large features that produced large quantities of other material including burnt flint, pottery and fired clay. There is no striking tendencies observable and the flint would appear to be relatively evenly distributed across the site.

Set	Flake/chip	Ret. flake	Core frag	Building material	Total	%Total
Roundhouse A	2	-	-	-	**2**	**2.4%**
Roundhouse B	7	-	-	-	**7**	**8.5%**
Roundhouse C	4	-	-	-	**4**	**4.8%**
Roundhouse D	4	-	-	-	**4**	**4.8%**
Post alignment E	1	1	1	-	**3**	**3.6%**
Four-posters F	1	1	-	-	**2**	**2.4%**
Fence J	1	-	-	-	**1**	**1.2%**
Ditch K (Roman)	1	-	-	-	**1**	**1.2%**
Ditch L	2	-	-	-	**2**	**2.4%**
Pit Q (Roman)	1	-	-	-	**1**	**1.2%**
Pit group T	13	2	-	-	**15**	**18.3%**
Other	35	1	2	2	**40**	**48.8%**
Total	**72**	**5**	**3**	**2**	**82**	**100%**

Table *: worked flint distribution

Condition
Condition is generally good with very little edge damage or heavy 'rolling' evident. A number of flakes appear very fresh, notably material from contexts 020 and pit group T, 744, both provisionally dated to the Late Bronze Age/Early Iron Age. Flakes from 020, although they do not re-fit, almost certainly come from the same core or nodule. Patination, the discolouration of flint as the result of burial in a calcareous environment is, almost entirely absent, and is restricted to just two flakes.

Raw Material and Process
A large proportion (74%) of the flint removal retains areas of cortex, with approximately 12% being fully cortical. Cortex, where observed, together with the small size of most removals, suggests that most or all raw material was procured locally from the plateau gravels. The bulk of the worked flint is dark or mid grey coloured, with a few pieces being pale grey or brown. The dominant colouring of the raw material is consistent with its deriving from the local gravels.

Technology and Chronology
As previously noted, there are no diagnostic tools present in this group and an assessment of dating can only be made with reference to technological traits, and observed condition linked to other datable artefact classes such as the pottery.

Unretouched flakes, chips and shatter pieces make up approximately 94% of the (prehistoric) assemblage. Two cores are present, both of multi-platform type with multiple flake scars. Flake removals are predominantly of squat proportions with length to breadth ratio close to 1:1. In most instances, flaking appears generally crude and haphazard, with no clear intent to guide removal shape by using existing flake scars. Hinge fractures are abundant and at least two flakes/core fragments exhibit multiple incipient bulbs of percussion caused by repeated blows. Striking platforms are typically broad, always unprepared and on occasion located on areas of cortex. Broad platforms, clear points of percussion and pronounced bulbs indicate that removal utilising a hard (stone) hammer was usual.

In summary, the observed technology of flakes and cores is typical for the Late Neolithic and Bronze Age/Early Iron Age. Certain aspects of the worked flint are consistent with dating to the later prehistoric period, where the primary motive may have been the impromptu creation of sharp cutting edges rather than specialist tool manufacture (Bradley 1975, 87). Further evidence for a late prehistoric date for at least a proportion of this material is provided by its fresh condition and its occurrence with late Bronze Age/Early Iron Age pottery.

The two trimmed flint nodules derive from undated small pits/postholes, close to the western edge of the site. The use of flint nodules as building material in the Roman period is well attested and such a date is further date is suggested by the proximity of these features to others of certain (later) Roman date.

Burnt Flint

Quantification and description
Burnt flint amounting to 32.6kg was hand-collected from the excavations. A further 41.5kg was recovered from soil samples. The burnt flint was rinsed, weighed by context and scanned for worked material.

The bulk of the burnt flint consists of fragments up to 40mm. Such material is thoroughly burnt to a universal white or pale grey colour with frequent surface crazing. The majority of fragments exhibit large surviving areas of cortex and it is clear that the raw material was obtained from the underlying plateau gravels. There is no evidence that the flint was 'prepared' prior to burning and the fracturing which has occurred appears to be as the result of or was subsequent to the act of burning.

Provenance
Burnt flint was recovered from 357 separate contexts. Almost all derives from features of likely later prehistoric date (less than 1% comes from the Roman dated features). The bulk of the burnt flint (88%) was recovered from pits and postholes, with 7% coming from ditches and the remainder from tree boles (4%) and hearths (1%).

Table * shows the distribution of worked flint across the site relative to sets. Even when it is recognised that roundhouses B to D were 100% excavated the proportion of burnt flint from these structures is striking. More striking is the abundance of material from roundhouse C which is equivalent to in excess of a quarter of burnt flint from the entire site.

Set	Total weight	%Total
Roundhouse A	**4**	**0.01%**
Roundhouse B	**7463**	**10.24%**
Roundhouse C	**20265**	**27.81%**
Roundhouse D	**8714**	**11.96%**
Post alignment E	**1728**	**2.37%**
Four-posters F	**580**	**0.80%**
Enclosure ditch G	**728**	**1.00%**
Fence H	**538**	**0.74%**
Fence H / J	**13**	**0.02%**
Fence J	**196**	**0.27%**
Ditch K (Roman)	**190**	**0.26%**
Ditch L	**114**	**0.16%**
Ditch M (post-medieval)	**98**	**0.13%**
Cremation P	**76**	**0.10%**
Pit Q (Roman)	**522**	**0.72%**
Pit group R	**499**	**0.68%**
Pit group S	**3**	**0.00%**
Pit group T	**5245**	**7.20%**
Hearth U	**8**	**0.01%**
Other	**25879**	**35.52%**
Total	**72863g**	**100%**

Table *: burnt flint distribution

Burnt flint is clearly abundant across the site and far more so when compared to previous phases of work at the site. By contrast, burnt flint from Iron Age, Roman and medieval phases from the first pohase of excavations at the site in 2001-2 amount to only 82g. The volume of burnt flint is such that it clearly indicates it was not (in its entirety) the product of accidental burning or else derives from domestic hearths. The near absence of other burnt stone such as quartzite cobbles, suggests that flint was selected for its particular qualities when heated.

Discussion
One use for burnt flint for which there is abundant evidence for from the present excavation is as a tempering material for pottery. Quantities are such however, that alternative uses must surely have existed and the heating of food would seem most likely. Similarly large quantities of burnt flint were recovered from the Early Iron Age

settlement site at Dunston Park, Thatcham (Fitzpatrick et al., 1995). Burnt mounds, many of which are datable to the Middle and Late Bronze Age and have a suspected culinary use, may also be of relevance here. If culinary use is likely, the contrast in quantities observable between the Late Bronze Age/Early Iron Age site and ?Middle Iron Age and later sites, is potentially significant as evidence for cultural change.

Statement of potential and requirements for further analysis and publication

Worked flint
This is a relatively small group of material which nevertheless is of some interest as evidence of use of flint into the Late Bronze Age/Early Iron Age period. The significance of the group is increased by its seeming stratified nature and its homogeneity, being free of tool types of earlier prehistoric date.

The potential for further analysis is restricted by the size and nature of the group, however some additional analysis should be undertaken following on from final phasing of the site. Such analysis should be directed at plotting incidence of flint across later prehistoric phases. Further recording of the worked flint is not necessary and none of the worked flint merits illustration.

Burnt Flint
The burnt flint is remarkable for the large quantities recovered. The absence of similarly large quantities of material from earlier phases of excavation is also notable. However, further analysis and study of similar material from dated sites in the region such as Dunston Park (Fitzpatrick *et al* 1995) may be able to answer some of the questions relating to the organisation, location and scale of early iron production and its relationship to other technologies (such as flint), as cited here and that are poorly understood. Further study may elucidate the function and use of the volume of this burnt flint material.

In addition, there exists scope for the use of spatial analysis of lithic material in order to further investigate distribution of material in relation to structural and other feature classes. Spatial analyses should be qualified to take account of the overall excavated sample through the use of volumetric estimates. Further analysis relative to final phasing should also be attempted to investigate incidence across the later prehistoric phases.

Report Preparation:	3 days
Spatial analysis:	3 days
Illustration	2 days

Total: 4 days (Finds Officer)
2 day (Senior Illustrator)

APPENDIX 2: THE PREHISTORIC POTTERY BY ELAINE L. MORRIS

Summary
A total of 2065 sherds (17,270g) of later prehistoric pottery were examined. The pottery is in good condition with clear evidence of usewear and surface treatments visible. The assemblage is predominantly of Late Bronze Age and Late Bronze Age - Early Iron Age date, with small quantities of Early/Middle Iron Age date and one possible sherd from a Middle Bronze Age urn. The size of this assemblage from a variety of settlement features will allow a detailed investigation of vessel form and function across the excavated area by clusters of features, with focused radiocarbon dating of specific vessels and, by association, the features from which this material was recovered. The range of fabric types appears to be chronologically specific based on distinctively different wares associated in spatially distinctive locations. Visual examination of the fabrics, which are dominated by flint-tempered wares and wares with quartz sand and iron oxides, include a range of possible glauconite-bearing sandy fabrics which cannot have been made from immediately local resources and several fabrics bearing various amounts of vegetable matter usually in association with quartz sand or mica. Therefore, this is an outstanding assemblage for determining absolute dating of specific vessel forms and fabrics, combined with evidence of their use, as well as the nature of the production and trade of pottery in the first millennium BC in this extraordinarily rich settlement area of the River Kennet and Middle Thames Valleys region.

Fabrics and Forms

Late Bronze Age
The most striking aspect of this assemblage is the strong variation amongst the fabrics and forms. There is a large number of medium, coarse and very coarse, flint-tempered fabrics used to make Class I, medium-thick walled jars (cf. Barrett 1980) and, in contrast, several extremely fine silt-sized quartz or micaceous fabrics, which occasionally also have fine, sparse flint grits in them, used to make Class IV thin-walled bowls. The jars are often heavily finger-wiped and the bowls in contrast are burnished to a high gloss on both surfaces. The bases of the flint-tempered jars are plain or frilled in profile with extra clay curling up the sides as though the vessel had been pressed down firmly while still very soft. Frequently, there are extra chips of flint impressed into the undersides of bases. The types of jars are predominantly ovoid or convex in profile (straight vessels lacking shoulders), a few with strongly hooked rims, two shouldered or carinated jars, and one jar which has a high and rounded shoulder. The fine, angular bowls with flared rims are typical of those recovered from Reading Business Park (Type 1; Hall 1992, fig. 41) but it is important to note that there are no biconical bowls as was common at that site.

The features which contained these contrasting jars and bowls were often quite rich with material and therefore it is possible to confidently state that there are no decorated sherds in them. This indicates that these features contained material which is known as plain assemblage Late Bronze Age pottery, dated to the 11th-9th centuries cal BC at Aldermaston Wharf, located south-west of Reading on the River Kennet (Bradley, *et al.* 1980). The Aldermaston assemblage is significant because of its abundance of straight jars, round-shouldered jars, and fine bowls with little decoration (Bradley 1980, 242, figs. 12-18), which makes this local assemblage a suitable parallel. However, the radiocarbon dating of the pottery from that site was very limited, and therefore Hartshill Copse, Upper Bucklebury provides a very welcome opportunity to check and improve on the general date of this type of assemblage and settlement. No radiocarbon dates were secured for the extremely large and partially contemporary assemblage at Reading Business Park.

Late Bronze Age-Early Iron Age
Pottery dating from the period of the 9th-7th centuries cal BC may exist in this assemblage but this is quite difficult to be certain. There are undoubtedly elements which suggest that this is the case, including sherds from two vessels known as typical Early All Cannings Cross style pottery. These are a highly decorated, fineware Class II jar with impressed dots and a furrowed bowl (cf. Cunliffe 1991, fig. A:2). However, these finewares are normally associated with finger-tip impressed shouldered jars, as at Knight's Farm subsite 1 (Bradley, *et al.* 1980, figs. 34-36), Reading Business Park (Hall 1992, fig. 50, 183-192) and Potterne in Wiltshire (Lawson 2000), and in fact such decorated jars are usually more common than the fancy jars and decorated bowls. Therefore, it is uncertain whether these vessels, interestingly found in the fourposter F complex, represent the end of this period or the beginning of it, although an iron knife found in the group, posthole 690 strongly suggests the latter. There is only one, small finger-tip impressed shoulder sherd in the whole assemblage, which is in a coarse, flint-tempered fabric.

However, there is a strong possibility that the fabrics of many plain body sherds bearing fine and medium-grained quartz sand with numerous fragments of iron oxides might belong to this period. It is well-known that flint-tempered fabrics of Late Bronze Age date are gradually abandoned by potters during this Late Bronze-Early Iron Age period and replaced by sandy fabrics, which in this area could mean iron oxide and quartz sand fabrics. What is important to mention, however, is that there is a strong technological leap from making the coarsely-tempered flint fabrics to the much finer and thinner-walled quartz and iron oxide fabrics which suggests that there is also a distinct chronological gap between the production, or at least use, of these wares at Upper Bucklebury. Similarly, there must have been a major cultural leap from making and using flint-tempered jars to sandy fabric

jars. Therefore, it is very important for radiocarbon dating of any secure deposits containing solely these types of fabrics to help resolve this conundrum.

Comparisons between the Upper Bucklebury assemblage and 7th century BC material (1,674 sherds) from the settlement nearby at Dunston Park (Morris and Mepham 1995), reveals broad similarities but also some curious differences. Here there were several strongly carinated jars with finger-tip impressions and carinated bowls with linear decoration. However, there were also single examples of a furrow bowl, an Early All Cannings Cross fineware jar and sherds with glauconite and quartz sand fabrics. What is missing from the Dunston Park assemblage, which is dominated by flint-tempered fabrics (*ibid*, table 31), is any reference to iron oxide-bearing sandy fabrics. Near to the main site at Dunston Park, there was more 7th century BC activity at Cooper's Farm, Dunston Park, where ironworking was recorded, in association with an assemblage including several finger-tip impressed shouldered jars (288 sherds; Morris 1995).

Early Iron Age (6th-4th centuries BC)
One feature, pit 493, contained the only example of a fineware fabric, medium to long-necked and round-shouldered jar decorated with finger-tip impressions on the top edge of the rim and also broad-end-of-finger impressions along the shoulder. This combination of double decoration, the length of rim/neck, and the rounded shoulder all indicate an Early Iron Age date for this feature (Mytum 1986, fig. 3, 2). The jar is also slipped and burnished on the exterior surface. Other examples of diagnostic pottery from this period include a small, medium length neck, round-bodied bowl decorated with pointed impressions in a cluster (only partial design present) similar to one from Blewburton Hill, Berkshire (Cunliffe 1991, fig. A:11, 22), and other round-bodied bowls in sandy fabrics. There is the possibility that the micaceous and organic-tempered fabric vessels are also of this date based on the slightly rounded shoulder of one cookpot. It is very important for this example to be submitted for radiocarbon dating to assist in securing a general period of use for these organic or vegetable matter-tempered fabrics.

Middle Iron Age (3rd-1st century BC)
There are a few features which contained pottery which is likely to be Middle Iron Age in date. One vessel is another round-bodied bowl which is more similar to the classic Upper Thames Valley globular bowls due to the fabric which consists has fine, well-sorted flint temper, rather than quartz sand. Other vessels include simple upright rims on sloping shoulder profile jars which were made from sandy fabrics and burnished on the exterior.

Spatial Distribution - Dating of Major Feature Clusters

Roundhouse C and Pit 1104
This post-built structure with porched entrance is undoubtedly Late Bronze Age in date. Several postholes contained extraordinary quantities of pottery, and much of this material had been burnt after original firing and deposited into the features. This effect appears as pale grey, soft-edged pottery which is slightly bloated making 'fat' sherds. It is likely that this structure burned down and the pottery was re-burnt with it. The nearby pit 1104 contained nearly identical pottery and a few sherds in similar, re-burnt condition.

Roundhouse D
In contrast to roundhouse C, this group of postholes contains very little pottery; the majority of the ceramic material recovered is actually 'pit lining', a type of unusual fired clay but tempered material first recognised at Reading Business Park (Bradley and Hall 1992). The material has only one smoothed surface, often is layered in texture, and is thick and lumpy as well as bearing some coarse, poorly-sorted flint temper. The pottery sherds which were recovered are similar to those from roundhouse B, and therefore a Late Bronze Age date is likely.

Enclosure Ditch G and Internal Features, including Roundhouse B
The range of pottery from various cuttings across this ditch is predominantly the finer sandy fabrics with various quantities of iron oxides and therefore at least Late Bronze Age-Early Iron Age in date, if not later. The vessel associated with cremation P, located at the eastern entrance, is, however, typically Late Bronze Age in type based on fabric and form. Posthole 690 which contains the Early All Cannings Cross jar and the furrowed bowl, is Late Bronze Age-Early Iron Age as well, if not later. All of the other features within the enclosure including the hearth, pit group T and roundhouse B probably belongs to this period or later in the Early Iron Age. The wide range of pottery fabrics and vessel forms from these features suggests that the internal occupation of enclosure ditch G may well have extended for nearly 200 years, from the 7th to 5th centuries BC.

Food and Drink - Assemblage Quality, Variability and Evidence of Use

As mentioned above, this assemblage contains a number of jars and bowls of different types and sizes which can be reconstructed to determine at least rim diameters to characterise the chronological groups. This information correlated to visible evidence of use will provide a very useful resource of information not only for this project by identifying different functions of various structures but also for comparison to assemblages from elsewhere in the region and nationally in the future. The range of sizes and vessel functions will be able to indicate variability or similarity to Aldermaston Wharf, Knight's Farm, Reading Business Park, and other contemporary sites with regard to the nature of food preparation, storage and consumption at settlements along gravel terraces. This

information can then be compared to that from sites at other locations with different landscapes to determine if and how Late Bronze Age life was conducted differently there.

Evidence for Trade and Contacts

Petrological analysis of the pottery fabrics would provide confirmation of the presence of non-local materials in the fabrics, as well as characterise more effectively all of the fabrics in the assemblage. The decorative styles on the pots, while few in number, suggest that this location was a cross-roads in the communication networks of social groups. Styles from both the north and south of Berkshire, as well as Wiltshire, are present.

Dating Evidence from Other Artefacts

Posthole 690, which contained the Early All Cannings Cross decorated jar and the furrowed bowl sherd, also contained an iron knife which suggests that these sherds are likely to belong more to the Early Iron Age end of the chronological spectrum rather than the Late Bronze Age end. The fabrics in this feature are all sandy in nature, some of which have fine flint fragments as well. Similarly iron slag was recovered from 1075 within enclosure ditch G, which also contained pottery fabrics including fine quartz sand and iron oxides, fine quartz sand and rare fine flint, and medium-grained flint types of Late Bronze Age to Early Iron Age date, as did pit 19 which revealed one sherd of medium-grained flint fabric pottery.

Both cylindrical/pyramidal and triangular clay weights were recovered from different features containing different types of pottery. Fragments of pyramidal and cylindrical weights were recovered at Aldermaston Wharf (Bradley, *et al.* 1980, fig. 19) indicating a Late Bronze Age date for these, and triangular weights are Iron Age in date. In addition, a single biconical-profile, clay spindle whorl of Late Bronze Age-Early Iron Age type (Bradley, *et al.* 1980, fig. 20, 6-7) was found in association with possible glauconite-rich, sandy fabric sherds.

Statement of potential and requirements for further analysis and publication

It is important to provide a full detailed analysis and report of this significant assemblage in order to be able to characterise the material and catalogue any variation systematically, as recommended by the Prehistoric Ceramics Research Group (PCRG 1997). Petrological analysis of 15 thin sectioned samples of pottery and five samples of fired clay material, representative of the major fabric types identified, is required to identify any fabrics which are non-local in character and to be able to compare background clay matrices of fabrics with local materials. Between six and eight different vessels may be suitable for selection for radiocarbon determinations due to the presence of burnt food residues on their interiors. Most of these vessels have more than one sherd with this residue adhering which could provide multiple samples for comparison of quality amongst the dating results.

A maximum 120 vessels should be illustrated.

The evaluation of the site in 1986 produced a small amount of possible Middle-Late Bronze Age pottery (Miles and Collard 1986). It would be very beneficial to determine the range of general fabric groups and vessel forms in this particular assemblage by scanning as a point of reference *post quem* for the 2003 excavated assemblage. Undoubtedly, there has been shifting settlement activity all over this area, and therefore plotting of that activity in general terms should be considered for the final publication.

There are approximately 200 additional sherds identified amongst the sorted residues from environmental sieving. It is recommended that these be analysed if they represent the only dating evidence from a feature or if they include distinctive sherds with form or diagnostic fabrics which can eventually be dated to specific periods.

I thought I should draw this out! This assemblage has the potential to further refine the current state of knowledge and understanding of ceramics of Late Bronze Age/Early Iron Age date within the Kennet Valley. It is interesting that the assemblage lies at the junction of three potential tribal boundaries and that during the assessment these potential differences have been flagged up. This has implications for the wider trade and exchange network and the mechanisms that drive it. Other artefact types, such as the worked stone quernstones and metalworking debris may have some bearing here in relation to the extent and nature of contact with other regionally-based groups. The wider geographical landscape should be studied to access 'trade routes' such as waterways, saltways, etc…

Full pottery recording and report writing:	:	36 days (£7200)
Travel expenses:		(£30)
Thin sections x 15:		(£202.50)
Illustration:		12 days

Total: 36 days (Pottery Specialist)
10 day (Senior Illustrator)

APPENDIX 3: FIRED AND BURNT CLAY BY E.R. MCSLOY

The fired and burnt clay objects and fragments were scanned by context and fully recorded. Recorded attributes include type, count, weight, dimensions (where appropriate), condition, fabric (where visible) and aspects of production process.

Spindlewhorl

A single spindlewhorl (Sf. 1) of biconical form was recovered from a posthole with enclosure ditch G, 729. The fabric is fine and inclusionless, fired to a reddish brown. Spindlewhorls of similar biconical form of date were recovered at Aldermaston Wharf (Bradley, *et al.* 1980, fig. 20, 6-7), and the type is frequently associated with Late Bronze Age/Early Iron Age-dated pottery elsewhere (Needham and Longley 1980, 411), although, that the type continues throughout the Iron Age is indicated by a series of finds from Danebury, Hants (Cunliffe and Poole 1991, fig. 7.86-8).

Clay weights

Fragments of fired clay weights were recovered from 10 contexts (table *). Further fragments described as 'miscellaneous fired clay' may also have derived from weights of unknown form and are noted below. Clay weights are usually thought to represent loomweights although other uses, such as thatch weights might be considered.

All of the clay weight fragments appear to be of a similar fairly dense, fairly hard fabric, most often light reddish-brown surfaces and sometimes with a grey core. There is no suggestion of added tempering materials, although most fragments contain sparse inclusions such as flint, iron oxide and quartz, as well as occasional burnt-out voids indicating vegetable matter.

With the exception of material from pit group T, the fired clay weights are highly fragmented and/or comprise small pieces. This makes identification of form problematical. There are no certain examples of cylindrical type, known to be current on other sites of the Middle and Later Bronze Age. A few, however, are almost certainly of pyramidal (horizontally perforated) type and are comparable to weights from Runnymede Bridge (Needham and Longley 1980, 411) and Aldermaston Wharf (Bradley *et al*. 1980, 243), which are dated to the Late Bronze Age.

In contrast, a large number of triangular weight fragments were recovered from 976, part of pit group T. These are the only certain examples of this form of weight to be recovered and are likely to be of Iron Age date. Joining fragments from more than one weight are present in this context.

Miscellaneous

The remainder of the fired clay consists of unfacetted, formless pieces for which no function can be assigned. Fabrics are comparable to clay weights described above.

Context	Group	Type	Wt. (grams)
492	-	?pyramidal	210
976	Pit group T	triangular	2701
1105	-	?pyramidal	179
1404	Roundhouse D	?pyramidal	41
1568	Roundhouse D	?pyramidal	114
1636	-	?pyramidal/triangular	34
1643	-	?pyramidal	73
1668	-	?pyramidal/triangular	454
1673	Roundhouse B	?pyramidal	451
1704	-	?pyramidal/triangular	53
Total			**4310g**

Table *: fired clay loomweight fragments

Burnt clay/daub

Burnt clay or probable daub amounts to 3957g and was recovered from 39 different contexts. The fabric is typically softer and far less dense compared to the fired clay described above and most often of a darker reddish brown colour. Typically fragments have frequent linear voids from burnt out vegetable matter. Identification of at least some of this material as daub, is in a minority of fragments, supported by presence of wattle impressions. A small number of fragments also have wiped surfaces.

Group	Weight (grams)	% Total
Roundhouse B	902	22.9%
Roundhouse C	26	0.7%
Enclosure ditch G	32	0.8%
Ditch L	13	0.3%
Pit Q (Roman)	117	3.0%
Pit group T	234	5.9%
Other	2622	66.4%
Total	**3946**	**100%**

Table *: burnt clay/daub distribution

Pit Lining
A small quantity of material, five fragments weighing 130g, identified as pit lining was recovered from Roundhouse C, 744 and 1234, each of which produced pottery of Late Bronze Age date. This material, which is sparsely tempered with medium or coarse flint, can be compared to material first identified at Reading Business Park (Bradley and Hall 1992). Further material of this type, initially identified as pottery is described in the pottery section (appendix 2 above).

Discussion
Table * summarises distribution of burnt clay/daub across the site in relation to sets. A large quantity of this material can be seen to derive from pits or postholes associated with roundhouse B, but relatively very little or no debris derives from the remaining post-built roundhouses. The dearth of probable daub from roundhouse C, in particular, is unusual in the light of other evidence, such as burnt pottery, which hints that the structure was destroyed by fire. An explanation for this unusual pattern of distribution should be sought at the analysis stage.

Statement of potential and requirements for further analysis and publication

The objects of fired clay are of some significance as indicators of crafts processes undertaken on site. The spindlewhorl and clay weights are additionally of some use as chronological indicators and the site-based/ceramic phasing should take account of this material. Fired clay objects should be fully recorded. Recording should include descriptions of form and fabric, with the aim of enabling comparison between supposed chronologically distinct types. To assist in the fabric descriptions and confirm suspected local manufacture, five petrological thin-sections are recommended. Some potential exists for spatial analysis of the fired clay objects to examine possible zoning of textiles based crafts activities in relation to other possible zones of activity, such as metalworking and pottery production and/or distribution. This will allow for some possible characterisation of feature type to function as well as interpretation of the final phasing of the site. The virtual absence of daub/burnt clay from two of the three roundhouse structures should be further investigated.

The spindlewhorl and a selection of the loomweights require illustration. This will necessitate some reconstruction work of fragmentary but potentially complete loomweights from pit group T, 976. A full catalogue description should be prepared for the spindlewhorl and more complete loomweights and fired clay fabrics should be fully described.

Report preparation/reconstruction:	1.5 days
Thin sections x 5	(£67.50)
Illustration:	1 day

Total: 1.5 days (Finds Officer)
1 day (Senior illustrator)
1 day external specialist (thin-sections)

APPENDIX 4: ROMAN AND POST-ROMAN POTTERY BY E. R. MCSLOY

Roman pottery amounting to 182 sherds (1599g) was recovered from 18 contexts. The pottery was scanned by context, sorted macroscopically into fabric types and quantified by sherd count and weight. Spot-dates and quantified data were entered onto an Access database. Single small sherds of pottery can be seen to derive from postholes associated with roundhouses B-C and this material must surely be considered intrusive.

Most Roman pottery (86% by sherd count) comes from pits, predominantly on the south-eastern side of the excavated area with the remainder recovered from ditches and a single post-hole. The Roman pottery dates from the first to the mid-third to fourth centuries. The grouping of the features, the quantity of material and other artefacts recovered from these features and the absence of later dating material within them suggest that they form a secure group of Roman date. A small quantity of material from roundhouses B and C is considered to be intrusive.

Condition

Average sherd count is 9g, which is on the low side for Roman material and suggestive of a moderately well broken-up, dispersed assemblage. No complete vessels were recovered and there are very few instances where vessel profiles are able to be reconstructed. Surface preservation is variable and certain slipped or colour-coated fabrics, samian and Oxfordshire red-slipped ware included, have suffered partial or complete loss of surfaces. Such damage would appear to be the result of burial conditions rather than through abrasion as the result of 'mechanical' processes.

Composition and Chronology

The bulk of the recovered pottery consists of coarse greywares and black, sandy wares of likely fairly local manufacture. Non-local material is scarce, restricted to a small quantities of Oxfordshire whiteware and red-slipped wares, Dorset black-burnished ware, ?Verulamium region whiteware and central Gaulish samian.

The earliest material present consists of a single sherd of a grog and quartz-tempered fabric from fill of ditch L 1141, which probably dates to the mid or late first century AD. Additional evidence for this early dating of ditch L is provided by a disc brooch (see appendix 6). Second century material is present as a single sherd of central Gaulish samian from pit fill 1419. Later second to third-century material occurs in fills of pit 928 in the form of greyware jars, gritty whiteware (Verulamium region type?) and Oxfordshire whiteware mortaria.

The bulk of the pottery, including material from pit fill 1346, ditch fill 1549/1514 and pit fill 1694 is of later Roman (later third to fourth century) date. Represented fabrics comprise mainly greywares, coarse black sandy wares and Oxfordshire red-slipped wares, including mortaria. Forms include jar, flanged bowl and handled 'fish-dish' type dishes imitating Dorset black-burnished ware.

Fabric type	NRFRC equiv.	Count	Weight (grams)
Black sandy		16	181
Dorset black-burnished ware	DOR BB	6	25
Buff gritty ware	VER WH	4	18
Coarse grogged type	-	1	28
Grog with quartz ('Belgic' type)	-	1	21
Misc. greyware	-	92	664
Coarse greyware	-	14	87
Fine greyware	-	5	16
Coarse greyware with flint	-	3	18
Coarse black sandy (imit. BB)	-	15	193
Micaceous coarse black sandy (imit. BB)	-	7	134
Oxfordshire red-slipped ware	OXF RS	15	92
Oxfordshire white ware (mortaria)	OXF WH	1	104
Misc oxidised ware	-	1	14
Central Gaulish samian ware	-	1	4
Total		**182**	**1599g**

Table *: Roman pottery, represented fabrics

Summary

This is a small group which most likely relates to settlement activity located close to the excavated area. The pottery is mainly Late Roman (after *c.* AD 250) in character, although earlier Roman types occur in small quantities. Forms are predominantly utilitarian, comprising mainly jars dishes, bowls and mixing bowls.

Romano-British pottery and ceramic building material is shown in table * according to provisional group.

The Roman pottery is notably different in character from that recovered from earlier phases of work 200-300m to the north-east. Material from the earlier excavations was of Early Roman date (mainly mid-first to early or middle second centuries), with no late Roman types present. It is unclear at this stage whether the two groups of material are related and represent a shift of settlement activity or whether they derive from separate settlement foci.

Group	**Roman Pottery**		**Roman tile**	
	Count	*Weight*	*Count*	*Weight*
Roundhouse B*	1	9	-	-
Roundhouse C*	1	2	-	-
Ditch K (Roman)	-	-	1	82
Ditch L (Roman)	15	152	1	3
Pit Q (Roman)	102	739	2	35
Pit Group S (Roman)	6	30	-	-
Other	57	667	21	605
Totals	**182**	**1599**	**25**	**725**

Table *: Roman pottery and CBM. Distribution by provisional set
* material from roundhouses B and C is considered to be intrusive

Medieval pottery

A very small quantity was recovered (5 sherds, weighing 20g). Four sherds are unstratified. The remaining single sherd derives from pit fill 1346 (Pit Q) and is sufficiently small to be considered an intrusion.

All sherds are of a similar quartz and (non-calcined) flint tempered fabric which compares to material abundant from excavations at Newbury (Vince *et al*. 1997). Such material, commonly referred to as 'Newbury A' type, is believed to originate from the Wiltshire Kennet valley and to date to the 11th to13th centuries. Large quantities of 'Newbury A' type pottery were recovered from preceding excavations at Hartshill Copse associated with a structure provisionally interpreted as a small farmstead.

Statement of potential and requirements for further analysis and publication

Potential for further analysis is restricted by the limited size of the assemblage. The Roman pottery is however able to contribute to the major aim of the project, the characterisation and dating of archaeological deposits. Full recording of the Roman pottery by fabric (tied where possible to local and national pottery type series) and form is considered necessary in order to facilitate inter and intra-site comparisons and to maximise potential for addressing such issues as chronology and pottery supply.

Analysis of the assemblage will be used to establish whether there is evidence for overlap between this assemblage and material from earlier excavations, or whether they are chronologically discrete and may then relate to unconnected setlement *foci*. Further research of assemblages from the local area will be necessary and a sample of vessels from the two larger groups, Pits 928 and Pit Q, a total 6 vessels should be drawn.

Research:	1 day
Full quantification of pottery and database entry:	0.5 day
Report writing:	0.5 day
Illustration of 6 vessels:	1 day

Total: 2 days (Finds Officer)
1 day (Senior Illustrator)

APPENDIX 5: CERAMIC BUILDING MATERIAL BY E.R. MCSLOY

A small quantity of ceramic building material, 25 fragments weighing 725g, was recovered from six contexts (table *, above). All fragments are of a similar hard sandy fabric, fired to orange throughout. Two fragments of *tegula* are identifiable, the remainder consisting of unfeatured tile or brick fragments. All are datable by form, or by association with other material (pottery), to the Roman period.

Statement of potential and requirements for further analysis and publication

There is no potential for further analysis regarding this material. A note for publication should however be prepared. This will be done using extant records and a revised version of the report presented here.

Report writing (revision): 1 hour

Total: 1 hour (Finds Officer)

APPENDIX 6: THE METALWORK BY E. R. McSLOY WITH COMMENTS ON CONDITION BY ESTHER CAMERON

Introduction
All metal artefacts have been assessed by a specialist conservator and stabilised. Where appropriate metal objects have been x-rayed to facilitate identification and constructional/compositional details.

All items are extremely corroded and incomplete but appear to be stable. Two iron items contain a substantial metal core (931 and 1572) of which the latter may be cast iron. Sf. 9 (knife) is fragmented but almost complete and has traces of organic handle. Sf8 (brooch) is too fragile for easy handling and surface detail is obscured by dirt/corrosion. Both of these items have been provisionally dated to the Late Bronze Age/Early Iron Age by associated finds.

A total of ten metal items were recovered of which nine are of iron and one is copper-alloy. These figures do not include the single coin recovered, which is reported on below.

Copper alloy
A single copper alloy Roman coin was recovered: a small bronze of Constantine I (GLORIA EXERCITUS type) struck between AD 330-35. The coin was not identified on site but processed as part of soil sample 82, taken from pit group T, 976. A large number of triangular fired clay fragments of likely Iron Age date, were recovered from this pit and the coin is therefore clearly intrusive.

A single additional item of copper alloy (Sf. 5), a hinged plate brooch is recorded from ?ditch L, 1514. The condition of this item is extremely fragile with damage to the thinner metal at the edges and the central boss. Due to the damage the precise form of the brooch is unclear. The brooch features punched linear decoration. Four circular recesses on the outside of the central boss may originally have held bone studs or enamel. A mid to late first century AD is likely for this item which is in the tradition of hinged, thin, often tinned copper alloy plate brooches introduced in the first years of the conquest.

Iron
Iron knife Sf.9, from posthole fill 1671 (Four-poster F) is seemingly the only metal item of late prehistoric form from the site. The small quantity of pottery from this feature supports an Early Iron Age date. The form of the knife with plain tang and curving blade (the cutting edge is convex and the back concave) is paralleled from a number of Iron Age sites including Ashville, Abingdon (Parrington 1978 fig. 58), for which an Early Iron Age date is suggested by associated pottery. The remaining ironwork consists of fragmentary rod or bar-like items, together with three nails and a perforated binding strip fragment. With the exception of a square-sectioned bar (a knife tang?) fragment from 674, for which an ?Early Iron Age date is indicated by associated pottery, the remaining iron items derive from Roman period features.

Statement of potential and requirements for further analysis and publication

There is limited potential for further analysis regarding this material. The metal objects will however require basic archive level recording to include a catalogue description and/or classification. The iron knife is of some significance from a site with rather restricted non-ceramic artefact assemblage. Further research should be undertaken to identify further form parallels. The Romano-British brooch is an unusual form and is similarly deserving of further research work. Iron knife Sf. 8 and brooch Sf. 5 should be drawn.

As stated in *Understanding The British Iron Age: An Agenda For Action* (Haselgrove et *al* 2001) detailed technological examination of objects is less well served, but is crucial to understanding artefacts and their cultural context, for instance the effort required in manufacture, leading on to questions of craft specialisation and patronage. The analysis will seek to link the iron objects with the information derived from the metallurgical residues to investigate the organisation of production (see appendix 7 below) as basic questions such as smelting and smithing activities such as their technology, location and social interpretation in this period are poorly understood. The information will be analysed particularly in the context of the known local ironworking site at Cooper's Farm (Dunston Park), as well as the wider context of iron production and consumption in the Wessex region in this period.

Scope for investigative conservation work is limited but recommended for brooch Sf. 5 in order to fully reveal the punched decoration and for the iron knife Sf.9 in order to identify the organic material on the tang. Both items require further treatment for archiving/handling/recording purposes.

Additional Research:	1 day
Report Preparation:	0.5 day
Conservation:	2 hours
Illustration:	0.5 day

Total: 1.5 days (Finds Officer)

0.5 days (Senior Illustrator)
2 hours (Appointed conservator-approx rate £30 per hour)

APPENDIX 7: METALLURGICAL RESIDUES BY DR T.P. YOUNG

Summary
The assemblage includes both micro- and macroscopic metallurgical residues. The total quantity of residue is very small, suggesting that the excavated area was probably not the focus of the metallurgical operations which were occurring in the vicinity.

The microscopic residues are dominated by amorphous, vesicular materials. It is likely that the majority of these materials are not of metallurgical origin. The distribution of these materials on the site is largely dependent on the location of suitably sampled contexts.

Amongst the microscopic material are also more certain metallurgical residues: some 31 environmental samples yielded spherical hammerscale, and four samples contained flake hammerscale. Three contexts yielding flake hammerscale and fifteen of the contexts yielding spherical hammerscale were in the area of the structure interpreted as roundhouse D, including spheroidal hammerscale from the hearth. Some care must be taken in assuming that roundhouse D was used for metalworking because the actual amount of material involved is very small, the incorporation of micro-residues into postholes does not necessarily indicate use of that structure and also because the features containing the residues appears to suggest a rectangular, rather than circular area. Lesser amounts of slag were recovered from features associated with roundhouses B and C, none with roundhouse A.

The macroscopic slags include several large pieces which are best interpreted as slags from iron smelting within a non-slag tapping furnace. These smelting slags were mainly (apart from one in a Roman pit) found within the area enclosed by ditch G. A few slag pieces were probably from blacksmithing, and one large piece might either be from bloomsmithing or smelting.

It must be concluded that iron making and iron working were undertaken on the site, although the main smelting operation may have been outside the excavated area. Roundhouses B, C and D all yielded micro-residues from smithing and those contexts must therefore considered in the strictly technological sense to be of the Iron Age rather than the Bronze Age.

Although the assemblage is very small, this find is particularly important given the early date and the location of the site. It is recommended that follow-up analytical studies are undertaken to attempt to provenance the ore employed.

Micro-residues
The micro-residues have been examined within the constraints of time available and provisional identification made of all particles.

The dominant type of particle present is of dark, vitreous, vesicular, non-magnetic material. This material cannot be identified precisely by optical methods. It is likely indeed, that this class covers various types of material. It may include some slag-like materials, particularly the dark glass that may be derived from the melting of the lining of a furnace or hearth at temperatures in excess of about 1000°C. Most of the material is probably highly coked organic matter, particularly wood charcoal, but a small proportion of the material may be derived from mineral coal. Some of this material might also include a small proportion of burnt bone.

Some non-magnetic slag-like materials are more certainly identified, and these are dominated by glassy materials, mainly of a pale colour, but there are also some darker crystalline non-magnetic slag particles which may be small fragments of iron-smelting slags. There are rare examples of large non-magnetic slag spheroids, and these are likely to be slag droplets from the base of an iron smelting furnace.

Magnetic particles included some which appear to be heated rock (and which may, in part, be tiny fragments of iron ore), magnetic slag particles (derived from smithing slags), spheroidal hammerscale (produced during fire welding) and flake hammerscale (produced during smithing).

Particles in the residues which are not associated with slags or metallurgical residues include fragments of iron-rich sandstone, charcoal and coal.

Macro-residues
Only a small amount of macroscopic slag was recovered. Such material is described by set where possible and/or feature type and context. All these features have provisionally been assigned to the Late Bronze Age/Eary Iron Age as a result of spot-dating of the ceramics.

Context 005. The larger piece appears to be corrosion around a piece of iron, rather than slag. The smaller piece of slag is small nub of vesicular, dense slag, but is too small to be certain whether this piece of iron slag is derived from smelting or smithing.

Context 020. This is a slightly unusual slag piece. It has a distinctly purple surface patina, and contains inclusions of what appears to be shale. The slag has been fairly fluid, but the piece is rather amorphous. The piece has superficial lichen growths, suggesting it has been lying in a surface environment for some time. The piece cannot be attributed to any particular process, but the shale fragments suggest that the process was coal/coke fired, and the piece looks likely to be industrial/modern despite the recorded context.

Context 323. Two broken slag pieces: first with flow lobes of dense in right angle between two original contact surfaces. Some slight lineation on the contact surfaces creates strong impression that these are charcoal/wood contacts, so that this is a piece of slag within a hearth rather than a runner. Such a form could be interpreted as forming close to the blowing wall, below the hotzone of a non-tapping iron smelting furnace. The other piece is a rusty slag, probably, but not certainly, from iron smelting. A bag of small material from the same context is dominated by fired wall material, but also including some dense flow lobes of fayalitic slag. Material labelled from the equivalent context 422 (sample 23) comprises a small bag with fired clay, prills and blebs as well as more corroded material The entire assemblage is likely to have been derived from iron smelting.

Context 325. A highly irregular crudely plano-convex slag cake. The lower part includes a lobe of flowed slag, but the upper part is dominated by melted wall material, with abundant gravelly inclusions and vitrified upper surface. A small plano-convex cake of this type is likely to be from blacksmithing.

Context 407 (sample 48). Dense slag, locally with rusty surface. Includes small area of wall contact and interaction, suggesting orientation of the piece is approximately 100m along the wall, extending 55mm into furnace and up to 50mm thick. Upper (?) surface is irregularly broken; lower surface comprises impressions of large charcoal fragments. Charcoal ranges up to at least 40 x 40x 30mm. The most likely interpretation of this piece is that it derives from close to the blowing wall of a non-tapping iron smelting furnace. The open texture of the dense slag, with large charcoal voids and areas of wall attachment would be typical features of material from Irish sites recently examined by the author (particularly that at Tullyallen 6, unpublished).

Context 588. Two small pieces of grey slag with large charcoal impressions. One of the pieces has some original lobate surface. These are almost certainly slags from within an iron smelting furnace.

Context 821. A complexly lobed mass, probably from just in front of the burr area in a non-tapping iron smelting furnace. One side of the specimen shows slag with a coarsely equant texture, a common feature of the burr area (the zone of interaction between the iron-rich furnace contents and the wall immediately beneath the blow hole). The slag has flown around very large wood or charcoal pieces, ranging up to at least 80mm long.

Context 1030. The larger slag piece is a small smithing cake with very fine charcoal impressions, the smaller slag piece is melted furnace/hearth wall. 25g of the sample comprises corroded iron pieces, including nails.

Context 1076. This is a large piece (90 x 80 x 55mm thick) of plano-convex slag cake. The piece is extremely dense, and has little internal vesicularity. The upper surface is marked by rather rusty impressions of small charcoal pieces. The upper part of the cake has a dense slag layer some 30mm thick, with an equant granular, crystalline texture distally, with a more radial, lath texture proximally, where the cake shows adhering altered lining. This burr region is marked by the development of flow lobes in the lower part of the cake. Suggesting a high mobility of slag close to the furnace wall. The lower surface shows flow lobes proximally, becoming replaced by charcoal impressions distally. This is a difficult slag piece to identify, with no certain indicators of origin. It shows some features which would be unusual an a plano-convex bloomsmithing cake, particularly the lack of a smooth upper surface and the presence of flow lobes, so an origin within a non-slag tapping smelting furnace appears likely, but is by no means certain.

Distribution

Microscopic residues from metallurgical activity were present in the area of roundhouses C and D. The finds were dominated by magnetic materials including spheroidal hammerscale (roundhouse D including 17 of the 32 contexts yielding spheroids; C including a further five samples), but with rather little flake hammerscale (although the samples from roundhouse D included three of the four samples yielding this material). Whether this is a failure of collection or a genuine feature remains to be determined (residues have been kept and a sample will be further investigated to resolve this issue). The residues do not necessarily indicate that the iron working was taking place within these structures, but the circumstantial evidence suggests it was. Both roundhouses have large hearth-like features on their northern sides; in roundhouse D this hearth contained some residue (spheroidal hammerscale) and in roundhouse C, pit 201 in a similar location also yielded spheroidal hammerscale. However, derivation of the micro-residues through being residual on the ground prior to the roundhouse construction, intrusive during post decay, or simply carried into the roundhouse on people's clothing or footwear might also account for the distribution. It may be significant that there are no accumulations of

macroscopic slags adjacent to these houses, which would be extremely likely if either, or both, had functioned as a smithy.

Microscopic residues from the area of Roundhouse B were typically less diagnostic, but included spheroidal hammerscale from two postholes 406 and 408. One of which, 406, also yielded some macroscopic iron smelting slag. Both postholes yielded a small piece of what may be mineral coal – a material more commonly encountered in southern England in Roman contexts than earlier.

Spheroidal hammerscale also was retrieved from within pit 1262 – a component of prehistoric pit group R, from within ditch 745 (a component of enclosure ditch G). Ditch G also yielded two collections of macroscopic slag contexts 5 and 1076.

A particularly important collection of both micro- and macro-residues was retrieved from posthole 322, contexts 422 and 323, within the enclosure. This material included a large block of iron smelting slag, a second probably from iron smelting, together with a large collection of small debris including prills, flows, lining fragments and rusty slags.

A smaller collection of material derived from pit 1030 (to the north of Roundhouse D) includes an example of a blacksmithing slag and a furnace/hearth wall fragment, occurring in association with some small iron artefacts including nails.

This wide distribution of material across the prehistoric site therefore encompasses three of the four roundhouses, the enclosure ditch and isolated pits and postholes both inside and outside the enclosure. Therefore all these components were receiving fills and sediments after the Bronze Age. A single context 820, fill of pit 821, dated by artefacts as Roman, yielded a piece of iron smelting slag. This piece is extremely similar to the material from posthole 322, and is likely to be residual.

The material from the south-western corner of the site poses some slight problems. The slag from context 20 pit 19 is undiagnostic to hand-specimen inspection, but is similar to industrial period forge slags. The adjacent pit 27 yielded a spot sample (No. 2) with a considerable quantity of coke-like residue which might be true mineral coal coke. Context 20 produced a single sherd of later prehistoric pottery and both pit 19 and 27 have been provisionally dated to the Late Bronze Age/Early Iron Age. If the slag from one or either of these features is not considered intrusive, the dating might need to be reconsidered.

Discussion

The volume of metallurgical residue from the site is very small, but indicates that both iron smelting and iron working took place somewhere on the site. However, determination of the scale of that activity must await the discovery of its focus. The amount of iron smelting slag recovered represents the equivalent of perhaps one tenth of one smelt.

The iron smelting appears to be reasonably closely tied to the prehistoric structures recognised, with microscopic residues occurring widely in their postholes and macroscopic slags occurring within pits and postholes within the enclosure and within the fill of its ditch G. The small number of slag pieces does not permit much comment on the technology and scale of operation, but do point to the use of non-slag tapping furnaces. Such furnaces are widely presumed to have been in use in the Early Iron Age, but direct evidence for them has not generally been forthcoming in southern England. Identification of the ore involved in the smelting operation would be very important. The best known iron-smelting site in the area is the Saxon site at Ramsbury (Haslam 1980), some 27km further up the Kennet Valley, but still within a broadly similar geological setting.

Until recently it had been assumed that most of the iron being employed in Early Iron Age Wessex was sourced from outside the region, but a number of smelting sites within the area have started to be recognised. The technology of iron smelting appears to be very close to that on several unpublished sites of this period in Ireland for which the author has undertaken review of the metallurgical residues.

Statement of Potential and requirements for further analysis and publication

Extensive further analysis of this rather small assemblage would probably not be justifiable, but in view of the scarcity of earlier Iron Age smelting operations in lowland Britain, full chemical analysis of the macroscopic smelting slags would, at least, be desirable. These studies would be aimed at producing data to assist in provenancing the iron ore employed, and possibly to provide some information on the efficiency of the smelting operation.

The preponderance of spheroidal compared to flake hammerscale types is unusual. Additional checking of soil sample residues is required in order to investigate whether this is a genuine pattern or a product of the recovery process.

Check residues 1 day

Chemical analysis/report	£460

Total: 1 day (FA)
£460 (specialist)

APPENDIX 8: THE WORKED STONE BY FIONA ROE

The stone finds were all examined using a x8 hand lens, and the materials identified. Sarsen was used for the five objects, four saddle querns and a hammerstone that were found in Late Bronze/Early Iron Age contexts. This stone could have been obtained locally, since blocks of sarsen have been noted as being common in the Plateau Gravel between the rivers Pang and Kennet (Blake 1903, 68). Eleven pieces of stone were given a preliminary examination, and are listed in a provisional catalogue. Nine were identified as coming from objects, with just one piece of building stone, and one fragment of burnt stone. Five or possibly six of the nine objects relate to saddle querns, since there is one complete, small saddle quern, fragments from four further ones, and a group of unworked fragments of quern or rubber material. A hammerstone, a whetstone fragment and a possible socket stone complete the assemblage.

Three pieces of saddle quern come from postholes, where they were probably re-used as post packing 657, 662 and 783. Another quern fragment 524 came from the fill of a treebole, while a hammerstone 953 came from pit 952. In addition, three finds from Roman contexts may be redeposited prehistoric material. Part of a saddle quern from 1346 was found in Roman pit 1345, pit Q, while three unworked fragments of prehistoric quern or rubber material came from pit 930. The one find of burnt stone 978 is from a stakehole, but seems best interpreted as prehistoric, along with burnt flint from the same context. Thus only two of the objects appear to be certainly Roman, a possible socket stone from pit 930 and a whetstone fragment 1346 from pit 1345. There is also a fragment of roofing tile 931 which again is from Roman pit 930. Nearly all the finds of stone are fragmentary, but are otherwise in good condition, so that petrological identifications can readily be made. There is one complete, small saddle quern 657, while the hammerstone 953 and possible socket stone 931 are reasonably well preserved.

Fragments of iron sandstone, noted as a quern or rubber material could have come from the same source (*op cit.*, 64), as could two pieces of quartzite, a pebble, used for a possible socket stone and a burnt fragment. By contrast, the fragment of saddle quern thought to be a prehistoric object redeposited in Roman pit Q is made from Upper Old Red Sandstone, brought from the Forest of Dean some 106 km (66 miles) to the north west of the site. The Roman whetstone also from this feature, is made from Kentish Rag, brought from near Maidstone in Kent, while the fragment of Roman roofing tile is Lower Old Red Sandstone, likely to come from the Brownstones of the Forest of Dean.

These finds are of interest principally because known sites of this date have hitherto been sparse in the area, although a number of Bronze Age sites with finds that include worked stone have been recorded locally. Notable examples are Aldermaston Wharf and Knight's Farm, Burghfield (Bradley *et al.* 1980), Pingewood (Johnstone & Bowen 1985) and Reading Business Park (Moore & Jennings 1992; Brossler *et al.*, in prep). At these sites sarsen seems to have been widely used for saddle querns, while ironstone also occurs, but in smaller quantities. What is striking, however, at such sites is the discovery that, while local materials were mainly being used for the saddle querns, some imported materials were also beginning to appear. In the wider region, the same pattern can be seen in finds from the Eton Rowing Lake and the Flood Alleviation Scheme sites, and at Eton further Old Red Sandstone was found in both Late Bronze/Early Iron Age and Middle Iron Age contexts (Roe, in prep).

Sites of Early Iron Age date are particularly uncommon in the area, but at Dunston Park, Thatcham, further sarsen saddle querns were found (Fitzpatrick *et al.* 1995, 77). Not a great deal is known about the use of stone during the Iron Age generally in the Kennet valley, since sites of this date appear not to have been located. The Roman worked stone is, however, more readily compared with local sites. Whetstones made from Kentish Rag are common on Roman sites generally, and further comment may not be required. Roofing tiles of Old Red Sandstone, surprisingly, were quite widely distributed, occurring, for instance, at Silchester (Fulford & Timby 2000).

Statement of potential and requirements for further analysis and publication

This collection of worked stone does not require a great deal of further work in order to complete a final report. Thin sections will not be needed. The stone should be given a second, careful examination, to record measurements and weights for the catalogue, and to note any further descriptive details. It is intended to obtain a second opinion on the saddle quern of Old Red Sandstone, and more detail can be provided for discussion about sites with comparable finds. It is suggested that two items should be drawn, the complete small saddle quern of sarsen 657; to illustrate the more typical prehistoric querns, and the quern fragment of Old Red Sandstone 1346, to illustrate a more unusual aspect of the site, and a point of particular interest.

Report Preparation:	3 days (£360)
Illustration	1 day

Total: £360 (specialist)
1 day (Senior Illustrator)

APPENDIX 9: THE CREMATED BONE BY JACQUELINE I. MCKINLEY

The cremated human bone was found with pottery sherds (1 vessel), of Late Bronze Age type, in a feature set cremation P, 448 between the terminals of enclosure ditch G. It is unclear at this stage whether the deposit represents an urned or unurned burial.

Methods
The bone was rapidly scanned to assess condition, demographic data, presence of pathological lesions and other inclusions.

Results
The bone is in relatively good condition, with no indications of erosion or abrasion and includes some trabecular bone. The bone fragment size is generally small, with most fragments being <10mm in size; this may reflect burial conditions rather than any cultural activity.

The 877.1g of cremated human bone appears to represent the remains from a single adult, possibly male. No pathological lesions were observed in the scan, or any non-human osseous material indicative of pyre goods. The bone was predominantly white, indicative of full oxidation of the organic components. Elements from all skeletal areas appear to be represented.

Statement of potential and requirements for further analysis and publication

Further analysis, undertaken following the writers standard procedure (McKinley 1994; 2000), may enable the recovery of further data pertaining to the age and sex of the individual. Pathological lesions by be revealed with more detailed analysis. Aspects of pyre technology and the rituals attendant on the mortuary rite will be considered from a combination of the osteological and stratigraphic data, including the nature of the deposit.

Some re-washing of the bone from sample 26 will be required. Access to site context records and any relevant drawings will be a requirement of analysis.

Total: 1 day (£200); specialist J. McKinley

APPENDIX 10: BURNT ANIMAL BONE BY E.R. MCSLOY

Small quantities of burnt animal bone were recovered from 23 contexts (table *). The majority of fragments are small and are not identifiable to species. Such material was recovered exclusively from soil samples taken from a variety of features across the site. The absence of unburnt faunal remains almost certainly was due to the relative acidity of soil conditions.

Context	Group	Wt.
200	-	<1g
202	-	<1g
204	-	<1g
221	-	1g
492	-	<1g
500	Roundhouse B	<1g
542	Roundhouse B	<1g
1105	-	<1g
1126	-	1g
1238	-	<1g
1242	Roundhouse C	<1g
1272	Roundhouse C	<1g
1340	Roundhouse C	<1g
1400	Roundhouse D	<1g
1402	Roundhouse D	1g
1454	Roundhouse D	<1g
1462	Roundhouse D	<1g
1631	Roundhouse D	<1g
1658	Roundhouse D	<1g
1662	-	<1g
1664	Roundhouse D	<1g
1667	Roundhouse D	2g
1669	-	<1g

Table *: burnt bone

Statement of Potential and requirements for further analysis and publication.

There is no potential for further analysis with this material due to the fragmentary nature of the assemblage as a direct result of the soil conditions. The latter has allowed for poor survival of faunal remains.

APPENDIX 11: CHARRED PLANT REMAINS BY WENDY J. CARRUTHERS

Introduction
Environmental sampling was carried out following advice from environmental consultants Helen Keeley, and the author of this report. Site visits were made and processing methods were adapted to suit the conditions.

Methods
Samples were taken from a wide range of features during the excavations, including postholes, pits and hearths. The samples were processed on site using standard methods of floatation. A 250µ mesh was used to collect the flot and 1mm was used to retain the residue. The large, gravely residues were dried and sorted by eye on site. A number of residues were found to contain frequent hazelnut shell fragments, demonstrating the value of this method.

The dried flots and charred material from the residues were assessed. Three residues were also scanned under the microscope as a check on the recovery. They were found to be very clean of charcoal, indicating that the floatation had been successful.

Two hundred and seventeen flots have been assessed for this report. The assessment was carried out by rapidly scanning the flots under a binocular microscope. Where very small, unproductive flots were encountered, they were fully sorted. For the large, high-potential flots it was only necessary to scan a small proportion of the flots to see that the samples were worthy of full analysis. Rough frequency scoring was used in these cases to indicate the main components of the assemblages. It should be noted that further taxa are likely to be recorded during full analysis, and some identifications may be taken further.

Results
Table ** presents the results of the assessment, and indicates the potential of the samples for further analysis. The following scores were given to the samples:

A = high potential – high frequency of well-preserved charred plant remains, or presence of unusual taxa. Worthy of full analysis on archaeobotanical grounds alone.
B = good to moderate potential – often lower frequency of material or poorer preservation Worthy of full analysis in conjunction with class A samples.
C = little potential – very few remains present. Only worth including if of group value, or if particular archaeological questions are being asked of the feature.
D = no remains, or fully sorted and identified remains. No further potential.

It should be noted that if changes in the phasing are made, or if contexts are of particular archaeological significance, the 'Potential' rating may change. Ratings will also be influenced by the results of other environmental analyses, the importance of the samples being greatly increased by the analysis of different types of environmental remains from the same context.

Discussion
State of preservation - Many of the flots were silty and most contained modern rootlets and modern, uncharred seeds. However, the charred plant remains, where present, were in a fairly good state of preservation, with little evidence of weathering. A number of samples contained 'slaggy' fragments of material. In some cases these could be the result of high-temperature charring of plant material, although the globular black fragments were not recognisable as such and are more likely to represent additional spheroidal hammerscale. The absence of 'glassy' but recognisable cereal grains it is not thought that high-temperature charring has played an important part in the range of cereal components preserved, i.e. differential preservation due to high-temperature charring is not thought to be an important reason behind the very rare occurrence of chaff in samples from this site (see discussion below). This is an important point, since charring at certain temperatures can cause the ratios of chaff to cereal grains to be altered (Boardman & Jones, 1990). These ratios are often used in discussions as to whether crop processing waste, unprocessed crops or processed grain are represented.

Frequency of charred plant remains
Out of 217 samples scanned, only four samples produced enough material to be graded 'A', and only 23 others had lower concentrations of remains that were worth including in the full analysis. Forty-eight more samples contained one or two cereal grains or weed seeds, but their flots were small enough to have been fully sorted at the assessment stage (Potential 'C' or 'D'). Although these samples do not require further work, their data may be used in the final report.

This type of low concentration of cereal remains is more typical of primarily pastoral sites or small, short-term settlements. However, more accurate quantifications need to be carried out before conclusions can be drawn, and comparisons with other sites in the area need to be carried out.

Range of plant remains represented
In addition to the observation made above, there is a notable lack of crop processing waste on this site. The glume bases of hulled wheats are fairly tough, easily recognised remains, and they are sometimes present in fairly high concentrations, along with weed seeds, where cereal processing waste has been deposited. However, two factors may have a bearing on these observations – relatively few Late Bronze Age sites have been investigated in detail, and there is no doubt that cereal processing waste is much more common on Iron Age sites than on Bronze Age sites. Secondly, barley appears to have been as important as emmer/spelt wheat on this site (though this may be disproved once the rich samples have been fully analysed). If barley was important, this could reduce the amount of emmer/spelt chaff that was likely to have been distributed around the site. Barley chaff is not recovered in such large quantities as emmer/spelt chaff, probably due to preservational differences and the reduced ratio of chaff to grains in an ear of barley.

Barley was the dominant crop cultivated during the Middle Bronze Age, with some sites in southern England producing both the naked and hulled varieties (e.g. Rowden, Dorset, Carruthers, 1990). However, by the Late Bronze Age emmer and spelt wheat were beginning to take over, and by the Iron Age these wheats predominate most archaeobotanical assemblages in southern England. Where barley has been recovered in higher numbers than wheat on some Iron Age sites it is sometimes suggested that this is due to the use of barley for fodder. It will be interesting to establish the relative frequencies of these crops in the rich deposits, and to compare the results with other sites on the floodplain of the River Kennet and on the plateau gravel.

The range of taxa observed during scanning was not particularly great or unusual in any way. Hulled barley and spelt wheat were positively identified, and it is likely (although not yet confirmed by the recovery of well-preserved glume bases) that emmer wheat was present. The presence of oats, bread-type wheat and even possibly rye were not confirmed, although a few poorly preserved grains of each were recovered. These cereals are occasionally found in small numbers in Bronze Age assemblages, but probably did not become crops in their own right until the Iron Age. Full analysis of the better-preserved samples may help to clarify the picture.

The range of weed taxa was fairly restricted, and typical of many prehistoric assemblages. Arable weeds such as black bindweed (*Fallopia convolvulus*) and chess (*Bromus* sect. *Bromus*) were the main taxa recorded, although other, smaller-seeded taxa are likely to be found during full sorting. One weed of damp ground, marsh bedstraw (*Galium palustre*) was present in several samples, reflecting the types of soils cultivated.

One possible cultivated flax seed was recovered from the fill of pit 203 in roundhouse C. Since these seeds have less chance of becoming charred than cereal remains, and are often difficult to identify because of their high oil content, this one seed could represent an important crop. Further examination may confirm the identification of this seed. Flax is not unknown from Late Bronze Age assemblages, but it is not particularly common until the Saxon period.

Hazelnut shell fragments and a few other hedgerow/scrub/woodland remains were more frequent amongst this assemblage than on many sites. Hawthorn, elder and sloe remains were present, and although these only amounted to one or two seeds, the results as a whole could suggest that woodland resources were still readily available to the Late Bronze Age occupants of the site. It will be interesting to compare these results to those from the charcoal analysis. Unfortunately, although a palynologist visited the site, pollen was not thought to survive in the gravelly fills of the features.

Statement of potential and requirements for further analysis and publication
Although this site has not been particularly productive in terms of charred plant remains, full analysis of the four grade A samples and the 23 grade B samples is likely to provide enough data to address the following questions:

- Which crop plants were being used by the occupants – there is evidence for barley, spelt, probably emmer and possibly flax according to the assessment results;
- Whether crop processing was taking place locally, or whether cereals were being brought onto the site as processed grain – very few chaff fragments and weed seeds were observed during the assessment; some weed taxa indicate the cultivation of damp soils;
- ;Whether the economy was based more on pastoral rather than arable agriculture, as suggested by the evidence from other sites studied in the Kennet Valley (Lobb & Rose, 1996)

Although the four grade A samples are definitely worth analysing on archaeobotanical grounds alone, however, it is recommended that as many of the grade B samples as possible are also included, so as to cover as wide a range of features as possible and as wide an area of the site, and to provide possible information to aupllment the archaeological analysis of the features and the wider spatial analysis of activities within the site.

Costing for Full Analysis
Full sorting, identification, quantification, analysis and report writing is recommended for 27 samples.

Total: 18 days Wendy Carruthers

context no	description	fill of	sample no.	sample vol.(l)	flot vol. (ml)	flot description	grain	chaff	weeds	HNS	other	potential	notes
7	fill of pit	6	1			NOT FOUND							
28	fill of pit	27	2	5	45	freq slaggy, 15ml lge char, occ sm char	0	0	2	1	0	B	occ. elder, plantain, poppy, Polygonum aviculare - open, disturbed ground weeds - unusual assemblage
141	fill of posthole	140	3	6	2	roots, rare char, mod seeds	0	0	0	0	0	D	
145	fill of posthole	144	4	8	3	roots, mod seeds, rare char	0	0	0	0	0	D	
147	fill of posthole	146	5	8	3	roots, rare char, mod seeds	0	0	0	0	0	D	
159	tertiary fill of posthole	154	6	35	30	lot roots, occ. char, mod seeds	0	0	0	0	0	D	
161	fill of posthole	160	7	4	1	roots, rare char	0	0	0	0	0	D	
176	fill of posthole	144	9	20	10	lot roots, occ. char, mod seeds	0	0	0	0	0	D	
177	fill of posthole	140	10	20	10	roots, silt, freq mod seeds, rare char, slaggy	0	0	0	0	0	D	
178	fill of posthole	164	11	20	20	roots, silt, rare char, mod seeds	0	0	0	0	0	D	
179	fill of posthole	146	12	20	20	roots, silt, occ. sm char, mod seeds	0	0	0	0	0	D	
180	fill of posthole	160	13	10	1	roots, mod seeds	0	0	0	0	0	D	
183	tertiary fill of posthole	154	14	20	10	roots, silt, rare char, mod seeds	0	0	0	0	0	D	
185	fill of posthole	184	8	4	3	roots, silt, rare char	0	0	0	0	0	D	
198	secondary fill of posthole	154	15	20	10	lot silt, roots, occ. sm char	0	0	0	0	0	D	
200	fill of pit	199	16	30	400	lot roots, occ. lge char	1	0	0	0	0	D	2 indet. Cereal frag.
200	fill of pit	199	149	40	500	lot roots, lot sm char, 30ml lge char	2	0	0	0	0	B	5 e/s grain, 1 oat, 3 indet. Cereal - poss. not much more but difficult to scan because lot roots
200	fill of pit	199	156	10	165	lot sm char, 45ml lge char	2	0	0	0	1	B	4 e/s grain, 3 barley, 1 indet. Cereal, 1 Prunus spinosa stone - poss. a few more
202	fill of pit	201	17	120	500	lot roots, v. silty, 15ml lge char	2	0	1	1	0	B	1 e/s grain, 4 barley, 1 HNS, 2 indet. Cereal, 1 cf. Trifolium - needs refloating, difficult to see
204	fill of pit	203	18	30	100	lot roots, slaggy frag., 8ml lge char	0	0	1	0	0	C	Galium palustre - wet ground weed, prob no more
204	fill of pit	203	154	10	183	38ml lge char, silty, lot roots, lot sm char	2	0	0	0	0	B	7 barley, 1 e/s grain, 2 indet. Cereals - poss. a few more, wash. NOT LISTED
204	fill of pit	203	159	40	150	28ml lge char, lot sm char, silty, lot roots,	2	0	1	0	1	B	2 e/s grain, 3 barley, 2 indet. Cereal, 1 Vic/Lath, 1 cf. flax - poss. a few more in roots
205	primary fill of posthole	154	19	10	5	roots, silt, rare char	0	0	0	0	0	D	
221	fill of pit	220	20	20	30	lot roots, some sm char, lot mod seeds	0	0	0	0	0	D	
231	fill of posthole	230	22	15	10	lot roots, freq mod seeds, occ. sm char	0	0	0	0	0	D	
286	fill of posthole	285	43	10	3	roots, silt, mod seeds	0	0	0	0	0	D	RESIDUE checked - v. clean
288	fill of posthole	287	39	10	10	roots, occ. sm char	0	0	0	0	0	D	
288	fill of posthole	287	40	10	5	roots, occ. slaggy, occ. char, mod seeds	0	0	0	0	0	D	
290	fill of posthole	289	34	10	20	lot roots, rare char	0	0	0	0	0	D	
290	fill of posthole	289	35	10	20	lot roots, rare char	0	0	0	0	0	D	

context no	description	fill of	sample no.	sample vol.(l)	flot vol. (ml)	flot description	grain	chaff	weeds	HNS	other	potential	notes
292	fill of posthole	291	25	10	10	roots, occ. sm char, mod seeds	0	0	0	0	0	D	
294	fill of posthole	293	29	18	10	lot roots, occ. sm char, mod seeds	0	0	0	0	0	D	
300	fill of posthole	299	74	15	30	roots, freq sm char, freq mod seeds, 2 v. lge char fg + 5ml	0	0	0	0	0	D	
302	fill of posthole	301	37	15	10	roots, mod seeds, rare char	0	0	0	0	0	D	
315	fill of posthole	314	50	15	10	roots, occ. char	0	0	0	0	0	D	
319	fill of posthole	318	52	10	3	roots, sev. char	0	0	0	0	0	D	
323	fill of posthole	322	21	10	10	roots, sm char, mod seeds	0	0	0	0	0	D	
343	fill of posthole	342	54	10	1	roots, silt,	0	0	0	0	0	D	
358	fill of posthole	357	56	10	5	roots, silt, mod seeds	0	0	0	0	0	D	
380	fill of posthole	379	60	15	50	lot roots, sev sm char, slaggy	1	0	0	0	0	D	1 cf. barley frag
395	fill of posthole	394	65	10	10	roots, occ. sm char, mod seeds, white slaggy frag	0	0	0	0	0	D	
401	fill of posthole	400	68	10	10	roots, silt, mod seeds, slaggy black fg	0	0	0	0	0	D	
403	fill of posthole	402	70	12	10	silt, roots, v. rare char, modern grape seed	0	0	0	0	0	D	
405	fill of posthole	404	72	10	10	roots, silt, mod seeds, occ. sm char	0	0	0	0	0	D	
407	fill of posthole	406	48	10	5	roots, mod seeds	0	0	0	0	0	D	
409	fill of posthole	408	41	15	40	lot roots & silt, mod seeds	1	0	0	0	0	D	1 barley grain
422	fill of posthole	322	23	10	10	roots, sev sm char	0	0	0	0	0	D	
426	fill of posthole	230	24	25	10	roots, silt, mod seeds, occ. sm char	0	0	0	0	0	D	
447	fill of cremation pit	446	26	10	3	silt, roots, mod seeds, slaggy fg.	0	0	0	0	0	D	
448	fill of cremation pit	446	27	15	30	silt, occ. sm char, roots, slaggy fg.	0	0	0	0	0	D	
449	fill of posthole	291	28	20	20	roots, silt, occ. sm char, mod seeds	0	0	0	0	0	D	
489	fill of pit	488	31	25	30	roots, little char, slaggy fg.	1	0	0	0	0	D	3 emer/spelt grains - sorted
490	fill of posthole	293	30	18	20	lot roots, little char, mod seeds	1	0	0	0	0	D	1 barley grain - sorted
492	fill of pit	491	32	40	60	lot roots & silt, sev sm char	2	0	2	0	0	B	sev. poor grains, some weeds incl. Fallopia
494	fifth fill of pit	493	33	40	85	roots,15ml lge char,	4	0	0	4	0	A	lot of poor emmer/spelt grain & barley, freq HNS in residue
499	fill of posthole	498	38	15	5	roots, rare char, mod seeds	0	0	0	0	0	D	
500	fill of posthole	301	36	18	15	roots, mod seeds, slaggy	0	0	0	0	0	D	
504	primary fill of pit	493	46	8	15	roots, freq sm char,	2	0	1	0	0	C	sev poor cereals, barley, Fallopia - prob all sorted
505	fill of posthole	408	42	20	30	lot roots, silt, rare char,mod seeds	0	0	0	0	0	D	
context no	**description**	**fill of**	**sample no.**	**sample vol.(l)**	**flot vol. (ml)**	**flot description**	**grain**	**chaff**	**weeds**	**HNS**	**other**	**potential**	**notes**

514	fill of pit	513	45	10	20	lot roots, lot silt, refloated, mod seeds, sev sm char, freq slaggy fg	1	0	0	0	0	D	4 poor indet. Cereals
518	fill of posthole	285	44	10	3	roots, occ. char, mod seeds	0	0	0	0	0	D	
521	fill of posthole	526	47	5	5	roots, sev sm char, mod seeds	0	0	0	0	0	D	
542	fill of posthole	406	49	15	5	roots, sev sm char, silt	0	0	1	0	0	D	1 Rumex sp.
545	fill of posthole	314	51	6	10	roots, sev char	0	0	0	0	0	D	
603	fill of posthole	318	53	10	2	roots, occ. char, silt	0	0	0	0	0	D	
621	fill of posthole	342	55	8	3	roots, silt, mod seeds, rare char	0	0	0	0	0	D	
634	fill of posthole	357	57	15	10	roots, mod seeds, slaggy fg	0	0	0	0	0	D	
639	fill of pit	638	59	20	5	roots, silt, sev sm char	0	0	0	0	0	D	
640	fill of pit	638	58	20	15	roots, occ char, silt	1	0	0	0	0	D	1 barley fg, 1 puffed Triticum sp., 1 indet. Cereal fg - sorted
657	fill of posthole	379	61	30	60	lot roots, lot silt, occ. lge char	1	0	0	4	1	B	freq HNS in residue, 3 poor indet. Cereal grains, 1 e/s grain, 1 Sambucus nigra - poss more in roots
679	fill of pit	677	62	7	5	silt, rare char	0	0	0	0	0	D	
731	fill of posthole	730	63	6	10	occ lge flaky char, mod seeds	0	0	0	0	0	D	
732	fill of pit	379	64	20	30	lot roots, mod seeds, occ. sm char	0	0	0	0	0	D	
735	fill of posthole	394	66	10	10	roots, silt, sev sm char, mod seeds	0	0	0	0	0	D	
746	fill of ditch	745	197	40	5	silt, sev sm char, mod seeds	0	0	0	0	0	D	
773	fill of pit	772	67	30	50	lot silt, roots, muddy lumps, mod seeds, occ sm char	0	0	0	0	0	D	difficult to scan - probably no remains
778	fill of posthole	400	69	10	50	lot roots, occ. sm char, silt, mod seeds	0	0	0	0	0	D	
788	fill of posthole	402	71	20	30	lot roots, mod seeds, occ. sm char, silty	0	0	0	0	0	D	
856	fill of posthole	404	73	20	10	roots, mod seeds, occ. char, silt	0	0	0	0	0	D	
878	fill of posthole	299	75	10	10	roots, silt, slaggy fg, mod seeds, occ char	0	0	0	0	0	D	
941	fill of posthole	940	76	10	3	roots, occ. sm char	0	0	0	0	0	D	
976	fill of pit	975	82	40	20	lot roots, silt, mod seeds, occ sm char	0	0	0	0	0	D	
1103	fill of posthole	1102	77	10	140	1ml lge char, freq sm char	4	0	0	0	0	A	lot of good e/s grain
1105	fill of pit	1104	78	40	35	15ml lge char, lot roots, slaggy fg, mod seeds	2	0	0	3	0	B	sev barley, HNS in residue - prob a little more in roots
1119	fill of pit	1118	79	20	390	205ml flaky lge char	0	0	0	0	0	D	
1121	fill of pit	1118	80	20	260	135ml lge, distorted char, lot sm char	1	0	0	0	0	D	1 cf. barley - sorted
1126	fill of pit	1125	81	40	48	18ml lge char, roots, sev sm char, silty	1	0	0	0	0	D	2 e/s grain, 1 barley - sorted
1208	fill of posthole	1207	103	10	10	roots, freq sm char, mod seeds	0	0	0	0	0	D	
1216			95		20	roots, sev sm char, silt	0	0	1	0	0	D	1 Rumex sp. - sorted. NOT LISTED
1218	fill of posthole	1217	96	10	10	2 fg lge char, freq sm char, occ. roots	0	0	0	0	0	D	
1222	fill of posthole	1221	94	10	10	silt, roots, sev sm char	1	0	0	0	0	D	4 sm indet. Cereal fg
1224	fill of posthole	1223	86	10	5	roots, silt	2	0	1	0	0	D	1 e/s grain, 1 barley, 5 indet cereal fg, 1 cf. chess - sorted

context no	description	fill of	sample no.	sample vol.(l)	flot vol. (ml)	flot description	grain	chaff	weeds	HNS	other	potential	notes
1228	fill of posthole	1227	85	20	40	lot roots, lot silt, some lge char, sev sm char	1	0	0	0	0	D	3 indet. Cereal fg - sorted
1230	fill of posthole	1229	140	10	20	roots, occ sm char, mod seeds	0		0	0	0	D	
1232	fill of posthole	1231	110	10	5	roots, occ. char, mod seeds	0	0	0	0	0	D	
1236	fill of posthole	1235	126	10	15	roots, sev sm char	2	2	1	0	1	D	3 e/s grain, 3 indet. Cereal fg, 2 Triticum spelta glume bases, 3 e/s gl bases, 1 chess, 1 Poaceae, 1 Crataegus mongyna - sorted
1238	fill of posthole		130	10	20	silt, freq sm char	1	1	1	0	0	B	1 e/s grain, 3 e/s gl bases, 1 chess fg. - prob not much more but worth sorting because of chaff
1240	fill of posthole	1239	135	40	76	roots, lot sm char 16ml lge char	1	0	0	0	0	C	2 e/s grain, 2 barley - prob no more
1242	fill of posthole	1241	89	10	50	oc lge char, freq sm char, lot roots, silt	1	1	1	0	0	B	1 barley, 3 indet. Cereal fg, 2 e/s gl bases, 1 Rumex sp. - poss a few more
1244	fill of posthole	1243	137	10	5	roots, sm char,	0	0	0	0	0	D	
1246	fill of posthole	1245	92	10	40	occ lge char, lot roots, freq sm char	1	0	0	0	0	D	2 barley - sorted
1254	fill of posthole	1253	83	10	30	lot roots, freq sm char, silt	0	0	0	0	0	D	
1263	fill of pit	1262	84	40	50	lot roots, sev sm char, mod seeds	1	0	1	0	0	C	1 barley, 1 Galium aparine - prob no more, +-sorted
1270	fill of posthole	1223	87	10	5	roots, silt, sm char	1	0	0	0	0	D	2 e/s grain - sorted. RESIDUE checked - v. clean
1271	fill of posthole	1227	88	20	15	roots, silt, some sm char	0	0	0	0	0	D	
1272	fill of posthole	1241	90	10	20	roots, sev sm char	1	0	1	0	0	D	3 poor e/s grain, 1 indet. Cereal fg, 1 Galium palustre - sorted
1282	fill of posthole	1281	91	20	20	roots, sev sm char	1	0	0	0	0	D	1 poor e/s grain, 1 poor cf. barley, 1 cf. oat - sorted
1295	secondary fill of posthole	1213	93	10	20	lot silt, root, sev sm char	0	0	0	0	0	D	
1296	secondary fill of posthole	1213	97	10	5	roots, sm char	0	0	0	0	0	D	
1297	primary fill of posthole	1213	98	10	10	2 lge char fg, sev s char, roots	0	0	0	0	0	D	
1298	fill of posthole	1221	101	10	31	11ml lge char, roots, freq sm char	1	0	0	0	0	D	1 barley, 1 oat, 1 indet. Cereal - sorted
1299	fill of posthole	1215	99	10	30	lot roots, silt, freq sm char	0	0	0	0	0	D	
1300	fill of posthole	1217	100	10	5	roots, some sm char	0	0	0	0	0	D	
1310	fill of posthole	1245	102	10	43	3ml lge char, lot roots, freq sm char	0	0	0	0	0	D	
1329	generic fill of posthole	1209	104	20	90	25ml lge char, rots, lot sm char	1	0	0	0	0	C	1 e/s grain, 1 barley - prob no more
1340	fill of posthole	1207	105	10	20	roots, freq sm char	1	0	0	0	0	D	2 poor vacuolated barley - sorted
1341	primary fill of posthole	1209	106	10	90	40ml lge char, roots, freq sm char	0	0	0	0	0	D	

1342	secondary fill of posthole	1209	107	10	19	7ml lge char, freq sm char, roots	0	0	0	0	0	D	
1354	fill of posthole	1233	109	15	20	lot roots, freq sm char,	0	0	0	0	0	D	
1371	fill of post pipe	1370	113	10	10	roots, silt, sm char, occ lge char, slagy fg, mod seeds	0	0	0	0	0	D	
1372	fill of posthole	1231	111	10	10	roots, occ char, mod seeds incl. grape	0	0	0	0	0	D	
1374	fill of pit	1373	112	30	25	roots, freq sm char, occ lge char, mod seeds	0	0	0	0	0	D	
1383	fill of posthole	1382	114	30	65	freq sm char, freq roots, occ slaggy fg, mod seeds	2	0	1	0	0	C	1 e/s grain, 1 barley, 4 indet. Cereals, 1 Vicia/Lathyrus sp. - prob no more, +- sorted
1400	fill of posthole	1399	116	10	5	roots, sm char, mod seeds	0	0	0	0	0	D	
1402	fill of posthole	1401	117	30	50	occ lge char, lot sm char, lot roots	1	0	1	0	0	C	1 cf. e/s grain (very long), 1 indet. Cereal fg, 1 Fallopia embryo - prob no more, +- sorted
1404	fill of posthole	1403	120	20	62	12ml lge char, roots, freq sm char	0	0	0	0	0	D	
1406	post pipe	1405	119	10	3	roots, sm flaky char, mod seeds	0	0	0	0	0	D	
1409	fill of pit	1441	118	40	165	75ml lge char, lot sm char, lot roots, freq slaggy fg	0	0	1	0	0	D	sorted
1412	fill of posthole	1411	121	20	10	roots, freq sm char	0	0	0	0	0	D	
1416	fill of posthole	1415	122	10	10	roots, sev sm char	0	0	0	0	0	D	
1425	fill of posthole	1424	123	10	10	sev sm char, muddy	2	0	0	0	0	D	1 e/s grain, 2 barley, 2 indet. Cereal fg - sorted
1431	fill of posthole	1430	124	10	5	roots, sm char, mod seeds	0	0	1	0	0	D	1 Chenopodiaceae embryo - sorted
1437	fill of posthole	1436	127	10	10	sev sm char, roots	1	0	1	0	0	D	2 hulled 6-r barley, 1 Fallopia conv., 1 Plantago laceolata - sorted
1440	fill of posthole	1439	125	30	5	roots, sm char	1	0	0	0	0	D	1 e/s grain - sorted
1454	fill of posthole	1453	128	10	10	roots, sev sm char	0	0	0	0	0	D	
1455	fill of posthole	1235	129	10	60	lot roots	2	0	1	0	0	B	6 good hulled barley, 1 cf. rye, 8 indet. Cereal fgs, 1 cf. Viola sp. - roots need sorting
1458	fill of posthole	1237	131	10	30	5ml lge char, freq sm char, roots, muddy	1	1	1	0	0	B	1 barley, 1 e/s grain, 1 spelt gl base, 1 chess - prob not much more but difficult to scan as muddy

1460	fill of posthole	1459	132	10	10	roots, silt, sm char	0	0	0	0	0	D	
1462	fill of posthole	1461	133	20	25	lot roots, silt	0	0	0	0	0	D	
1464	fill of posthole	1463	134	10	15	roots, sm char	0	0	0	0	0	D	
1484	fill of posthole	1483	138	10	5	roots, sm char	0	0	0	0	0	D	
1485	fill of pit	1239	136	40	30	lot roots, freq sm char, muddy, mod seeds	0	0	0	0	0	D	
1489	fill of posthole	1488	139	10	2	roots,sm char	0	0	0	0	0	D	
1499	fill of posthole	1498	141	10	2	sev sm char roots	0	0	0	0	0	D	
1503	fill of post pipe	1502	142	10	5	sev sm char, roots	0	0	0	0	0	D	
1505	fill of posthole	1504	143	10	5	roots, occ sm char, silt	0	0	0	0	0	D	
1510	fill of posthole	1509	144	10	2	roots, occ sm char	0	0	0	0	0	D	
1512	fill of posthole	1511	145	10	3	roots, silt, occ sm char, mod seeds	0	0	0	0	0	D	
1518	fill of posthole	1517	146	10	30	10ml lge char, roots, freq sm char	0	0	0	0	0	D	
1527	fill of posthole	1526	147	10	1	occ sm char	1	0	0	0	0	D	1 cf. barley fg - sorted
1529	fill of posthole	1528	148	10	3	roots, occ char, slag	0	0	0	0	0	D	
1532	fill of posthole	1531	150	10	<1	trace roots, mod seed	0	0	0	0	0	D	
1534	fill of posthole	1533	151	10	<1	roots, mod seed	0	0	0	0	0	D	
1541	fill of posthole	1540	152	10	1	roots, sm char	0	0	0	0	0	D	
1543	fill of posthole	1542	153	10	2	roots, sm char	0	0	0	0	0	D	
1545	fill of posthole	1544	155	10	5	freq sm char, roots	0	0	0	0	0	D	
1563	fill of posthole	1562	157	10	5	roots, sev sm char	1	0	1	0	0	D	1 indet. Cereal fg, 1 Galium palustre - sorted
1567	fill of posthole	1566	158	10	5	roots, some sm char	0	0	0	0	0	D	RESIDUE checked - v. clean
1568	fill of pit	1564	160	20	20	roots, freq m char, slaggy char freq	1	0	1	0	0	D	3 barley, 1 indt. Cereal, 1 chess - sorted
1574	fill of pit	1564	161	10	15	lot roots, muddy char	1	0	0	0	0	D	1 e/s grain - sorted
1575	fill of posthole	1411	162	10	10	roots, sm char	1	0	0	0	0	D	1/2 e/s grain - sorted
1576	fill of posthole	1403	163	10	45	roots, freq sm char	0	1	1	0	0	D	1 spelt gl base, 1 Sherardia arv, 1 Fallopia conv. Embryo - sorted
1624	fill of posthole	1430	164	10	20	roots, freq sm char	1	0	1	0	0	D	1 barley, 1 Fallopia conv. Embryo, 1 Plantago lanc. - sorted
1625	fill of posthole	1566	165	10	18	roots, silt, some sm char	1	0	0	0	0	D	1 e/s grain, 2 indet. Cereal fg. - sorted
1626	fill of posthole	1436	166	10	25	roots, freq sm char	1	0	2	0	0	D	1 barley, 5 Fallopia embryos - sorted
1627	fill of posthole	1453	167	10	5	roots, freq sm char	0	0	0	0	0	D	
1628	fill of posthole	1533	168	10	3	roots, silt, occ sm char	0	0	0	0	0	D	
1631	fill of posthole	1396	169	10	3	roots, sev sm char	0	0	0	0	0	D	
1632	fill of pit	27	170	10	92	7ml lge char,lot slaggy fg, lot roots & silt	1	0	0	0	1	C	1 barley, 1 indet. Cereal, 1 elderberry - prob no more

1633	fill of pit	488	171	20	177	7ml lge char, lot sm char, v. silty/muddy	1	1	0	0	0	B	2 Triticum sp., 2 e/s gl bases - possibly a few more, diff to see, wash
1634	fill of posthole	498	172	30	165	occ lge char, v. silty, lot sm char	1	0	0	0	0	B	1 e/s grain, 1 barley, 2 indet. Cereal fg - poss a few more, wash
1635	fill of pit	513	173	30	85	15ml lge char, lot roots, lot sm char,v. silty	1	0	0	0	1	B	1 good e/s grain, 2 indet. Grain (one poss oat), 1 onion couch tuber - poss a few more, wash
1636	fifth fill of pit	493	174	40		NOT FOUND							
1639	secondary fill of pit	493	175	30	680	290ml lge char, lot sm char,	4	?	?	1	0	A	lot e/s grain & barley, lot of poor grains & frags, weeds & chaff not yet seen but no doubt a few present
1640	secondary fill of posthole	677	176	20	10	silt, occ sm char, roots	0	0	0	0	0	D	
1642	fill of pit	772	177	10	70	occ lge char, freq sm char, silty, muddy, roots	1	0	0	0	0	C	1 poor e/s grain - poss a little more, wash?
1643	fill of posthole	1102	178	10	170	occ lge char	4	1	?	0	0	A	lot good e/s grain & barley, occ. Chaff - prob a few weeds but not yet seen
1644	fill of pit	1373	179	10		NOT FOUND							
1645	fill of posthole	1526	180	10	10	lot silt, sev sm char, roots, occ slaggy	0	0	0	0	0	D	
1646	fill of posthole	1528	181	10	20	lot silt, sev sm char, roots, occ slaggy	0	0	0	0	0	D	
1647	fill of pit	1281	182	10		NOT FOUND							
1648	fill of posthole	1386	183	10	10	roots, sev sm char	0	0	1	0	0	D	1 Fallopia convolvulus - sorted
1649	fill of posthole	1488	184	10	10	roots, silt, occ sm char	0	0	0	0	0	D	
1658	fill of posthole	1483	185	10	15	roots, lot silt, freq sm char	0	0	0	0	0	D	
1660	fill of posthole	1542	186	10	5	silt, roots, sm char	0	0	0	0	0	D	
1662			187		30	lot roots, lot silt, sev sm char	0	0	0	0	0	D	NOT LISTED
1663	fill of posthole	1439	188	20	20	roots, freq sm char	0	0	0	0	0	D	
1664	fill of posthole	1382	189	20	65	15ml lge char, lot sm char, roots	1	0	0	0	1	B/C	1 cf. acorn frag, 2 indet. Cereal fg - prob no more
1665	fill of posthole	1424	190	10	5	silt, roots, occ sm char, mod seeds	0	0	0	0	0	D	
1667	fill of posthole	1401	191	30	111	18ml lge char, lot silt, roots, freq mod seeds	1	0	0	0	0	D	1 poor cf. barley - sorted

1669	fill of hearth	1373	192	70	35	lot silt, occ lge char, occ slaggy fg, mod seeds	2	0	0	0	0	D	1 oat, 1 cf. bread-t wheat, 3 poor indet. Cereal - sorted
1678	fill of posthole	1415	193	10	10	roots, silt, sev sm char, sev Cenococcum	0	0	0	0	0	D	
1679	fill of posthole	1504	194	10	10	lot roots, sev sm char, slag, mod seeds	0	0	0	0	0	D	
1680	fill of posthole	1509	195	20	20	lot roots, silty, occ char, mod seeds	0	0	0	0	0	D	
1681	fill of posthole	1459	196	10	5	roots, lot silt, occ s char, mod seeds	0	0	0	0	0	D	
1837			115		15	roots, silt, freq sm char, occ lge char	0	0	0	0	0	D	NOT LISTED

Table *:Charred plant remains quantification and assessment

KEY : 'grain', 'chaff', 'weeds',' HNS' & 'other' are given in frequency ratings of 1 = 1 to 4, 2 = 5 to 19, 3 = 20 to 99, 4 = 100 & over; actual numbers of seeds are given in 'Notes' for small assemblages; POTENTIAL : A = high; B = some; C = a little, if important context; D = no further potential

APPENDIX 12: THE CHARCOAL BY ROWENA GALE

Introduction

This report includes the assessment of 194 samples of charcoal recovered from features associated with the Late Bronze Age/ Early Iron Age settlement. A high proportion of the charcoal probably originated from domestic fuel debris (e.g., pits and postholes associated with roundhouses) and, although metal-working was evidently important at the site, there was no direct evidence from the contexts examined to suggest that any of the charcoal represented industrial waste. The remains of pyre fuel from the cremation deposit (P) provide the opportunity to compare the fuel selected for funerary purposes with that for domestic firewood. The charcoal was also assessed for suitable material for C14 dating.

Methods

Bulk soil samples were processed by flotation and sieving using 1mm and 0.5mm meshes. The charcoal was generally well preserved although many of the samples were either too fragmentary or contained insufficient material to enable species identification. Intact radial segments of roundwood were infrequent. For the purposes of the assessment, three fragments were randomly selected for identification from all viable samples.

Standard methods were used to prepare the samples for examination (Gale and Cutler 2000). The anatomical structures were examined using incident light on a Nikon Labophot-2 microscope at magnifications up to x400. The taxa identified were matched to prepared reference slides of modern wood and bagged and labelled separately. When possible, the maturity of the wood was assessed (i.e. heartwood/ sapwood) and the number of growth rings recorded.

Results

Details of the samples examined and the taxa identified are presented in Table ***. A relatively wide range of taxa was identified including:
Aceraceae. *Acer campestre* L., field maple
Betulaceae. *Alnus glutinosa* (L.) Gaertner, European alder; *Betula* spp., birch
Corylaceae. *Corylus avellana* L., hazel
Fagaceae. *Quercus* sp., oak
Oleaceae. *Fraxinus excelsior* L., ash
Rhamnaceae. *Rhamnus frangula* L., alder buckthorn
Rosaceae. Subfamilies:
Pomoideae, which includes *Crataegus* sp., hawthorn; *Malus* sp., apple; *Pyrus* sp., pear; *Sorbus* spp., rowan, service tree and whitebeam. These taxa are anatomically similar; one or more taxa may be represented in the charcoal.
Prunoideae: *Prunus spinosa* L., blackthorn.

C14 dating

It is probable that none of the samples include sufficient material for conventional dating. Samples with suitable material for AMS are indicated on Table ***.

Aims and objectives

The full analysis of selected samples should aim to provide the following data:

- Evidence of tree and shrub species in the local environment, thereby indicating the character of local woodland during the Late Bronze Age/ Early Iron Age. This evidence should be correlated with that from contemporary sites in the Kennet valley;
- Spatial differences in the type of fuel used/ deposited across the site, i.e., from each roundhouse and other locations (e.g., distal pits such as those located on the fringes of the site);
- The type and character of fuel used to construct the cremation pyre. Comparison with residues from domestic contexts at the site and/ or evidence from contemporary cremations from elsewhere in the region may indicate ritual/ practical applications;
- Evidence of woodland management and the use of local resources. The procurement of industrial fuel for metal working on a long-term basis and its impact local wood resources should also be considered.

Statement of Potential and Requirements for Further analysis and publication

It is recommended that 23 samples (Table **) should be included in the proposed charcoal analysis and the results discussed in a full report to include the topics listed above. The samples selected represent:
Roundhouse B – 3 samples (3 features)
Roundhouse C – 8 samples (5 features)
Roundhouse D – 4 samples (4 features)
Post alignment E – 1 sample
Cremation pit P – 2 samples (1 feature)

Miscellaneous pits – 4 samples (4 features)

Estimate of costs
To identify 23 samples, 2½–3 days……£387 - £465
Full report, 4 – 5 days……£620 - £775

Total: 6.5 - 8 days.(£1007 - £1240)

Table *: Hartshill Copse: Charcoal Assessment
Key. h/w = heartwood; s/w = sapwood
Quantity of charcoal indicates number of fragments suitable for identification: x = 0 – 10 fragments; xx = 11 – 20 fragments; xxx = 20+ fragments
Potential for further work o = nil; x = moderate; xx = high
C14: Charcoal suitable for AMS dating is highlighted in bold type

Context	Sample	Description	Quantity of charcoal	Species identified	Comments	Poter furthe
Miscellaneous pits, postholes and ditches						
28	2	Fill of pit 27	Xxx	**ash**	-	xx
221	20	Fill of pit 220	X	**alder; hawthorn type; bark**	-	o
302	37	Fill of PH 301	X	-	Insufficient charcoal for id	x
306	-	Fill of pit 305	X	Oak	From largewood	x
323	21	Fill of PH 322	X	oak h/w	-	o
343	54	Fill of PH 342	X	-	Insufficient charcoal for id	o
422	23	Fill of PH 322	X	-	Insufficient charcoal for id	o
492		Fill of pit 491	X	oak; **blackthorn**	-	o
494	33	Fill of pit 493	Xxx	oak h/w; **alder; ash**	-	xxx
500	36	Fill of PH 301	X	-	Insufficient charcoal for id	o
502	42	Fill of stake hole 501	X	oak h/w	-	x
504	46	Primary fill of pit 493	X	oak h/w; **hazel**	-	x
514	45	Fill of pit 513	X	oak; **ash; hazel**	-	x
639	59	Fill of pit 638	X	**oak s/w; hazel**	-	o
640	58		X	**birch; maple**	-	x
679	62	Fill of pit 677	X	-	Insufficient charcoal for id	o
731	63	Fill of PH 730	X	oak h/w	-	o
732	64	Fill of pit 379	X	-	Insufficient charcoal for id	o
746	197	Fill of PH 745	X	oak h/w	-	o
773	67	Fill of pit 772	X	Oak	-	o
929	2000.1	Fill of pit 928	X	**Hazel**	Roundwood; 11 growth rings	o
931	2000.1	Fill of pit 930	X	**Hazel**	Roundwood	o

Context	**Sample**	**Description**	**Quantity of charcoal**	**Species identified**	**Comments**	**Poter furthe**
941	76	Fill of PH 940	X	**hazel; alder**	-	o
976	82	Fill of pit 975	X	**-**	Insufficient charcoal for id	o
1006	-	Fill of PH 1005	X	**oak**	Roundwood; 17 growth rings	o
1103	77	Fill of PH 1102	X	**-**	Insufficient charcoal for id	o
1105	77	Fill of PH 1104	Xxx	**ash**	-	xxx
	78		X	-	-	x
1119	79	Fill of pit 1118	Xxx	oak h/w	Poor preservation	x
1121	80		Xxx	oak h/w		x
1126	81	Fill of pit 1125	Xxx	oak; **hawthorn type**	-	xx
1216	95	-	X	-	Insufficient charcoal for id	o
1254	83	Fill of PH 1253	X	-	Insufficient charcoal for id	o
1263	84	Fill of pit 1262	X	oak; **hawthorn type**	-	x
1282	91	Fill of PH 1281	X	-	Insufficient charcoal for id	o
1371	113	Fill of post pipe1370	X	-	Insufficient charcoal for id	o
1400	116	Fill of PH 1399	X	-	Insufficient charcoal for id	o
1409	118	Fill of pit 1441	Xxx	oak h/w	-	xx
	119		X	-	Insufficient charcoal for id	o
1416	122	Fill of PH 1415	X	-	Insufficient charcoal for id	o
1433	164	Fill of ditch1432	X	-	Insufficient charcoal for id	o
1437	127	Fill of PH 1436	X	**ash**	-	o
	166		X	-	Insufficient charcoal for id	o
1476	2000.1	Fill of pit 1475	Xx	oak h/w	-	x
1484	138	Fill of PH 1483	X	-	Insufficient charcoal for id	o

Table *: Hartshill Copse: Charcoal Assessment

Context	Sample	Description	Quantity of charcoal	Species identified	Comments	Poter furthe
1503	142	Fill of post pipe 1502	X	-	Insufficient charcoal for id	o
1505	143	Fill of PH 1504	X	-	Insufficient charcoal for id	o
1510	144	Fill of PH 1509	X	-	Insufficient charcoal for id	o
1532	150	Fill of PH 1531	X	-	Insufficient charcoal for id	o
1534	151	Fill of PH 1533	X	-	Insufficient charcoal for id	o
1541	152	Fill of PH 1540	X	-	Insufficient charcoal for id	o
1543	153	Fill of PH 1542	X	-	Insufficient charcoal for id	o
1545	155	Fill of PH 1544	X	**hazel**	-	o
1563	157	Fill of PH 1562	X	oak; **hazel; alder buckthorn**	-	o
1567	165	Fill of PH 1566	X	-	Insufficient charcoal for id	o
	158		X	-	Insufficient charcoal for id	o
1568	160	Fill of pit 1564	X	-	Insufficient charcoal for id	o
1574	161	Fill of pit	X	-	Insufficient charcoal for id	o
1575	162	Fill of PH 1411	X	-	Insufficient charcoal for id	o
1576	163	Fill of PH 1403	X	-	Insufficient charcoal for id	o
1628	168	Fill of PH 1533	X	-	Insufficient charcoal for id	o
1631	169	Fill of PH 1396	X	-	Insufficient charcoal for id	o
1632	170	Fill of pit 27	Xxx	**ash**	-	x
1635	173	Fill of pit 513	Xxx	oak; *cf.***hazel/ alder**	-	xx
1639	175	Secondary fill of pit 493	Xxx	oak h/w; **ash**	-	xx

Table *: Hartshill Copse: Charcoal Assessment

Context	Sample	Description	Quantity of charcoal	Species identified	Comments	Poter furthe
1640	176	Secondary fill of PH 677	X	-	Insufficient charcoal for id	o
1642	177	Fill of pit 772	X	-	Insufficient charcoal for id	o
1643	178	Fill of PH	X	-	Insufficient charcoal for id	o
1658	185	Fill of PH 1483	X	-	Insufficient charcoal for id	o
1660	186	Fill of PH 1542	X	-	Insufficient charcoal for id	o
1678	193	Fill of PH 1415	X	-	Insufficient charcoal for id	o
1679	194	Fill of PH 1504	X	-	Insufficient charcoal for id	o
1662	187	-	X	-	Insufficient charcoal for id	o
1837	115	-	X	-	Insufficient charcoal for id	o
Roundhouse A						
141	3	Fill of pit 140	X	-	Insufficient charcoal for id	o
145	4	Fill of PH 144	X	-	Insufficient charcoal for id	o
147	5	Fill of PH 146	X	-	Insufficient charcoal for id	o
158	6	Fill of PH 154	X	-	Insufficient charcoal for id	o
161	7	Fill of PH 160	X	-	Insufficient charcoal for id	o
176	9	Fill of PH 144	X	oak h/w	-	o
177	10	Fill of PH 140	X	-	Insufficient charcoal	o
178	11	Fill of PH 164	X	-	Insufficient charcoal	o
180	13	Fill of PH 160	X	-	Insufficient charcoal	o
183	14	Tertiary fill of PH154	X	-	Insufficient charcoal	o
198	15	Secondary fill of PH 154	X	-	Insufficient charcoal	o

Table *: Hartshill Copse: Charcoal Assessment

Context	Sample	Description	Quantity of charcoal	Species identified	Comments	Poter furthe
Roundhouse B						
231	22	Fill of PH 230	X	-	Insufficient charcoal for id	o
286	43	Fill of PH 285	X	-	Insufficient charcoal for id	x
288	39	Fill of PH 287	X	-	Insufficient charcoal for id	o
	40		X	-	Insufficient charcoal for id	o
290	34	Fill of PH 289	X	-	Insufficient charcoal for id	o
	35		X	-	Insufficient charcoal for id`	o
292	25	Fill of PH 291	X	-	Insufficient charcoal for id	o
294	29	Fill of PH 293	X	-	Insufficient charcoal for id	o
300	74	Fill of PH 299	X	oak h/w	Poor preservation	o
315	50	Fill of PH 314	X	-	Insufficient charcoal for id	o
319	52	Fill of PH 318	X	-	Insufficient charcoal for id	o
358	56	Fill of PH 357	X	-	Insufficient charcoal for id	o
380	60	Fill of PH 379	X	**blackthorn; hazel nutshell; bark**	-	o
395	65	Fill of PH 394	Xx	oak	-	xx
401	68	Fill of PH 400	X	-	Insufficient charcoal for id	o
403	70	Fill of PH 402	X	-	Insufficient charcoal for id	o
405	72	Fill of PH 404	X	**hazel; blackthorn**	-	o
409	41	Fill of PH 408	Xxx	oak h/w	-	xx
426	24	Fill of PH 230	X	oak h/w; **maple; hazel**	-	o
449	28	Fill of PH 291	X	-	Insufficient charcoal for id	o

Table *: Hartshill Copse: Charcoal Assessment

Context	Sample	Description	Quantity of charcoal	Species identified	Comments	Poter furthe
490		Fill of PH 293	X	-	Insufficient charcoal for id	o
499	38	Fill of PH 498	X	-	Insufficient charcoal for id	o
518	44	Fill of posthole 285	X	oak	-	o
521	47	Fill of PH 526	X	oak	-	o
542	49	Fill of PH 406	X	oak	-	o
545	51	Fill of PH 314	X	-	Insufficient charcoal for id	o
603	53	Fill of PH 318	X	-	Insufficient charcoal for id	o
634	57	Fill of PH 357	X	-	Insufficient charcoal for id	o
657	61	Fill of PH 379	X	**oak s/w**	-	x
735	66	Fill of PH 394	X	oak	-	x
778	69	Fill of PH 400	X	oak	-	o
788	71	Fill of PH 402	X	**hazel; hawthorn type; bark**	-	o
856	73	Fill of PH 404	X	-	Insufficient charcoal for id	o
878	75	Fill of PH 299	Xx	oak; **hazel; hawthorn type**	-	x
1634	172	Fill of PH 498	X	-	Insufficient charcoal for id	o
Roundhouse C						
200	16	Fill of pit 199	X	-	Insufficient charcoal	o
	17		X	-	-	x
	149		Xxx	**oak s/w; maple; hazel**	-	xx
	156		X	-	-	x
202	17	Fill of pit 201	Xx	oak h/w; **hazel/alder**	-	x
204	18	Fill of pit 203	X	**hawthorn type; hazel**	-	xxx
	154		Xx	oak h/w; **hawthorn type**	-	xx
	159		X	-	-	x
205	19	Primary fill of PH 154	X	-	Insufficient charcoal	o
1208	103	Fill of PH 1207	X	-	Insufficient charcoal for id	o

Table *: Hartshill Copse: Charcoal Assessment

Context	Sample	Description	Quantity of charcoal	Species identified	Comments	Poter furthe
1214	93	Primary fill of PH 1213	X	oak; **maple**	-	o
1218	96	Fill of PH 1217	X	oak; **oak s/w**	-	o
1222	94	Fill of PH 1221	X	-	Insufficient charcoal for id	o
1224	86	Fill of PH 1223	X	oak h/w; **hazel**	-	o
1228	85	Fill of PH 1227	Xx	oak; **ash**	-	x
1230	140	Fill of PH 1229	X	-	Insufficient charcoal for id	o
1232		Fill of PH 1231	X	-	Insufficient charcoal for id	o
1234	108	Fill of PH 1233	Xx	oak h/w; **maple; blackthorn**	-	xx
1236	126	Fill of PH 1235	X	oak; **blackthorn; ash**	-	o
1238	130	Fill of PH 1458	X	oak; **hazel**	-	o
1240	135	Fill of PH 1239	Xxx	oak h/w; **hawthorn type; alder**	-	xx
1242	89	Fill of PH 1241	X	oak	-	o
1244	137	Fill of PH 1243	X	-	Insufficient charcoal for id	o
1246	92	Fill of PH 1245	Xx	oak h/w	-	x
1270	87	Fill of PH 1223	X	-	Insufficient charcoal for id	o
1271	88	Fill of PH 1227	X	-	Insufficient charcoal for id	o
1272	90	Fill of PH 1241	X	oak; **hazel/ alder**	-	o
1296	97	Secondary fill of PH 1213	X	**maple**	-	o
1297	98	Primary fill of PH 1213	X	oak; **maple**	-	x
1298	101	Fill of PH 1221	Xx	oak h/w	-	x
1299	99	Fill of PH 1215	Xxx	oak h/w; **oak s/w**	-	xx
1300		Fill of PH 1217	X	-	Insufficient charcoal for id	o
1310	102	Fill of PH 1245	Xxx	**oak s/w; ash**	-	xx
1329	104	Fill of PH 1209	Xxx	oak h/w; **maple**	-	xx
1340	105	Fill of PH 1207	X	**maple; hazel**	-	x
1341	106	Primary fill of PH 1209	Xxx	oak h/w	-	xx
1342	107	Secondary fill of PH 1209	Xx	**oak s/w; ash**	-	x

Table *: Hartshill Copse: Charcoal Assessment

Context	Sample	Description	Quantity of charcoal	Species identified	Comments	Poter furthe
1354	109	Fill of PH 1233	X	oak; **ash**	-	o
1372	111	Fill of PH 1231	X	-	Insufficient charcoal for id	o
1455	129	Fill of PH 1235	X	oak; **maple**	-	o
1458	131	Fill of PH 1237	Xx	**oak s/w; maple**	-	x
1485	136	Fill of pit 1239	X	**oak s/w; hazel**	-	o
1512	145	Fill of PH 1511	X	-	Insufficient charcoal for id	o
1518	146	Fill of PH 1517	Xx	oak h/w	-	xx
Roundhouse D						
1374	112	Fill of pit 1373	X	oak; **maple**	-	o
1383	114	Fill of PH 1382	X	**oak s/w; ash**	-	x
1402	117	Fill of PH 1401	X	**ash**	Roundwood	x
1404	120	Fill of PH 1403	Xxx	oak; **blackthorn**	-	xx
1412	121	Fill of PH 1411	X	oak; **hazel**	-	o
1425	123	Fill of PH 1424	X	-	Insufficient charcoal for id	o
1431	124	Fill of PH 1430	X	-	Insufficient charcoal for id	o
1440	125	Fill of PH 1439	X	oak; **hawthorn type**	-	o
1454	128	Fill of PH 1453	X	-	Insufficient charcoal for id	o
	167		X	-	Insufficient charcoal for id	o
1460	132	Fill of PH 1459	X	-	Insufficient charcoal for id	o
1462	133	Fill of PH 1461	X	oak; **hazel; maple**	-	x
1464	134	Fill of PH 1463	X	-	Insufficient charcoal for id	o
1489	139	Fill of PH 1488	X	-	Insufficient charcoal for id	o
1499	141	Fill of PH 1498	X	-	Insufficient charcoal for id	o
1527	147	Fill of PH 1526	X	-	Insufficient charcoal for id	o
1529	148	Fill of PH	X	oak h/w	-	o

Table *: Hartshill Copse: Charcoal Assessment

Context	Sample	Description	Quantity of charcoal	Species identified	Comments	Poter furthe
1645	180	Fill of PH 1526	X	-	Insufficient charcoal for id	o
1646	184	Fill of PH 1528	X	-	Insufficient charcoal for id	o
1649	181	Fill of PH 1488	X	-	Insufficient charcoal for id	o
1663	188	Fill of PH 1439	X	-	Insufficient charcoal for id	o
1664	189	Fill of PH 1382	Xxx	**maple; hawthorn type**	-	xx
1665	190	Fill of PH 1424	X	**ash; hazel**	-	o
1667	191	Fill of PH 1401	X	-	Insufficient charcoal for id	o
1669	192	Fill of hearth 1373	X	-	Insufficient charcoal for id	o
1680	195	Fill of PH 1509	X	-	Insufficient charcoal for id	o
1681	196	Fill of PH 1459	X	-	Insufficient charcoal for id	o
Post alignment E						
486	31	PH	X	oak h/w; **ash**	-	x
1633	171	Fill of pit 488	Xxx	oak h/w	-	x
Cremation pit 446						
447	26	Fill of pit	X	oak h/w; **oak s/w**	-	x
448	27	Fill of pit	Xx	**oak s/w, hazel**	-	x

Table *: Hartshill Copse: Charcoal Assessment