

Orbital Park
Ashford
Kent



Post Excavation
Assessment Report



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Salmon Harvester Properties Ltd**

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Orbital Park, Ashford, Kent

Post-excavation assessment

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Summary

An archaeological strip, map and sample investigation took place between September and November 2010 at Orbital Park, Ashford, Kent. The 1.56 hectare site produced remains predominantly dating from the mid to late Iron Age, although a middle Bronze Age ditch and a Neolithic flint scatter were also uncovered. Approximately 60 linear features were observed, including one curvilinear feature which formed a ring gully. These features belong to at least five phases of activity at the site spanning a 200-year period. There were also 182 discrete features, including some 40 postholes clustered around and post-dating the ring gully. No identifiable structures were observed within this cluster. However a possible four-post structure was recorded to the north of the ring-gully.

This assessment presents the preliminary findings of the fieldwork, specifies what further post-excavation recording and analysis is required. It assesses the potential of the results to address research questions and contribute to a better understanding of the region's earlier prehistoric and Iron Age landscapes.



1 DESCRIPTION OF THE PROJECT

1.1 Scope of report

- 1.1.1 This document is a MoRPHE-style (succeeding MAP2 – EH 2006) post-excavation report, which presents the preliminary results of the excavation and proposal for further analysis, full reporting and publication.

1.2 Background

Location and scope of work

- 1.2.1 Between September and November 2010, Oxford Archaeology conducted an archaeological strip, map and sample excavation at Orbital Park, Ashford, Kent, centred on TR 0314 4058 (Fig. 1). The excavation encompassed plots 2.2 and 2.4 and was the first of three phases of fieldwork.
- 1.2.2 The development site at Orbital Park Industrial Estate is located on an irregularly shaped plot of land approximately 4.6 ha and situated to the south-east of Ashford town centre. The strip, map and sample area comprised 1.56 ha of the development area. The site was bounded to the north by Hall Avenue and a balancing pond, beyond which lies the Scheduled Ancient Monument of Boys Hall Moat (SAM 146). The eastern boundary of the site was formed by High Speed 1 (formerly the Channel Tunnel Rail Link, or CTRL) and to the south by the A2070 Bad Munstereifel Road. To the west was a public house/hotel complex and adjacent warehouse units.
- 1.2.3 Planning permission was granted by Kent County Council subject to the condition that an archaeological strip, map and sample excavation be undertaken in advance of development due to the possibility of below ground archaeological deposits being disturbed during construction. A written scheme of investigation setting out the design to mitigate the effects of development was prepared by Scott Wilson (2008) and approved by Wendy Rogers, senior archaeological officer for Kent County Council. A written scheme of investigation prepared by Oxford Archaeology (OA 2010) set out how the project would be delivered to meet the design and specification set out by Scott Wilson.

Topography and Geology

- 1.2.4 The site lies on the north-east side of the East Stour river. The gently rising ground slopes gradually from its southern boundary to approximately 40 m above Ordnance Datum (AOD) at its northern boundary with the balancing pond. The site was once pasture, but had lain vacant for a number years and at the time of excavation comprised open rough grassland with scrub vegetation.
- 1.2.5 The solid geology is Atherfield Clay bordered to the north by Hythe Beds. To the south lie dry valley and alluvial deposit of the Stour Valley. The geological substrate is covered by clay silt soils.

Archaeological Background

- 1.2.6 A written scheme of investigation for archaeological recording was prepared by Scott Wilson prior to the archaeological on site investigations and those results are outlined below.



- 1.2.7 The Historic Environment Record (HER) lists 18 entries within 500 m of the site, including the Boys Hall Moat Scheduled Ancient Monument. Extensive archaeological investigations have been undertaken in the vicinity of the site in advance of construction of High Speed 1 immediately to the east.

Mesolithic and Neolithic (c 8500 BC-2400 BC)

- 1.2.8 Evidence of prehistoric activity was found during archaeological work adjacent to the site. Struck flints, probably of Mesolithic and early Neolithic date, have been recovered during earlier investigations (eg OAU 2000; CAT 2005), although no archaeological features of have been recorded.

Bronze Age (c 2400 BC-700 BC)

- 1.2.9 An archaeological evaluation 350 m south of the site in Blind Lane recorded at least one ditch and a number of pits and postholes which produced a substantial quantity of pottery (MoLAS 1998). A further excavation of the area revealed ditches (including a possible trackway), gullies, postholes and two undated charcoal-filled pits. A Deverel-Rimbury bucket urn was recovered from the possible trackway. (OAU 1999c)
- 1.2.10 The remains of a possible field system comprising four linear ditches, one of which containing a single sherd of middle Bronze Age pottery, were recorded during archaeological excavations in the north-eastern corner of the balancing pond site (OAU 2000).
- 1.2.11 Wood-lined pits or waterholes were recorded in a possible Bronze Age settlement on land adjacent to the Keel Toys site in Sevington (pers. comm. Wendy Rogers).

Iron Age (c 700 BC-AD 43)

- 1.2.12 An archaeological evaluation took place in advance of development within the limits of the site (HER No. TR 04 SW 71). The works revealed a shallow ditch and a group of similar ditches, gullies and pits interpreted as a small farmstead or similar settlement. Pottery recovered from the features suggested a late Iron Age date for occupation (KARU 1990).
- 1.2.13 Part of a late Iron Age field system and evidence of settlement was recorded on a site at Waterbrook during archaeological works (HER No. TR 04 SW 86; CAT 1990).
- 1.2.14 At Boys Hall Moat to the north of the site a number of linear cut features with large amounts of Iron Age pottery were excavated during an archaeological evaluation in 1993 (HER No. TR 04 SW 105; Bennett 1988). A late Iron Age date was suggested based on the proximity of a settlement of that date to the north-east of Boys Hill.
- 1.2.15 An archaeological excavation (HER No. TR 34 SW 600; OAU 1999a) immediately north-east of the site in advance of the construction of the balancing pond revealed four phases of activity, including four parallel ditches and two plough-damaged cremation burials (of a group of five) dated to the late Iron Age/early Roman period (100 BC–AD 70).

Roman (AD 43-410)

- 1.2.16 Apart from the evidence of Roman activity observed prior to the construction of the balancing pond (OAU 1999a), a number of early Roman features, including a cluster of four plough-damaged cremation burials and a boundary ditch have been recorded (KARU 1990). The boundary ditch may continue into the northern part of the site, and with the cremations suggests nearby settlement.

**Medieval (AD 410-1499)**

- 1.2.17 Evidence of medieval activity is provided by the presence of Boys Hall Moat Scheduled Ancient Monument situated to the immediate north of the site. Although the house itself was demolished in 1631, a water-filled moat, a fish pond, as well as a well-preserved group of earthworks representing the remains of complex water features associated with a formal garden, all survive (HER No. TR 04 SW 2).

Post-Medieval (AD 1500-1800)

- 1.2.18 Archaeological excavations at the balancing pond immediately north of the site (HER no. TR 34 SW 601; OAU 1999a) revealed two parallel ditches of similar depth and profile, aligned north-east to south-west. The ditches appear to have been re-cut up to three times and produced a small quantity of post-medieval tile and 18th century glass. This was interpreted as possibly representing a pathway related to the formal gardens surrounding Boys Hall Moat. A third ditch and small area of cobbling, possibly a yard surface, were also excavated. The post-medieval features cut the subsoil layer, which was observed sealing the natural Atherfield Clay.

1.3 Fieldwork methodology and site conditions

- 1.3.1 The investigation followed the methodology set out in the written schemes of investigation for archaeological recording (Scott Wilson 2008) and the strip, map and sample (OA 2010). The overburden was stripped from the site under archaeological supervision using a 360° mechanical excavator with a toothless ditching bucket until the first archaeological deposit or the natural geology was encountered. A provisional pre-excavation plan of the stripped areas was digitally produced using a Leica RX 1250EX Smart Rover GPS system. Hand excavation of the archaeological features followed.
- 1.3.2 A sufficient number of interventions through ditches to determine the character, date, function and morphology of the features were excavated. Sections were no less than 1 m long. Discrete features, such as pits, were generally half-sectioned, while structural remains were fully-excavated.
- 1.3.3 All archaeological deposits were allocated a unique context number. Plans and sections of individual excavated slots were drawn at an appropriate scale, usually 1:20. The locations of the individual plans and section lines were tied into the overall digital site plan using a Leica total station or GPS system. Features were also recorded by colour slide, monochrome film and digital photography.
- 1.3.4 Finds were recovered by hand during the course of the excavation and generally bagged by context. Finds of special interest were given a unique small find number.
- 1.3.5 An environmental sampling strategy was prepared following a site visit by OA's environmental manager, Rebecca Nicholson. On the basis of the strategy, 67 bulk soil samples (40L) were collected in order to assess deposits for palaeo-environmental evidence. Dominique de Moulins, the English Heritage Science advisor, also visited the site and highlighted the waterlogged area to the north of the site as potentially containing anaerobic material. Four monoliths were taken to allow further sedimentary analysis to be carried out and assess the nature of the soils, including whether deposits were laid down in waterlogged conditions (see appendices C.2 and C.3).
- 1.3.6 Frequent periods of heavy rain occurred during the excavation and the site was quickly flooded. The north-west part of the site was particularly affected and at one stage was under approximately 0.50 m of standing water that had to be pumped out over several days (Plate 1). The flooding was compounded by the natural topography and a



constantly flowing water source originating beyond the south-east limits of the site that created a small stream. A modern linear feature running was excavated by machine and the stream directed to follow this course away from the archaeological remains. Frequent field drains crossed the excavation area and the high water table caused features to fill with water once reaching approximately 0.5 m below the current ground level. In drier conditions, the clay soils became cracked and blocky, making excavation of shallower features difficult.

1.4 Archaeological description

1.4.1 A catalogue of all archaeological features is given in Appendix A. Where possible, information on the dimensions of the feature interventions and their heights above Ordnance Datum (OD) has been included.

Quantification of the archive

1.4.2 Quantification of the excavation records is as follows:

Record type	Quantity
Context sheets	1605
Site plans	360
Sections	477
Levels sheets	35
Small finds sheets	10
Environmental samples sheets	12
Photography: B&W films	36
Photography: colour films	35
Photography: digital sheets	23

1.4.3 Quantification of the finds and environmental evidence is as follows:

Material	Quantity (no. objects)
Pottery	2116
Clay pipe	1
Fired clay	21
Metalwork	9
Shell	1 (not assessed)
Flint	432
Burnt flint	22
Stone	3 (natural – not assessed)
Animal bone	263
Environmental samples	44



1.5 Excavation Results

Introduction

- 1.5.1 The site was predominately characterised by ditches and gullies. Approximately 60 linear features were observed, including one curvilinear feature forming a ring gully (Fig. 2). These features span some 200 years of the middle to late Iron Age, but there were traces of earlier and later activity on the site. There were also 182 discrete features, including postholes, pits and natural features derived from bioturbation.
- 1.5.2 The phasing of the site is based upon a combination of stratigraphic observations and a rapid spot date assessment of pottery and other datable artefacts found within the features. This phasing may alter as a result of more detailed analysis. Currently five periods of activity can be distinguished with additional phases apparent during the Iron Age:
- Neolithic
 - Bronze Age
 - Middle to late Iron Age
 - Medieval/Post-medieval
 - Modern

Neolithic

- 1.5.3 A scatter of Neolithic waste flakes and flint cores was observed in the north corner of site in a slight hollow within the site geology. Two main clusters were observed: the first around tree-throw 1606 (Plate 2), the second within feature 1439 and ditch slot 1350, part of group 1857. Feature 1439 has been identified as bioturbation and although its relationship with ditch 1350 was undetermined, both contained very similar deposits and large quantities of flint debitage. The flint showed little sign of abrasion and is likely to have moved very little from its original knapping location (Donnelly, Appendix B.4). From recovered pottery, it would appear that ditch 1350 dates to the middle to late Iron Age, although the precise nature of the deposit containing the flint and its relationship with the ditch requires clarification. Only a very few recognisable tools/objects were observed during the excavation most notably a leaf shaped arrowhead from ditch slot 1350.
- 1.5.4 Several other struck flints were also recovered from the south-western part of the site. These flints were contained within inter-cutting pits 2672 and 2657. No other finds were recovered and while it is possible these flints may be residual, an early Neolithic date cannot be ruled out.
- 1.5.5 Pottery tentatively identified as Peterborough ware was recovered from ditch 2697 (Booth, Appendix B.1). It is likely to be residual, but it potentially adds further evidence for Neolithic activity in and around the site.

Bronze Age

- 1.5.6 A globular urn was recovered from ditch 1628. The vessel was relatively well preserved, and gives a strong points to a middle Bronze Age date for the ditch (Booth, Appendix B.1). Seven pieces of worked flint of late Neolithic/early Bronze Age or Bronze Age date was recovered as residual occurrences from middle to late Iron Age ditches.



Middle to late Iron Age

- 1.5.7 Rapid spot dating of the pottery recovered from the site dated the majority of features to the middle or late Iron Age. Middle Iron Age pottery is characterised by sand tempering and barrel-shaped or ovoid jars, while late Iron Age pottery includes grog-tempered pottery in 'Belgic' forms, although grog or clay pellets was also a feature of some middle Iron Age pottery (Booth, Appendix B.1).
- 1.5.8 There were at least five phases of activity described below as phases A to E. Preliminary analysis, however, indicates that within each phase there were episodes of re-cutting and replacement of features. For the sake of simplicity and coherency, these have not been assigned to sub-phases at this stage.
- 1.5.9 The phasing is based on both stratigraphical and spatial relationships and as such will warrant detailed analysis in conjunction with the finds assemblages. These phases appear to show differing types of ditch system that represent a shift in the organisation of the Iron Age landscape.
- 1.5.10 Also within this period are a number of features that are yet to be assigned to a particular phase, most notably the collection of features to the north-west of site, within the road extension spur. Stratigraphically, these features have no relationship with the ditches in the main area and will rely on artefacts recovered from them for phasing.

Phase A – Middle to late Iron Age

- 1.5.11 Stratigraphically, the earliest Iron Age activity comprises ditches and gullies that appear to subdivide the landscape and are likely to have facilitated drainage. Based on stratigraphic relationships and alignment, it seems likely that ditch groups 2712, 1554 and 2401 form the earliest phase and ceramic evidence may help to confirm this hypothesis. These ditches survive in small segments and have been severely truncated by modern disturbance.

Phase B – Middle to late Iron Age

- 1.5.12 The second phase of activity sees a shift in the organisation of the landscape and consists of shallow ditches and gullies.
- 1.5.13 The NE–SW aligned group 2705 demonstrates a period of re-cutting and slight re-organisation, with the ditch system shifting slightly to the north-east and an entranceway being established between gullies 2714 and 2703. A series of smaller ditches aligned NW–SE and perpendicular to the NE–SW ditches have been assigned to this phase both on stratigraphic and spatial grounds and likely represent further subdivision within the landscape. Further examination of dating evidence and stratigraphical relationships is required to confirm this.

Phase C – Middle to late Iron Age

- 1.5.14 A substantial ditch 1823, likely to represent an enclosure, extends beyond the north limits of the site. The ditch is deeper at its western limit and gradually becomes shallower to the east. It had multiple re-cuts, again particularly to the west. These re-cuts may reflect seasonal inundations, requiring the need to reinstate the ditch. This process appears to have continued into the late Iron age (Plate 3). A relatively large amount of finds, chiefly pottery, was collected from the western end of the enclosure, compared with the eastern end (sections were excavated from the ditch along its entire exposed length), suggesting a possible area of settlement focus. The ditch curves at its eastern limit, perhaps respecting a now no longer extant feature, or perhaps utilising an



existing natural drainage feature within the landscape. Alternately it may form part of some kind of animal enclosure. Further analysis of the finds and environmental samples, and comparison with other contemporaneous sites in the region, may help to ascertain the function of the putative enclosure.

- 1.5.15 The slightly shallower ditch group 1892 may represent an earlier alignment of this enclosure.

Phase D – Late Iron Age

- 1.5.16 This phase consists of slightly irregular, curving ditches 1574, 1229, 2709, 2695 and 2415 (Fig. 2). The ditches ran essentially NW–SE before gently turning northwards. Two complete, but broken, pots dating to late Iron Age were recovered from 1229 (Plate 4). The vessels stand in contrast to the condition of the remaining pottery recovered from the site, raising the possibility that the vessels were deliberately deposited, perhaps as part of a termination rite when the ditch was abandoned.
- 1.5.17 Truncation by modern disturbances makes it difficult to determine whether ditches 2709 and 2695 terminate or drain into other ditches. Two ditches to the east, 1857 and 2700, may belong to this phase of activity but stratigraphically this can not be confirmed. Again, pottery recovered from the groups may help to clarify the matter.
- 1.5.18 Ditches 1574, 2709 and 2415 are not contemporary but reflect the gradual shift of a boundary. Feature 2709 is stratigraphically earlier than 2415, but as yet no relationship could be established with 1574. Whether the curving ditches provided solely a drainage function or whether they show the implementation of a boundary is not clear at this stage. As a boundary they may have been following a contour around the gently sloping area and delimiting an activity area from one, less suitable, area, that is, one that was wetter.

Phase E – Late Iron Age

- 1.5.19 This later phase appears to mark a return to a NW-SE alignment of features. These ditches (1571, 2694, and re-cut ditches 2696, 2697 and 2698) were dug at intervals of approximately 40 m. Group 2704 may represent a shift in the boundary of 2709. Although 2704 is truncated to the south by modern disturbances, both ditches demonstrate a similar alignment and terminated in a similar location to the north. The alignment of all the ditch groups in this phase was contrary to the general direction of slope and could represent either a change in the drainage system or reflect where the ground was perhaps drier.
- 1.5.20 Within the western area between ditches 1571 and 2694 there was a ring gully, group 1627 (Plate 5). The feature, truncated slightly at the north-western terminal, was c 10 m in diameter. The gully survived to a maximum depth of 0.28 m and a maximum width of 0.40 m. A large cluster of postholes forming no obvious pattern was observed within the interior of the ring-gully, although it is possible that some may have formed part of the structure. This ring-gully and postholes appear to represent a round house indicating the presence of a settlement.
- 1.5.21 Approximately 40 postholes and several small pits were located inside and immediately to the east of ring gully 1627. Although some of these postholes may be associated, three clearly cut the ring-gully. Several postholes contained sherds of mid to late Iron Age pottery and it is possible that separate phases may be identified during closer examination of the pottery.



- 1.5.22 Several shallow pits were observed inside the ring-gully, including pit 1276 that contained a deposit of heat-affected clay. Initially thought to be a hearth, on subsequent examination, it appeared that the deposit was not *in situ*, but a thin deposit within the pit.
- 1.5.23 A second area of postholes to the north of enclosure 1823 suggests that settlement activity continued to the north beyond the site limits. This activity may belong to an earlier phase with ditches 2719 and 2726 forming a possible entrance.
- 1.5.24 An second possible ring-gully 2269 survives as a shallow truncated gully to the east of 1627. The feature was severely truncated but it does appear to have a similar curvature to 1627.
- 1.5.25 Few clear structures could be interpreted from the collection of postholes during fieldwork. One exception is the group of four postholes located to the north-east of ring-gully 1627, which form a four-post structure. The posts were evenly spaced and formed a 2.5 m square. Such structures are commonly interpreted as raised storage buildings, although other functions are possible.
- 1.5.26 A loose grouping of seven pits (1075, 1079, 1081, 1090, 1093, 1212 and 2075) was recorded close to the centre of the site. All contained charcoal-rich fills and some also contained fragments of bone. Pits 1075, 1081 and 1093 cut Phase E ditch 2696 and therefore can be assigned to the late Iron Age or later on stratigraphic grounds. On excavation, the features were interpreted as cremation burials. However, on subsequent examination by OA's osteologist, Sharon Clough, the fragments of bone were deemed not to be human, and none of the features is now regarded as a cremation burial. However, the rich charcoal material within the features, and the nature of their grouping, still point to some intriguing spatially-confined activity involving burnt food remains, and warrant further examination from the perspective of the stratigraphy and charred plant remains.

Medieval/Post-medieval

- 1.5.27 No features could be assigned a medieval date with any certainty. Two horseshoes were recovered from ditch groups 2724 and 2727 suggesting a date range within these periods (Scott, Appendix B.5). Re-cut ditch group 2711 may also belong to this phase, and may be contemporary with group 2724.

Modern

- 1.5.28 A number of modern intrusions were concentrated predominantly to the south-east of the site. These irregular pits contained large tree roots/stumps and are likely to be associated with the construction of High Speed 1. Modern wheel ruts were also observed truncating the site at the south-eastern corner. In addition to these features, there was a modern ditch located along the southern boundary of the site, and several 1.50 m wide trenches from the archaeological evaluation (KARU 1990).

1.6 Research aims and objectives

Aims of Fieldwork

- 1.6.1 The investigation recorded the extent, condition, nature, character, quality and date of the archaeological remains. The specific aims of the excavation, presented in the Written Scheme of Investigation (OA 2010), were to determine the following:



General aims

- define and outline the implementation of a strip, map and sample strategy of mitigation in order to ensure preservation by record where known archaeological deposits will be impacted upon;
- record the nature, depth and extent of features and deposits previously identified within the defined area of the strategy;
- record the location, nature, depth, extent, date and significance of any additional archaeological deposits within the defined area of the strategy;
- signal, before the destruction of the material in question, the discovery of a significant archaeological find, for which the resources allocated are not sufficient to support a treatment to a satisfactory proper standard;
- make available the results of the investigation.

Specific aims

- establish a phased plan of archaeological deposits revealed following machine excavation of topsoil and overburden;
- refine the chronology of the archaeological phasing and investigate the function of structural remains and to determine the activities taking place within the defined area and its environs;
- identify and characterise remains of Bronze Age date placing them within their local and regional context and their relationship with remains recorded at the adjacent Balancing Pond and other sites;
- contribute to the regional chronology and pottery type series for the Middle to Late Bronze Age period;
- identify and characterise remains of Iron Age date placing them within their local and regional context and their relationship with remains recorded at the adjacent Boys Hall Moat and Waterbrook Farm;
- identify and characterise potential palaeo-environmental remains on the site and undertake an appropriate programme of environmental sampling in order to increase the understanding of the palaeo-environment of the area;
- identify and characterise medieval and post-medieval remains associated with the adjacent Boys Hall Scheduled Monument in order to assess the extent and importance of the monument with the local landscape and settlement pattern of the period.

Statement of potential

Stratigraphy (Section 1.5; Appendix A)

- 1.6.2 On current understanding, pottery and worked flint point to limited activity in the Neolithic period and Bronze Age. Most of the evidence uncovered, however, belonged to the middle to late Iron Age. Apart from the odd fragment of pottery, there appears to be no evidence either for early Iron Age or Roman-period activity, and occupation of the site could fit within a 200/250-year period from c 200 BC to AD 40/50.
- 1.6.3 The excavation provided a record of the character and extent of the archaeology, and the pottery and other datable artefacts recovered from it offers a useful preliminary dated stratigraphic sequence. There is good potential to date currently unphased features and further group the mass of ditches on the basis of a fuller set of ceramic



spot-dates, stratigraphic relationships, radiocarbon dates, and spatial associations. These will allow the current phasing scheme to be refined and possibly simplified.

- 1.6.4 The stratigraphy is, however, complicated by the homogeneity of some of the ditch fills, and relationships between certain ditches remain uncertain. In addition, the assessment has revealed stratigraphic anomalies (eg ditches appearing to cut, and be cut by, the same ditch) in the digitised CAD plan. Figure 3 highlights the areas that require particular attention. In order to resolve these stratigraphic issues, relationships will be clarified with reference to original site plans, context descriptions, dating evidence and spatial associations. The digitised site plan will be corrected.
- 1.6.5 Areas of the site that are of particular interest in terms of site function or activities and periods represented include the Neolithic flint scatter 1439, Bronze Age ditch 1628, the Iron Age settlement focus of the roundhouse 1627, the four-post structure, and large number of postholes, enclosure ditch 1823, and a group of charcoal-rich pits tentatively dated to the late Iron Age. The morphology of the site, characterised by ditches often showing multiple recuts, and with each major phase set at different orientations or in different parts of the site, potentially offers insight into how the inhabitants managed and used the site, especially in the face of frequent (and perhaps increasing) flooding.

Pottery (B.1)

- 1.6.6 The pre-Roman pottery will make a modest but useful contribution to understanding of the ceramic sequence of the Iron Age in this area, while the globular jar is of intrinsic interest in local/regional terms. In both cases the material from CTRL Section 1 provides the wider context (Morris 2006). The comparative data from Beechbrook Wood, only c 6 km distant to the north-west, are particularly important. Work in the Ashford area has tended to suggest the existence of intensive activity in the late Iron Age (see, for example, the short summary in Booth *et al.* 2008, 7, 9), but the evidence from Beechbrook Wood and the present site emphasises the difficulties that could follow from the assumption that grog-tempered body sherds are by definition of late Iron Age date. Away from CTRL the site at Brisley Farm, 4 km to the west, also has an important middle Iron Age as well as a late Iron Age component, but remains unpublished (Johnson 2002). The questions of the earliest date of the middle Iron Age activity at the present site, and of the introduction of the grog-tempered tradition into the middle Iron Age ceramic sequence, a development that here is considered to supplement the use of sand-tempered material, if not eventually replacing it altogether, are key ones which have yet to be resolved. The present assemblage is important because it is in effect completely uncontaminated by Roman material. At the latest, therefore, activity at this site will have ceased within a very few years of the Roman conquest of AD 43, and it is possible that it ended some time before the conquest.
- 1.6.7 Use of the pottery to provide further refinement of the site sequence and, if possible, its absolute chronology will follow from completion of recording and analysis. Although of limited size the pottery assemblage is nevertheless also of importance for addressing questions such as the location and nature of domestic and other activities across the site and, by comparison with other datasets (particularly from CTRL), may allow some assessment of the character, status and wider connections of the inhabitants of the site in the Iron Age.

Clay pipe (B.2)

- 1.6.8 A single piece of pipe stem (weighing 3 g) was recovered from the subsoil (context 1001). The piece has a maker's mark allowing it to be dated to c 1851-8 (Plate 6). No further work is required.

*Fired clay (B.3)*

- 1.6.9 The fired clay is not intrinsically datable, but the general character is consistent with an Iron Age assemblage, which is likely to derive from ovens or hearths associated with domestic activity, probably related to the potential settlement identified on the western fringes of the excavation. No further work is required.

Lithics (B.4)

- 1.6.10 The flint assemblage represents a small but important collection of material. The most important aspect of this is the small yet statistically valid assemblage of around 400 pieces from the northern area of the site, much of which is believed to date to the early Neolithic period. Harding's scheme wide summary of the Channel Tunnel Rail Link (CTRL) assemblages, which followed on from earlier research (Clarke 1982; Ashbee 2004), revealed that early Neolithic material is widespread in Kent with concentrations of material in and around Maidstone and Folkestone with only a few records close to Ashford itself. The CTRL investigations revealed early Neolithic settlement at White Horse Stone (Hayden 2006), albeit without much accompanying flintwork, and there were further early Neolithic assemblages from Saltwood Tunnel, Sandway Road and Eyehorne Street. Often these assemblages were recovered from natural features such as tree-throws and were very often associated with Mesolithic material. In one instance the Mesolithic and early Neolithic assemblages are described as technologically indistinguishable.
- 1.6.11 The A2 widening scheme (Allen *et al.* forthcoming) also produced sparse evidence for early Neolithic material with only two small foci. However, detailed metrical analysis carried out on these assemblages and those from the CTRL works allows for a detailed comparison to be made with the Ashford assemblage as part of the further work programme for these flints. Recent work on the East Kent Access Road (EKA) continues the theme of the re-use of natural features with the recovery of a fairly large assemblage of early Neolithic flint from a small treethrow (P Andrews pers. com).

Metalwork (B.5)

- 1.6.12 The metals assemblage comprises just eight items (nine fragments), including one copper alloy bracelet and seven iron objects. The metalwork has been identified and recorded with provenance and measurements as appropriate. One piece (context 1216) could be better identified with the aid of an x-ray.

Animal bone (C.1)

- 1.6.13 Of the 209 re-fitted fragments, only 40 fragments were identified more closely than large or medium sized mammal. The species present included cattle, sheep/goat, horse and roe deer. Of those bones and teeth from cattle and sheep/goat which could be aged, all came from sub-adult and adult animals. No further work is necessary, although information gained from the record produced for the assessment will be incorporated into the stratigraphic narrative and overall discussion as appropriate (for example burnt bone from the group of pits formerly identified as cremation deposits).

Charred plant remains, including charcoal (C.2)

- 1.6.14 The assessment results from Orbital Park showed that under a third of the samples produced charred plant remains including charred cereal grains, occasional cereal chaff and wild plant remains (including *Corylus avellana* shell) and weed seeds, although most of these assemblages were small and contained poorly preserved material. Thus, the potential of the charred botanical remains in providing information on crop husbandry and processing activities at the site is limited.



- 1.6.15 On a basic level, the grains may provide data on the range of cereals used, with initial results suggesting that hulled wheat was the best represented cereal, including spelt (on the basis of occasional glume bases) and possibly emmer (from a few well preserved grains). Many of the grains, however, were too poorly preserved to distinguish between these two cereals. (Hulled) barley was also identified during the assessment along with occasional oat grains, although it was not possible to establish if the oats were wild and/or cultivated. A large amount of oat awn fragments in one sample also shows the presence of this cereal on the site. Other potential foodstuffs were represented by a few charred *Corylus avellana* shell fragments in two flots, while some of the occasional legume seeds may belong to cultivated species, although these remains were poorly preserved.
- 1.6.16 Archaeobotanical research for this period also suggests that hulled wheat and hulled barley were the main cereals used during the Iron Age period in southern England (Greig 1991, 306). The poor preservation of the hulled wheat grains in the samples and paucity of diagnostic chaff fragments means that it will probably be difficult to establish whether emmer or spelt was the dominant grain at the site or whether they were equally important; while it appears that spelt generally became the more dominant hulled wheat grain during the Iron Age in southern England, previous results from a number of Iron Age sites in Kent has shown that emmer continued to appear in large quantities alongside spelt (Giorgi and Stafford 2006) including the late Iron Age, with almost equal proportions of emmer and spelt in a pit from Wilmington, Kent (Hillman 1982) and a large amount of emmer in another pit from Hascombe in Surrey (Murphy 1979).
- 1.6.17 The investigation of other aspects of crop husbandry, however, is restricted by the paucity of charred weed seeds in the samples, with the assessment suggesting that few, if any, are identifiable to species. Evidence of crop-processing and other activities on the site is also limited by the quantity and quality of the botanical material within individual assemblages, with the small amounts of charred plant remains (mainly poorly preserved cereal grains) in 17 of the 20 productive samples probably simply representing background cereal debris blowing around the settlement and not necessarily associated with the use/function of the sampled features. The three rich samples contained larger amounts of material although much was poorly preserved and with low species diversity represented by the remains. The large numbers of grains in the hollow/hearth fill 1771 (sample 22) and ditch fill 2103 (sample 2001) are indicative of fully cleaned grain, while the frequent oat awn fragments (most of the chaff in sample 2001) and the *Rumex* seeds (the majority of the seed remains in ditch fill 2431 sample 2005) may represent by-products possibly used as tinder.
- 1.6.18 Variable amounts of potentially identifiable charcoal fragments were present in 60 of the samples. It is possible, however, that some of this material may be intrusive, particularly in those samples only containing occasional or small amounts of charcoal and large amounts of roots/rootlets. This included the four samples from the potential Neolithic deposits. This is less likely to be the case in those flots consisting of larger amounts of charcoal and fewer roots and other modern contaminants. Twenty four samples (all from mid to late Iron Age deposits) contained moderate or large amounts of charcoal, although several of these samples still contained substantial amounts of roots.
- 1.6.19 The identifiable charcoal from the mid-late Iron Age contexts, particularly the group of pits formerly identified as cremation deposits, may provide information on the range of woodland taxa used for different activities, including fuel selection for



domestic/economic use or ritual practices, and for construction purposes (samples from the post-pipes in postholes appear to have been burnt *in situ*), and contribute to our understanding of the functions of those features. The charcoal remains may also yield evidence on woodland management and woodland resources available at the time, and contribute towards environmental reconstruction. Initial results showed the presence of *Quercus* and *Pomoideae* charcoal. Radiocarbon determinations will be sought from four charcoal-rich features to help date deposition, and the use and selection of the charcoal.

Environmental monoliths (C.3)

- 1.6.20 Four monoliths taken through ditches 1350 and 1454 (group 1229) suggest that site occupied a low-lying floodplain edge environment. It seems possible that the site developed within a predominantly dry environment during the mid-late Iron Age as a focus of pastoral and settlement activity. During the late Iron Age, parts of the site appear to have been increasingly susceptible to flooding through rising ground water levels or over-bank alluviation. Areas of the site that were formerly utilised for settlement and seasonal grazing may have become increasingly too wet and this may have necessitated the digging of network of drainage ditches identified on the site. These ditches would have rapidly silted-up with alluvial silt and may have required regular cleaning or recutting to maintain their effectiveness as drainage features.
- 1.6.21 The site may have been abandoned partly as a result of this increased wetness recorded in the late Iron Age. However, the abandonment of the site may also have been related to the reorganisation of rural settlement, abandonment of marginal areas and a trend to more clustered settlement in the early Roman period. Further examination of the nature of the feature fills across the site and more refined dating of features will help to establish whether the transition from drier to wetter conditions occurred on the site in the late Iron Age.

Orbital Park in local and regional perspective

- 1.6.22 The Neolithic flint assemblage and pottery from Orbital Park joins a growing body of data of Neolithic activity in the area. A significant assemblage of late Neolithic flint artefacts, for example, was collected at Park Farm, 2.5 km south-west of Orbital Park, during fieldwalking and a subsequent evaluation (CAT 1993, 390-2). Inevitably, sites along High Speed 1, most notably White Horse Stone, Aylesford (Hayden and Stafford 2006), provide useful comparative material.
- 1.6.23 The identification of a middle Bronze Age ditch at Orbital Park is of some significance, given the paucity of settlement features dated to the period in the vicinity of Ashford, and the importance that the area had in terms of ritual deposition of prestige metalwork; there is a concentration of metalwork deposits at the junction of the Great Stour and East Stour rivers (Yates 2004, 14). Settlement activity is not unknown, however. Excavation at Blind Lane, c 1.5 km south-east of Orbital Park, exposed a possible trackway dating to the middle-late Bronze Age (OAU 1999c). A possible Bronze Age field system was uncovered at Westhawk Farm, 3 km east of Orbital Park (Booth *et al.* 2008, 25-6). The single ditch at Orbital Park offers limited potential for insight into the nature of settlement, although the ceramic vessel recovered from it may point to deliberate selection and deposition of material.
- 1.6.24 Orbital Park represents the most extensive area of Iron Age settlement yet excavated in Ashford. The discovery of the middle Iron Age settlement is of regional importance, given that middle Iron Age sites are relatively rare within Kent (Parfitt 2004, 16). Hillforts (eg Bigbury Camp and Oldbury) provide very visible evidence of middle Iron Age



occupation, but settlements are thinly-distributed throughout the county. Orbital Park clearly fills a gap in the distribution of middle Iron Age settlements, and is an important addition to the middle Iron Age landscape of Ashford. A double-ditched concentric settlement enclosure and pit group, dated to the middle Iron Age, was found 6 km north-west of Orbital Park at Beechbrook Wood (Brady 2006). Though outside the immediate area, another useful comparative site will be the farmstead at Farningham Hill, in the Darent Valley (Philp 1984). Farningham Hill and Orbital Park share aspects of chronology, although their site layouts differ; the settlement at Farningham Hill comprises a large enclosure that contains pits, postholes (including a four-post structure) and gullies. The factors that shaped all three sites (eg environment and function) will be compared and contrasted.

- 1.6.25 The late Iron Age settlement lies within an extensive area of contemporaneous occupation. An area of later Iron Age and 'Belgic' occupation was recorded south-east of Boys Hall Moat during ground works at the Ashford rail terminal (Bennett 1988, 2). A trench opened along the east edge of the scheduled ancient monument revealed ditches and gullies that contained grog-tempered pottery assigned to the 1st century BC or 1st century AD. The paucity of definite post-conquest pottery suggests little activity after the mid 1st century AD (Booth 1994, 428). Excavation at Boys Hall Balancing Pond uncovered ditches and gullies and four truncated cremation burials. Pottery recovered from the features suggested a late Iron Age or early Roman date (OAU 1999a).
- 1.6.26 About 0.5 km to the south-west of Orbital Park, at Waterbrook Farm, evaluation trenches exposed pits, ditches and structural evidence of late Bronze Age/early Iron Age date. A second area of investigation uncovered more features dating to this period, and also evidence of late Iron Age or early Roman occupation (CAT 1992, 376). Eight ditches dating to the late Iron Age or early Roman period were uncovered at Blind Lane. Two smashed vessels were found in boundary ditch (OAU 1999c).
- 1.6.27 Iron Age occupation was recorded at Lodge Wood, some 5 km north-west of Orbital Park (OAU 1999b). Roman ditches and pits were recorded at Park Farm (CAT 1993, 390-2).
- 1.6.28 The roadside settlement at Westhawk Farm (Booth *et al.* 2008) was established within a few decades after the Roman conquest of AD 43. The Roman settlement seems to have been sited to take advantage of the top and upper slopes of a south-east facing valley side. A localised patch of well-draining third terrace gravel was also exploited for the focal road junction area of the Roman settlement (Booth *et al.* 2008, 365). There was apparently no Iron Age evidence, but a late Iron Age settlement was recorded in excavations at Brisley Farm, some 600 m west-north-west of Westhawk Farm (Johnson 2002).
- 1.6.29 With the exception of Westhawk Farm, the limited nature of the investigations at other sites in the area reduces their value for comparative purposes. However, those sites are nevertheless indicative of occupation, and will allow us to reconstruct the pattern of late prehistoric settlement in the area. Comparison between Orbital Park and Westhawk Farm will help to highlight similarities or differences between the later Iron Age and Roman periods in terms of settlement organisation, the economic basis, social practices, and status.
- 1.6.30 Excavations along the route of High Speed 1 and at other sites in Kent have exposed a number of Iron Age sites. These will provide useful comparisons for Orbital Park in a general sense, but many also offer parallels for some of the features uncovered at



Orbital Park. The single four-post structure recorded at Orbital Park, for example, is paralleled at other Iron Age or Roman sites in Kent, among them Queen Elizabeth Square, Maidstone (Booth and Howard-Davis 2004, 5), Farningham Hill (Philp 1994), Snarkhurst Wood, Hollingbourne (Diez 2009, 7-9). At these sites, one or two were recovered only. White Horse Stone, Aylesford, is exceptional. There, 55 structures were recorded (Hayden and Stafford 2006, 136). Along with the roundhouse and with reference to comparative sites, the structures will allow us to consider the organisation and function of the settlement.

Revised research aims and objectives

1.6.31 In light of the stratigraphic, artefactual and environmental assessments, the questions proposed in the fieldwork specification (section 1.7.1) have been answered to lesser or greater extents:

- A phased plan of archaeological deposits has been produced, but, as noted above, this is preliminary, and further work is required to clarify relationships and refine the phasing.
- The excavated evidence offers good potential to refine the site chronology, investigate the function of structural remains, and to determine the nature of activities taking place.
- There is potential to further characterise remains of Bronze Age date, which have emerged through artefactual assessment. The ceramic evidence can potentially be placed within local and regional typologies.
- Remains of Iron Age date have been identified and characterised, although our understanding of the features will be enhanced with further analysis. The remains can be placed within their local and regional context, particularly with reference to the adjacent Boys Hall Moat, Waterbrook Farm and other sites, but the limited data from those sites suggest that comparison will be at a fairly superficial level.
- Potential palaeo-environmental remains were identified on the site and an appropriate programme of environmental sampling was undertaken. There is potential, from plant remains and soil samples, to increase the understanding of the palaeo-environment of the area.
- No medieval or post-medieval remains associated with the adjacent Boys Hall Scheduled Monument were identified.

1.6.32 The assessment has raised further questions:

- Where was the focus of Neolithic activity? What activities were being carried out?
- How does the Neolithic and Bronze Age evidence fit with current understanding of contemporaneous activity in the region?
- When was the Iron Age settlement established? How long was it occupied?
- What was the economic basis of the site? How was it organised? What was the function of the ditches (eg to form enclosures, provide drainage, or mark boundaries)?
- What does the middle Iron Age pottery reveal about the introduction of ceramic traditions, particularly grog-tempering, and their spread across the region? What implications are there for the dating of late Iron Age sites?



- How do Westhawk Farm and Orbital Park compare in terms of settlement size, organisation, morphology and economy?
- How does the settlement at Orbital Park compare with contemporary sites in other parts of Kent, such as Farningham (Philp 1984), White Horse Stone, Aylesford (Hayden 2006), and, closer to Ashford, Beechbrook Wood (Brady 2006)? Do they share aspects of, say, settlement organisation or chronology?
- Why was the settlement abandoned? Characterisation of the soil from the monoliths suggests that the site became increasingly wet towards the end of the Iron Age. Is this supported by the pattern of deposition in features across the site (eg alluvial deposits in the latest ditches)? Can we see evidence of rising water levels leading to a change in the pattern of late Iron Age/early Roman settlement? Or was abandonment related to a re-organisation of settlement in the decades following the Roman conquest, and re-settlement of the rural population into larger centres, including Westhawk Farm?

1.6.33 In addition, the evidence from Orbital Park will help to address a number of research priorities for the Iron Age identified at a conference of the South-East Research Framework Research Agenda, hosted by the University of Kent in 2008 (Weekes nd). These include:

- The location and distribution of middle Iron Age settlement
- Continuity or discontinuity of sites
- The character and location/zoning of structures within settlements
- The size, variability, filling and filling of pits
- The transition from the middle to late Iron Age

1.6.34 The conference acknowledged that research should focus more on the daily lives of inhabitants, and that more environmental analyses of floral and faunal remains are needed for the period. It was agreed that climate change was another important area of research. In this regard, the sediments and diatoms from the monoliths, and examination of the fills from the ditches in general, identify Orbital Park as a key site to contribute to this and other priorities.

1.7 Communications

1.7.1 The project team will communicate by email and through face-to-face discussions. Regular progress reports will be made to Iain Williamson at Scott Wilson and Wendy Rogers at Kent County Council by project manager Edward Biddulph, principally by email and telephone.

1.8 Project review

1.8.1 Project progress will be assessed by Edward Biddulph in regular meetings (at intervals as appropriate) with project staff (see team structure, section 2.1.1). He will also update Alex Smith, the project monitor, on a monthly basis.



2 RESOURCES AND PROGRAMMING

2.2 Methods statement

Stratigraphy

- 2.2.1 The phasing of the site will be finalised. This will be achieved through integration of pottery dating with the stratigraphic record (aided by further ceramic identification where necessary), and comparison of feature profiles and depositional sequence. A full archaeological description will be produced. This will be accompanied by a completed CAD/GIS plan. All the original plans have been scanned and added to the digital plan.
- 2.2.2 The relationship of the site to relevant contemporary sites within the wider region will be considered.



Pottery

- 2.2.3 Detailed recording of the outstanding portion of the assemblage will be completed. Pottery from sieved samples will be scanned but not recorded in detail. Analysis will follow data entry, and this will lead to a report and discussion. The report will be accompanied by illustrations of selected vessels.

Lithics

- 2.2.4 The lithic assemblage has been quantified and characterised typologically. During the initial analysis additional information on condition (rolled, abraded, fresh and degree of cortication), and state of the artefact (burnt, broken, or visibly utilised) was also recorded. Retouched pieces were classified according to standard morphological descriptions (eg Bamford 1985, 72-77; Healy 1988, 48-9; Bradley 1999).
- 2.2.5 Further work on the assemblage from the northern area of the site will include a detailed metrical and technological analysis to characterise the assemblage. Few groups of this date have been subject to detailed analysis and the data will provide a good comparison for future analyses. The assemblage from the south-western area of the site will be subject to a detailed metrical and technological analysis on the c 400 flints. The burnt unworked flint has no potential for further analysis.
- 2.2.6 Metrical and technological attribute analysis will be undertaken on flakes and a limited number of artefact types. Technological attributes recorded include butt type (Inizan *et al.* 1993), extent of dorsal cortex, termination type, flake type (Harding 1990), hammer mode (Onhuma and Bergman 1982), and the presence of platform edge abrasion and dorsal blade scars. Metrical analysis will undertaken using standard methods for recording length, breadth and thickness (Saville 1980) and the data will be considered against current research (eg Pitts and Jacobi 1979; Ford 1987).
- 2.2.7 A short report as part of the final excavation report will be submitted and would include tables, flint illustrations and detailed comparison of this assemblage with contemporary material from Kent. The text will provide a detailed characterisation of the flint from the northern area of the site with a brief summary of non-contemporary south-western area material. The burnt unworked flint has been adequately quantified and should be discarded.

Metalwork

- 2.2.8 The finds from post-medieval contexts do not require further work. The three finds from Iron Age contexts have only limited group value, but their presence should be noted. The block of iron (context 1216) would benefit from radiography to ascertain any features or structural detail hidden by corrosion and build-up of corrosion products. The copper alloy bracelet should be published and illustrated.

Charred plant remains

- 2.2.9 On the basis of the assessment it is recommended that full analysis (including sorting and quantification) is only carried out on the three charred plant assemblages with moderate to rich amounts of identifiable material. The presence of occasional or small amounts of identifiable remains from the other 17 productive flots should also be recorded with a rapid scan of these samples, although the better preserved material from these flots has already been sorted during the assessment. Charcoal fragments from the following moderate to rich assemblages will be identified and analysed: post-



pipe fill samples 2018 and 2019, pit fill 1305, ditch fill samples 2001, 2003, 2005, and hearth sample 22.

Environmental monoliths

- 2.2.10 The monoliths have low potential for environmental assessment, and further sedimentary analysis will not add significantly to the archaeological discussion of the site. However, samples taken from the monoliths will be assessed for diatoms. These single-celled algae are specific to their environment and, if surviving in the sample, will provide an indication of the source of the waterlogging, whether rising ground water or riverine inundation.
- 2.2.11 As the 'shelf-life' for monoliths is up to 12 months, it is recommended that assessment and analysis of the samples take place as soon as possible, and if necessary in advance of the start of the post-excavation programme outlined in section 2.6.

Scientific dating

- 2.2.12 In order to refine site phasing and help address the research aims, four radiocarbon determinations will be sought.
- 2.2.13 Pits 1075 and 1093 contained relatively abundant charcoal, from which a date may be obtained. The pits cut late Iron Age (Phase E) ditches 2415 and 2696, and are among the latest Iron Age features on the site. The pits formed part of a group of charcoal-rich pits. The determinations will potentially provide dates for the use of the plant remains, the activity that the deposition represents, and the final phases of occupation.
- 2.2.14 Hearth 1670 contained a rich assemblage of charcoal. The hearth was cut into ditch 1229. A date will potentially date the use of the plant material, the disuse of ditch 1229 and activity occurring relatively late in the occupation of the site.
- 2.2.15 A rich charcoal assemblage was also recovered from pit 1303. The pit did not cut, or was not cut by, any other feature, and contained no pottery. A determination will potentially date the use and selection of the plant material, including legume seeds.
- 2.2.16 Unfortunately, where recovered, the material from the earlier prehistoric features suggests that intrusive material is present, and so is of little value for dating.

2.3 Stages, products and tasks

Stages

Programme

- 2.3.1 The excavation of plots 2.2 and 2.4 is the first of three phases of work at Orbital Park. Post-excavation analysis and publication will be delayed until the remaining phases of fieldwork have been completed, allowing all the results to be analysed together, currently anticipated for 2012 or 2013.
- 2.3.2 A detailed programme will be prepared with assessment of the findings of the remaining phases of fieldwork. In the meantime, an indicative programme concerning the current fieldwork results, is provided. This allows for a ten-month programme of post-excavation analysis and reporting (Fig. 4), although it is likely that the programme will be extended with the inclusion of subsequent fieldwork.
- 2.3.3 Sections 2.3.6 to 2.3.11 give details of tasks and products for the stratigraphy of the current fieldwork and each material category identified as requiring further work.



2.3.4 For the publication proposal, see section 2.4.

Payment schedule

2.3.5 Before the start of post-excavation analysis and publication, a payment schedule will be drawn up and agreed by Oxford Archaeology and Scott Wilson. The schedule will provide details of payment stages spread over the course of the analysis programme. It will include the value of each payment and any conditions required to trigger payment (eg the provision of progress reports, or the completion of certain tasks).

Products

Stratigraphy

2.3.6 The products of the stratigraphic analysis comprise an updated context database, phase plans based on CAD/GIS data, and a stratigraphic narrative reflecting final phasing.

Pottery

2.3.7 The main outputs of the pottery analysis will be a database, which will include a finalised set of spot-dates, a full report, and illustrations.

Lithics

2.3.8 The report will be updated, taking into account insights from further research. The final report will be accompanied by illustrations of key pieces.

Metalwork

2.3.9 A brief note of the metals assemblage will be written, with particular attention given to the copper alloy bracelet (sf 2000), which will be illustrated.



Charred plant remains and charcoal

- 2.3.10 Three moderately rich charred plant assemblages (samples 22, 2001 and 2005) will be sorted and recorded, while seventeen flots containing occasional charred plant remains will be recorded. A report, accompanied by appropriate tables of data, will be produced. Seven moderate to rich charcoal assemblages will be identified and analysed. A report will be produced.

Diatoms

- 2.3.11 Samples from the monoliths taken from two ditches will be extracted and sent to the specialist for assessment and characterisation.

Scientific dating

- 2.3.12 Samples from the monoliths taken from two ditches will be extracted and sent to the specialist for assessment and characterisation.

2.4 Publication

- 2.4.1 Following approval from the county archaeological officer and Scott Wilson, the illustrated final report, incorporating all phases of fieldwork, will be submitted to Kent County Council in hard copy and digital format for entry onto the Historic Environment Record. The report will be available as a download from the OA digital library (<http://library.thehumanjourney.net/>).
- 2.4.2 The report will be published as an Oxford Archaeology monograph, provisionally entitled, *Ashford in the Iron Age: excavations at Orbital Park, Ashford*.



2.5 Ownership and archive

- 2.5.1 Salmon Harvester Properties Ltd retains ownership of the archive. Permission will be sought to transfer ownership and deposit the archive to an appropriate museum in due course.
- 2.5.2 Once the final report has been accepted by the county archaeological service, an OASIS fieldwork summary form will be completed and submitted to the Archaeology Data Service.
- 2.5.3 We have been informed that there is currently no receiving museum in the area for the archive, and consent to deposit the archive is awaited. While this matter is resolved, the archive will be prepared for deposition in accordance to current standards and temporarily housed at Oxford Archaeology's stores in Oxford.

2.6 Task list and programme

- 2.6.1 A task list for the first phase of fieldwork is presented below. A programme is appended at the end of this project design. The time given to the production of the publication has been estimated on the basis of the results of the current fieldwork. The compilation of a draft report, editing, refereeing, typesetting and copy-editing will inevitably take longer to complete with the incorporation of the results of the second and third phases of fieldwork.



**APPENDIX A. CATALOGUE OF ARCHAEOLOGICAL FEATURES**

Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1000	1000	Topsoil				
1001	1001	Subsoil				
1002	1002	Natural				
1003	2719	Ditch	1.04	0.78	0.44	39.61
1006	2722	Ditch	1.04	0.62	0.22	39.77
1008	1008	Ditch	0.66	0.62	0.14	39.69
1010	1571	Ditch	0.98	0.78	0.24	39.38
1013	2339	Ditch	0.98	0.72	0.34	
1017	2690	Ditch	1.08	0.7	0.16	
1019	1019	Post hole	0.58	0.68	0.19	
1021	1021	Post hole	0.94	0.8	0.46	40.43
1025	1025	Post hole	0.64	0.66	0.34	40
1027	1027	Post hole	0.6	0.56	0.32	39.9
1029	1029	Post hole	0.5	0.52	0.26	40.02
1031	1031	Post hole	0.5	0.46	0.38	39.95
1034	1627	Gully			0.3	40.04
1035	2339	Ditch	0.98	0.66	0.28	39.55
1039	1571	Ditch	1.06	0.52	0.18	39.55
1041	2724	Ditch	1.1	3.4	0.5	40.27
1044	2722	Ditch	0.4	0.3	0.28	40.12
1047	2722	Ditch	0.5	0.3	0.34	40.12
1049	1573	Ditch	1	2.2	0.8	39.05
1053	1053	Ditch	1	1.04	0.45	39.05
1055	1572	Ditch	1	1.66	0.46	39.01
1058	1572	Ditch	1	1.1	0.78	
1063	1574	Ditch	1.07	2.3	0.23	39.5
1065	1065	Natural feature	0.89	0.8	0.08	39.5
1067	1823	Ditch	1.1	2	1.2	40.12
1072		Ditch	1.1	0.8	0.6	39.92
1075	1075	Pit	0.4	0.45	0.08	41.81



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1077	2699	Ditch	1.4	0.72	0.37	41.81
1079	1079	Pit	0.5	0.3	0.15	47.76
1081	1081	Pit	0.42	0.22	0.06	41.72
1083	1229	Ditch	30	2.4	0.64	39.78
1086	1086	Pit	0.9	0.74	0.46	41.76
1088	2698	Ditch	1	0.6	0.38	42.06
1090	1090	Pit	0.76	0.6	0.18	42.55
1093	1093	Pit	0.76	0.55	0.06	42.72
1095	1095	Ditch	0.54	0.32	0.09	39.9
1097	1823	Ditch	0.6	0.9	0.26	39.82
1100	1100	Post hole		0.3	0.05	39.9
1102	2718	Gully	10	0.5	0.22	40.53
1104	1842	Ditch	0.44	1.9	0.44	40.59
1107	2727	Gully	5	0.75	0.29	40.53
1109	1109	Pit	0.79	0.36	0.2	39.19
1111	1574	Ditch	30	1.1	0.67	39.19
1115	1571	Ditch	30	1.14	0.38	39.1
1117		Ditch	2.76	1.09	0.38	
1119		Gully	2.76	0.92	0.3	40.27
1120	1572	Ditch	1.16	0.98	0.58	39.06
1121	1574	Ditch	1.16	1.04	0.26	39.06
1122	1823	Ditch	1.16	2.84	1.12	39.06
1123	1229	Ditch	1.16	2.46	1.16	
1124	1824	Ditch	1.16	1.4	0.24	
1129	1627	Gully terminus	0.9	0.46	0.14	39.91
1147	2718	Gully	10	0.06	0.28	40.64
1149	2718	Gully	10	0.64	0.28	40.68
1151	2722	Gully	10	0.35	0.28	40.68
1153	1823	Ditch	0.9	0.6	0.4	39.32
1154	1825	Ditch	0.9	1.9	0.8	
1155	1824	Ditch	0.9	1.4	0.8	
1156	1571	Ditch		0.8	0.4	



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1159	1573	Ditch		2	0.46	
1162	1627	Gully	1.2	0.6	0.16	39.94
1164	1574	Ditch	1	1	0.47	39.33
1166	1229	Ditch	0.9	2.8	1.54	
1167	1167	Ditch terminus	1.2	0.91	0.41	40.32
1170	2727	Ditch	0.5	0.98	0.39	40.31
1186		Ditch	1	0.9	0.5	39.32
1189	1825	Ditch	1	1.04	0.44	
1192	1823	Ditch	1	3.2	0.56	39.4
1196	2722	Gully	1	0.56	0.14	39.4
1198	2721	Ditch	1	0.58	0.3	39.37
1199	1825	Ditch terminus	1.4	0.2	0.24	39.51
1200	2722	Gully	1	0.9	0.35	39.32
1202	1572	Ditch				
1205	1205	Natural feature				
1207	2711	Ditch	1.4	0.99	0.46	40.44
1210	1823	Ditch	1.12	1.12	0.59	40.37
1212	1212	Pit		0.54	0.13	41.78
1215	1571	Ditch		0.8	0.4	39.23
1217	1574	Ditch		1.44	0.76	39.25
1219	1627	Gully	1	0.6	0.23	
1221	1627	Gully	1	0.6	0.2	39.93
1223	1223	Post hole		0.56	0.2	40.3
1225	1627	Gully	1	0.6	0.22	40.27
1227	1227	Post hole		0.46	0.1	40.27
1229	1229	Ditch group				
1230	2722	Gully	10	0.42	0.3	
1232		Ditch		0.56	0.3	
1234	1823	Ditch				
1240	1240	Pit	0.6	0.62	0.22	40.44
1242	1572	Ditch				
1245	1571	Ditch terminus				



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1249	1309	Gully	1	0.22	0.14	39.97
1251	1309	Gully	0.26	0.14	0.12	39.36
1253	1253	Post hole		0.32	0.26	39.82
1255	1255	Post hole		0.52	0.4	39.77
1257	1257	Post hole		0.34	0.26	39.87
1259	1259	Post hole		0.2	0.15	39.99
1261	1261	Post hole		0.2	0.1	
1263	1263	Post hole		0.2	0.12	
1268	1309	Gully	1	0.28	0.18	39.36
1270	1270	Post hole	0.34	0.3	0.14	39.34
1272	1309	Gully	0.5	0.14	0.1	39.33
1274	2722	Ditch	0.5	0.2	0.12	39.3
1276	1276	Pit	0.9	0.84	0.16	39.89
1285	1285	Post hole		0.28	0.12	
1287	1287	Post hole		0.24	0.16	39.91
1289	1289	Post hole		0.22	0.14	39.93
1291	1291	Post hole		0.1	0.06	40.02
1297	1297	Post hole		0.42	0.1	40.03
1299	1299	Ditch	1	0.84	0.42	
1301	2733	Ditch terminus	1.2	1.04	0.36	
1303	1303	Pit	1	1.1	0.14	40.87
1306	1306	Clay layer				
1307	1307	Post hole	0.3	0.24	0.07	39.92
1309	1309	Gully				
1310	1823	Ditch	0.9	2.05	0.83	41.81
1312	1312	Pit		1	0.12	
1315	1315	Natural feature	1.2	1.1	0.15	
1317	1627	Gully	1	0.42	0.23	40.23
1320	1627	Gully		0.3	0.2	40.2
1322	1322	Post hole	0.56	0.55	0.29	39.97
1324	1324	Post hole	0.26	0.24	0.24	39.96
1326	1326	Post hole	0.38	0.26	0.08	39.95



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1328	1328	Post hole	0.3	0.24	0.08	39.92
1330	1330	Post hole	0.7	0.5	0.4	39.92
1333	1333	Post hole	0.5	0.4	0.22	
1334	2719	Ditch	1	0.3	0.18	
1336	2726	Ditch	0.8	0.2	0.07	
1339	2726	Ditch	0.5	0.45	0.15	
1341	2725	Ditch	0.8	0.4	0.22	
1343	1343	Post hole				
1345	1345	Post hole	0.35	0.26	0.16	
1350	1857	Ditch	1.2	2.1	0.65	42.76
1352	1627	Gully		0.22	0.2	
1354		Gully				
1355	1355	Post hole	0.48	0.4	0.28	39.81
1357	1357	Post hole	0.62	0.24	0.08	40.1
1359	1359	Post hole	0.5	0.32	0.08	39.99
1361	1361	Post hole	0.24	0.18	0.04	39.92
1363	1363	Post hole	0.49	0.4	0.16	39.91
1365	1365	Post hole	0.65	0.65	0.21	39.91
1367	1367	Post hole	0.42	0.38	0.2	39.98
1369	1369	Post hole	0.38	0.37	0.04	39.97
1371	1371	Post hole	0.28	0.25	0.13	40
1373	1823	Ditch		0.7	0.5	
1374		Ditch		0.6	0.2	
1375	2718	Ditch		0.4	0.26	
1387	2741	Ditch		0.56	0.18	39.01
1389		Ditch		0.56	0.4	39.01
1390	1409	Ditch	1.5	0.7	0.36	41.77
1393	2730	Gully	0.78	0.5	0.22	41.71
1396	1396	Post hole	0.2		0.13	42.7
1398	1398	Stake hole	0.13		0.16	43.17
1400	1400	Pit		0.49	0.12	42.69
1402	1409	Ditch	1.3	0.74	0.32	41.97



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1405	2729	Ditch	1.6	0.52	0.28	42
1407	1842	Ditch		3.56	0.48	41.24
1409	1409	Ditch group				
1410	2729	Gully	1.2	0.44	0.14	42.02
1412	2730	Gully	1.3	0.46	0.1	42.02
1417		Ditch		1.9	0.52	42.95
1421		Ditch		0.62	0.8	42.95
1422	1422	Stake hole		0.13	0.06	42.51
1424	1424	Stake hole		0.12	0.10	42.5
1426	1426	Pit	0.94	0.29	0.18	42.92
1428	1857	Gully				42.96
1430	1430	Geological layer				
1431	1431	Ditch				41.4
1433		Ditch		0.8	0.48	41.4
1435	1435	Subsoil			0.12	
1436	1842	Ditch		3.6	0.65	
1439	1439	Natural feature	0.6	0.4	0.4	42.76
1440	1823	Ditch	5	2.36	0.52	41.07
1441	2731	Gully	0.94	0.4	0.06	41.58
1443	1823	Ditch				41.58
1445	2704	Ditch	1.7	1.09	0.72	41.58
1447	1477	Geological layer	0.8	0.5	0.22	
1448	1448	Post hole	0.42	0.37	0.15	
1454	1229	Ditch		2.9	1.42	39.2
1459	2731	Gully	0.8	0.26	0.08	42.02
1461	2730	Ditch		0.64	0.18	42.02
1465	1465	Pit	0.82	0.34	0.08	41.4
1467	2718	Gully		0.47	0.17	41
1469	2430	Ditch		1.2	0.5	40.1
1472	1627	Gully		0.34	0.22	40.1
1474	1474	Natural feature				39.29
1476		Ditch		0.9	0.3	42.7



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1478		Ditch terminus		0.36	0.3	42.7
1480	2706	Ditch terminus				39.53
1482	1482	Post hole		0.24	0.1	40.2
1486	1486	Post hole	0.5	0.43	0.4	40.21
1488	1488	Post hole			0.1	40.13
1490	1490	Post hole	0.43	0.4	0.12	40.15
1492	1492	Natural feature	0.98	0.84	0.2	39.2
1494	1494	Ditch terminus		0.47		40.15
1496	1824	Ditch		1.5	0.3	39.2
1498	1823	Ditch		0.3	1.2	39.2
1501	2727	Ditch		0.78	0.44	40.3
1504	2724	Ditch		0.4	0.46	40.3
1506	1506	Pit		0.5	0.18	
1508	1508	Pit		0.64	0.28	
1511	1627	Gully terminus		0.52	0.1	
1513	1627	Gully				
1515	1627	Gully		0.04	0.06	
1517	1517	Post hole		0.25	0.07	
1519	1857	Ditch		1.2	0.25	42.28
1520	1856	Ditch		1.5		42.28
1521	1856	Ditch		1.5	0.4	42.51
1524	1823	Ditch		1.7	0.6	42.02
1526	1892	Ditch				42.14
1528	1528	Post hole	0.18	0.17	0.12	40.19
1530	1530	Post hole	0.34	0.3	0.11	40.13
1532	1532	Post hole	0.23	0.21	0.09	40.13
1534	1534	Post hole	0.42	0.23	0.09	40.14
1536	1536	Post hole			0.1	40.08
1538	1538	Post hole				39.85
1540	1540	Field drain		0.2	0.24	39.72
1542	1542	Pit				39.45
1546	1546	Ditch				39.55



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1549	1549	Post hole	0.14	0.14		39.71
1551	2711	Ditch		0.44	0.29	40.54
1554	1554	Ditch		0.31	0.28	40.58
1560	1560	Post hole	0.6	0.4	0.13	39.58
1562	1562	Post hole		0.26	0.1	39.77
1564	1564	Post hole	0.22	0.21	0.13	40.14
1566	1566	Post hole				40.15
1568	1568	Post hole	0.54	0.52	0.09	40.12
1571	1571	Ditch group		0.8	0.38	
1572		Ditch		1.7	0.5	
1573		Ditch				
1574	1574	Ditch group				
1576	2725	Ditch	1	0.78	0.52	
1578	1309	Gully terminus	0.3	0.1	0.05	
1580		Gully	0.4	0.15	0.1	
1582	1582	Stake hole	0.06	0.06	0.08	
1584	1584	Stake hole	0.06	0.06	0.07	
1586	1586	Stake hole	0.14	0.14	0.12	
1588	1588	Stake hole	0.06	0.06	0.1	
1590	1590	Stake hole	0.34	0.32	0.12	
1592	1592	Post hole	0.34	0.32	0.14	
1593	2706	Ditch	15	0.8	0.16	39.64
1595	1595	Post hole	0.3	0.3	0.1	39.64
1597	1229	Ditch		2.5	0.75	39.1
1600	1600	Post hole	0.3	0.3	0.08	39.46
1601	1601	Pit	1.38	0.76	0.18	39.33
1603	1574	Ditch	0.8	0.9	0.54	39.34
1606	1606	Pit?	15	2.2	0.5	42.5
1611	2712	Ditch		1.1	0.54	40.47
1612	2736	Ditch	10	0.65	0.12	38.64
1614	1825	Ditch	1.04	0.95	0.4	39.81
1617	1617	Post hole	0.42	0.4	0.28	40.18



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1619	1619	Ditch	1.08	0.8	0.1	38.41
1622	1622	Pit	0.4	0.7	0.08	38.33
1623		Gully	0.5	0.4	0.3	
1625	2736	Ditch terminus	1.2	0.44	0.05	38.5
1627	1627	Gully group				
1628	1628	Ditch terminus				38.39
1630	1630	Post hole	0.42	0.56	0.19	38.4
1632	1632	Post hole	0.26	0.3	0.26	38.36
1634	2735	Gully	0.9	0.35	0.24	38.51
1636	2737	Gully terminus	0.82	0.28	0.22	38.51
1638	2737	Gully terminus	1	0.28	0.12	38.47
1640	2735	Gully		0.35	0.15	38.49
1642	2734	Ditch		0.8	0.22	38.49
1644	2734	Ditch		0.9	0.54	38.44
1646	1646	Pit		1.4	1.04	38.64
1652	1572	Ditch		0.3	0.24	
1654		Gully		0.3	0.28	
1661	2733	Ditch		1.86	1.1	38.34
1662	1309	Ditch		0.6	0.32	
1664	1664	Post hole		0.64	0.51	38.73
1666	1666	Post hole		0.5	0.27	38.65
1668		Ditch terminus	0.6	0.8	0.2	
1669	1229	Ditch terminus			0.19	
1670	1670	Pit	1.2	0.9	0.16	39.29
1671	1229	Ditch		2.7	0.74	39.29
1672	2741	Gully	1.7	0.55	0.21	39.01
1673	2706	Ditch terminus		0.77	0.35	39.83
1675	2430	Ditch		1.1	0.52	39.83
1678	1823	Ditch		2.42	0.68	39.78
1680	2719	Ditch			0.84	39.69
1682	2722	Ditch			0.62	39.76
1684	1684	Pit			0.9	



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1690	1690	Post hole		0.17	0.12	
1692	1692	Post hole		0.28	.015	40.21
1694	1694	Post hole		0.26	0.17	40.13
1696	1696	Post hole		0.27	0.12	40.1
1698	1698	Post hole		0.19	0.13	40.09
1700	1700	Post hole		0.2	0.13	40.09
1702	1702	Post hole		0.21	0.16	40.07
1704	1704	Post hole		0.25	0.15	40.07
1706	1706	Post hole		0.14	0.12	40.01
1708	1708	Post hole		0.28	0.19	40.06
1710	1710	Pit		0.4	0.16	40.03
1712	1712	Pit		0.5	0.17	39.96
1714	1825	Ditch		0.78	0.38	39.34
1716	1229	Ditch	0.9	0.26	0.18	39.34
1718	1718	Natural feature	0.75	0.45	0.15	41.11
1720	1842	Gully	0.4	0.3	0.2	41.11
1722	1722	Natural feature	1.15	0.8	0.17	40.86
1724	1724	Pit	0.7	0.55		
1727	1727	Pit	0.72	0.7	0.24	39.53
1729	2719	Ditch		0.64	0.28	40.1
1731	2719	Ditch		0.45	0.33	40.14
1734	2719	Ditch		0.85	0.28	
1736	1309	Ditch		0.3	0.1	
1738		Gully terminus	0.32	0.3	0.08	
1740		Ditch		0.35	0.2	
1742	1742	Post hole	0.5	0.45	0.16	
1745	1229	Ditch		2.82	1	39.33
1751	1751	Pit	1.02	0.56	0.35	40.34
1753	2723	Ditch terminus		0.3	0.15	40.47
1755	2723	Ditch		2.94	0.34	
1759	2723	Ditch		1.16	0.46	40.88
1773	1823	Ditch		3.12	0.5	



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1776	2723	Ditch		0.93	0.05	41.93
1778		Ditch		0.62	0.32	41.21
1780	1856	Ditch		0.86	0.26	41.29
1782		Ditch		2.3	0.43	40.8
1786		Ditch terminus		1.9	0.2	40.8
1788	1788	Pit	1	0.9	0.2	42.14
1790		Gully		0.25	0.21	40.41
1792	1824	Ditch		2.4	0.58	39.29
1793		Ditch		2.6	0.26	40.41
1795		Ditch		0.59	0.16	40.27
1799	1799	Pit	1.3	0.43	0.4	40.27
1801		Ditch	0.3	0.25	0.06	40.27
1803		Ditch		0.76	0.44	40.8
1805	2722	Gully		0.45	0.14	40.6
1807	1807	Pit	1.7	0.7	0.12	40.72
1809		Ditch		1	0.3	40.72
1811	1811	Field drain		0.7	0.32	41.09
1817	1817	Natural feature		1.6	0.39	41.07
1818	1818	Natural feature		4.42	0.42	41.09
1819	1819	Natural feature		0.9	0.43	40.88
1821	1821	Pit	1.1	0.68	0.06	40.27
1823	1823	Ditch group				
1824	1824	Ditch group				
1825	1825	Ditch group				
1829	1829	Pit	3.5	2.45	0.24	42.54
1830	1842	Ditch terminus			0.32	42.43
1833	1833	Natural feature	0.66	0.6	0.14	42.51
1836	1856	Ditch		1.6	0.25	42.51
1838	1838	Natural feature			0.08	42.66
1839	1842	Ditch		2.3		42.26
1842	1842	Ditch group				
1846	1857	Ditch				42.65



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
1848	1848	Natural feature			0.16	42.65
1851	1856	Ditch	1.5	1.17	0.33	43.04
1855	1857	Ditch		0.74	0.4	43.1
1856	1856	Ditch group				
1857	1857	Ditch group				
2003	2694	Ditch		0.6	0.16	41.16
2005	2694	Ditch		0.6	0.16	40.89
2007	2714	Ditch	1	0.6	0.24	40.89
2009	2714	Ditch		1	0.2	41
2011	2011	Pit		0.92	0.06	41
2013	2720	Ditch		0.4	0.06	41
2015	2696	Ditch		0.78	0.36	39.78
2017	1574	Ditch		1.82	0.37	39.78
2019	2698	Ditch		0.78	0.33	42.77
2024	2697	Ditch		1.54	0.41	42.77
2028	2692	Ditch terminus	7.7	0.46	0.13	40
2030	2692	Ditch	7.7	0.68	0.15	39.93
2032	2692	Ditch terminus	7.7	0.52	0.25	39.77
2033	2688	Ditch terminus		0.82	0.3	41.28
2035	2688	Ditch		0.8	.1	41.22
2037	2694	Ditch		0.8	0.14	41.22
2039	2697	Ditch		1.1	0.3	42.82
2043	2696	Ditch		0.94	0.48	42.82
2046	2711	Ditch		2.46	0.43	40.93
2052	1571	Ditch terminus	1.06	0.6	0.2	40.14
2053	1574	Ditch		1.52	0.26	39.6
2055	2339	Ditch		0.61	0.2	39.6
2057	2708	Ditch		1.1	0.62	40.16
2059	2695	Ditch			0.36	41.28
2061	2694	Ditch		0.76	0.13	41.28
2066	2690	Ditch		1.3	0.43	39.65
2067	2709	Ditch			0.46	40.72



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
2070	2691	Ditch			0.22	40.72
2073	2696	Ditch				
2075	2697	Pit		0.54	0.06	42.01
2077	2698	Ditch		0.7	0.32	42.31
2080	2699	Ditch		0.43	0.21	42.02
2083	2700	Ditch		0.54	0.11	42.02
2086	2729	Ditch		0.23	0.06	42.05
2088	2699	Ditch		0.21	0.17	42.05
2092	2700	Ditch		0.31	0.13	42.05
2094	2705	Ditch		0.98	0.44	40.14
2096	2690	Ditch terminus		1.38	0.43	40.14
2098	2710	Ditch				39.98
2101	2710	Ditch				39.98
2104	1574	Ditch		2.1	0.64	
2105	2105	Post hole		0.52	0.19	40.79
2107	2700	Ditch				42.31
2109	2716	Ditch		0.6	0.1	41.02
2111	2720	Ditch		0.35	0.06	41.02
2113	2113	Stake hole		0.12	0.12	41.02
2115	2698	Ditch		0.9	0.2	42.1
2117	2117	Modern pit		2	0.3	42.1
2119	2729	Ditch		1.1	0.08	42.1
2121	2121	Natural feature		0.3	0.12	42.2
2123	2698	Ditch		0.9	0.22	42.2
2125	2125	Modern pit				42.05
2126	2356	Gully		0.74	0.15	41
2128	2128	Post hole		0.26	0.18	41.3
2131	2131	Post hole		0.12	0.33	41.39
2134	2134	Post hole		0.26	0.09	41.58
2136	2634	Ditch		0.54	0.28	41.46
2138	2138	Ditch		0.68	0.21	40.13
2141	2141	Pit		0.64	0.18	42.22



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
2143	2732	Gully terminus		0.24	0.06	42.12
2145	2732	Gully terminus		0.22	0.07	42.32
2147	2732	Gully		0.24	0.09	42.22
2149	2698	Ditch		0.72	0.19	42.72
2151	2151	Ditch		1.8	0.37	40.47
2154	2154	Ditch		0.9	0.22	40.47
2158	2356	Ditch		0.7	0.16	40.37
2160	2714	Ditch terminus		0.7	0.32	42.61
2163	2633	Ditch		1.05	0.26	41.65
2166	2703	Ditch		0.61	0.19	42.82
2168	2696	Ditch		0.76	0.22	42.71
2170	2697	Ditch				42.71
2173	2698	Ditch		0.28	0.24	42.71
2175	2698	Ditch		0.7	0.34	
2176	2697	Ditch		1.5	0.34	
2178	2178	Pit	0.66	0.48	0.16	41.29
2180		Ditch terminus				39.75
2182	2182	Pit		0.74	0.07	39.81
2184	2184	Pit	1.2	1	0.14	39.91
2188	1574	Ditch		0.45	0.18	
2191	1574	Ditch		1.26	0.42	39.62
2195	2710	Ditch		1.08	0.38	39.62
2196	2728	Ditch terminus		0.74	0.22	44.47
2198	2728	Ditch		0.84	0.24	44.46
2201	2201	Pit		0.55	0.12	
2202	2694	Ditch		1.13	0.2	39.73
2206	2269	Gully terminus			0.12	39.99
2208	2208	Pit	1	1.12	0.3	42.49
2214	2214	Pit	1.2	0.3	0.22	41.06
2216	2222	Gully	2.2	0.4	0.2	41.08
2218	2222	Gully	2.2	0.4	0.2	41.12
2220	2695	Ditch	2.6	1	0.24	41.25



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
2222	2222	Gully group				
2224		Ditch		1.2	0.78	41.72
2225	2340	Ditch				41.64
2226	2633	Ditch			0.38	41.72
2233	2339	Ditch		1.08	0.48	39.91
2234	2716	Ditch		0.9	0.18	41.16
2236	2717	Ditch		1.3	0.2	41.16
2237		Ditch			0.16	
2238	2238	Pit	1.2	1.4	0.28	41.82
2240	2356	Gully	2.5	1	0.24	41.82
2242	2242	Post hole	0.24	0.2	0.12	41.82
2244	2633	Gully	2.8	0.34	0.14	41.82
2246	22246	Pit	0.84	0.64	0.18	42.95
2248	2697	Ditch		2	0.48	42.95
2251	2251	Pit	3.6	3.08	0.84	42.74
2255	2255	Pit		0.8	0.15	42.08
2257	2689	Ditch		0.96	0.28	42.08
2259	2259	Pit		0.8	0.1	42.01
2261	2695	Ditch		2.24	0.66	42.01
2263	2269	Gully		0.42	0.18	41.39
2265	2265	Pit		0.56	0.16	41.39
2267	2691	Ditch		0.48	0.21	40.61
2269	2269	Gully group				
2273	2708	Ditch		0.86	0.36	39.99
2277	2339	Ditch				39.99
2278	2364	Ditch			0.34	41.62
2280	2695	Ditch		1.12		41.62
2283	2696	Ditch		2.1	0.5	41.61
2284	2695	Ditch	2.8	2	0.4	41.44
2286	2356	Gully	2	1.5	0.24	41.44
2288	2340	Gully		0.7	0.34	40.55
2289	2711	Ditch		1.4	0.7	40.59



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
2290	2738	Ditch		2.5	0.54	40.65
2291	2415	Ditch		0.4	0.24	41.38
2293	2415	Ditch		0.36		41.38
2295	2415	Ditch		0.64	0.37	41.61
2297	2297	Pit		0.46	0.18	41.47
2299	2415	Ditch		1.04	0.3	41.78
2301	2301	Pit	1.1	0.78	0.3	41.78
2304	2356	Gully		0.8	0.14	41.1
2306	2415	Ditch		0.9	0.4	41.06
2312	2340	Ditch		1.5	.3	39.99
2319	2707	Ditch		0.8	0.4	
2322	2367	Ditch	0.8	0.3	0.34	41.65
2324	2415	Ditch	1.04	0.64	0.4	41.65
2327	2327	Ditch		0.6	0.18	41.07
2329	2356	Gully		0.8	0.16	41.07
2331	2714	Gully		0.44	0.16	41.25
2333	2715	Ditch		0.66	0.18	41.25
2337	2337	Pit		0.58	0.12	
2343	2634	Ditch		0.62		41.29
2345	2345	Pit	0.88	0.62	0.08	41.29
2347	2367	Ditch		1	0.31	41.69
2349	2367	Ditch terminus		0.54	0.16	41.58
2351	2367	Ditch		0.8	0.25	41.84
2353	2695	Ditch		2.55	0.62	41.84
2356	2356	Gully group				
2357	2415	Ditch		0.41	0.36	40.98
2359	2415	Ditch		0.35	0.26	40.98
2361	2713	Ditch		0.86	0.4	40.62
2362	2711	Ditch		0.7	0.5	40.67
2363	2704	Gully		0.62	0.22	41.45
2365	2365	Pit	1.5	1.3	0.18	41.71
2366	2415	Ditch		1.5	0.78	41.71



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
2367	2367	Ditch group				
2371	2711	Ditch		1	0.5	40.48
2373	1574	Ditch		0.34	0.2	40.48
2381		Ditch		0.8	0.14	40.7
2383	2383	Ditch		0.6	0.14	40.65
2385	2694	Ditch		0.88	0.3	40.65
2387	2387	Post hole	0.12	0.26	0.4	
2392	1229	Ditch		0.65	0.54	39.89
2396	2339	Ditch terminus		0.64	0.6	39.99
2397	2716	Gully		0.4	0.3	40.72
2399	2740	Ditch		1.4	0.3	40.72
2401	2401	Ditch group		0.9	0.3	41.68
2403	2689	Ditch		0.8	0.47	41.68
2405	2691	Ditch		0.38	0.16	40.66
2407	2711	Ditch		0.98	0.4	40.66
2410	2582	Gully		0.48	0.07	
2412	2415	Ditch		0.8	0.28	
2415	2415	Ditch group				
2416	2699	Ditch		1.05	0.48	41.88
2417	2714	Ditch		0.4	0.2	41.59
2419	2704	Ditch		0.32	0.18	41.61
2421	2421	Post hole	0.45	0.52	0.2	40.91
2423	2423	Post hole	0.6	0.66	0.34	41.28
2429	2340	Ditch		1.15	0.4	39.92
2430	2430	Ditch group				
2433	2691	Ditch		0.86	0.16	40.38
2435	2435	Pit		0.6	0.26	42.31
2437	2437	Pit	1.32	0.55	0.3	42.28
2439	2700	Ditch		0.8	0.23	42.59
2441	2701	Ditch		1	0.22	42.59
2443	2443	Pit	3	1.6	0.16	42.59
2445	1574	Ditch		0.64	0.34	40.5



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
2447	2691	Ditch		0.34	0.3	40.5
2453	2340	Ditch		1.2	0.44	40.36
2455	2712	Ditch		0.56	0.2	40.36
2456	1574	Gully		0.42	0.08	40.5
2458	2691	Gully		0.4	0.26	40.5
2461	2461	Post hole		0.6	0.14	40.46
2463	2463	Post hole		0.49	0.16	40.45
2465	2465	Post hole		0.35	0.2	40.24
2468	2739	Pit		0.84	0.3	40.18
2560	2705	Ditch		0.4	0.08	41.23
2562	2716	Ditch	0	60.4	0.14	41.23
2564	2701	Ditch terminus		0.62	0.13	43.65
2566	2566	Pit		0.9	0.34	43.24
2568	2568	Post hole		0.22	0.08	42.94
2570	2702	Gully		0.45	0.05	42.83
2572	2702	Gully		0.54	0.14	42.84
2574	2700	Gully		0.75	0.17	42.84
2576	2702	Ditch		0.46	0.17	42.71
2579	2739	Ditch terminus	3.2	0.84	0.3	40.26
2580	2582	Gully terminus		0.58	0.12	41.23
2582		Gully terminus			0.1	
2584	2703	Ditch		0.55	0.08	43.43
2585	2714	Ditch			0.28	42.05
2587	2729	Ditch	0.85	0.54	0.29	42.05
2589	2714	Ditch	0.8	0.38	0.19	42.32
2591	2702	Ditch		0.36	0.32	42.32
2593	1574	Ditch		1.4	0.38	40.09
2596	2710	Ditch		1.2	0.5	40.09
2598	1574	Ditch		1.58	0.5	40.09
2601	2601	Natural feature	3.5	2	0.18	41.12
2603	2694	Gully		0.75	0.25	41.12
2605	2364	Gully	30	0.34	0.08	41.07



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
2607	2716	Ditch		0.2	0.09	41.07
2609	2609	Pit	1.15	0.85	0.35	40.32
2611	2709	Ditch	1.15	0.72	0.15	40.12
2613	2708	Ditch	0.7	1.06	0.53	40.18
2618	2618	Pit				40.43
2622	2712	Ditch		0.8	0.32	40.43
2624	2624	Pit		0.9	0.14	40.43
2626	2626	Pit		0.8	0.22	40.5
2629	2694	Ditch	0.5	0.7	0.16	40.61
2631	2740	Ditch	0.6	0.5	0.16	40.61
2633	2633	Ditch group				
2634	2634	Gully group				
2635	2738	Ditch	1.1	0.54		40.85
2638	2711	Ditch		1.5	0.36	40.85
2641	2707	Ditch	0	0.72	>0.4	40.85
2643	1571	Ditch	1.2	0.5	0.39	39.8
2645	2708	Ditch	0	1.8	0.22	39.84
2647	1229	Ditch		1.5	0.42	39.84
2650	2696	Ditch	1.1	0.4	0.4	42.75
2652	2652	Ditch		0.4	0.18	42.75
2657	2657	Pit	0.8	0.72	0.15	40.36
2659	2716	Ditch		0.86	0.2	41.49
2661	2714	Ditch		1.42	0.26	41.49
2664	2705	Ditch		0.75	0.16	41.54
2665	2713	Ditch		2.04	0.52	40.34
2667	2715	Ditch		0.74	0.5	42.13
2670	2714	Ditch		0.71	0.24	42.13
2672	2672	Pit	0.7	0.74	0.2	40.39
2674		Ditch		0.76	0.1	41.02
2676	2714	Ditch		0.5	0.26	41.02
2678	2717	Ditch		0.9	0.2	41.05
2680	2714	Ditch		0.54	0.32	41.05



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
2682	2705	Ditch terminus	0.66	0.3	0.05	41.86
2684	2705	Ditch	0.8	0.3	0.16	41.8
2686	2700	Ditch	0.8	0.3	0.2	
2688	2688	Ditch group				
2689	2689	Ditch group				
2690	2690	Ditch group				
2691	2691	Gully group				
2692	2692	Gully group				
2694	2694	Gully group				
2695	2695	Ditch group				
2696	2696	Ditch group				
2697	2697	Ditch group				
2698	2698	Ditch group				
2699	2699	Ditch group				
2700	2700	Ditch group				
2701	2701	Gully group				
2702	2702	Gully group				
2703	2703	Gully group				
2704	2704	Gully group				
2705	2705	Gully group				
2706	2706	Ditch group				
2707	2707	Modern group				
2708	2708	Ditch group				
2709	2709	Ditch group				
2710	2710	Ditch group				
2711	2711	Ditch group				
2712	2712	Ditch group				
2713	2713	Ditch group				
2714	2714	Ditch group				
2715	2715	Gully group				
2716	2716	Ditch group				
2717	2717	Gully group				



Context	Group	Interpretation	Length (m)	Width (m)	Depth (m)	Level (m AOD)
2718	2718	Gully group				
2719	2719	Ditch group				
2720	2720	Gully group				
2721	2721	Gully group				
2722	2722	Gully group				
2723	2723	Gully group				
2724	2724	Ditch group				
2725	2725	Gully group				
2726	2726	Gully group				
2727	2727	Ditch group				
2728	2728	Ditch group				
2729	2729	Ditch group				
2730	2730	Ditch group				
2731	2731	Gully group				
2732	2732	Gully group				
2733	2733	Ditch group				
2734	2734	Gully group				
2735	2735	Gully group				
2736	2736	Gully group				
2737	2737	Ditch group				
2738	2738	Ditch group				
2739	2739	Ditch group				
2740	2740	Ditch group				
2741	2741	Gully group				



APPENDIX B. ASSESSMENT OF FINDS

B.1 Pottery

Paul Booth

Introduction and methodology

The excavations produced some 2115 sherds (16,950 g) of pottery, the great majority of which was of middle and late Iron Age date. A further 900 g of pottery was recovered from sieved soil samples. The majority of the pottery (c 1760 sherds, 14,250 g) was fully recorded as part of the assessment process, and the rest scanned rapidly, with the exception of the material from soil samples, which was not examined. It should be noted, however, that the data for the fully recorded part of the assemblage are currently in the form of paper records, so the quantification quoted here is based on initial counts and weights generated by the OA finds department. These figures typically do not distinguish between modern and old breaks, so once the assemblage is fully recorded the final sherd count will be less than that given here, but the mean sherd weight (8 g on the basis of the current data) will be slightly higher.

The detailed records compiled to date use standard codes set out in the OA recording system for later prehistoric and Roman pottery (Booth 2008) and are in line with the recommendations of the Prehistoric Ceramics Group (PCRG 1997). Sherds are recorded in terms of fabric and form, with a note of decoration and use-related characteristics where appropriate. Quantification is by sherd count and weight and vessels are also recorded in terms of rim equivalents (REs). For the purposes of the assessment a spot date has been assigned to each context group, but many of these are very small. The pottery was in variable condition, and was typically well-fragmented, as indicated by the low mean sherd weight (even allowing for adjustment subsequent to full recording - see above - this is likely to remain well below 10 g). Surfaces were frequently abraded, although this was probably as much a consequence of acidic soil condition as of repeated redeposition.

Fabrics and forms

A relatively wide variety of fabrics is evident in the assemblage, involving several distinct traditions, of which tempering with flint, sand and grog are the three main ones. The chronological definition of the first of these is most problematic, because flint temper seems to have been used in several distinct periods. Two very small sherds from context 2041 include a battered rim fragment which may be Peterborough Ware, though this is not certain. Much more certain is a middle Bronze Age vessel from context 1629. This is a globular urn or jar (the latter term may be preferable as there is no indication of a funerary use). The vessel is in a well-sorted moderately coarse flint-tempered fabric with no other inclusions evident. The form is relatively squat, but is broadly paralleled by a vessel from the CTRL Section 1 site at Sandway Road, which had a similar flint-tempered fabric and also had decoration of horizontal tooled lines and rows of impressed dots like that of the Ashford vessel. There are a few clear instances of the use of flint-tempered fabrics in vessels of middle or middle-late Iron Age character. In many cases, however, flint tempering is seen in undiagnostic body sherds. The date of these is uncertain, but it is possible that completely oxidised firing, relatively common in these sherds, is more characteristic of the Bronze Age than of later periods, although the globular jar is not fired in this way. Flint also occurs quite regularly as a subsidiary inclusion type in Iron Age fabrics tempered principally with sand or (less frequently) with grog.



Sand tempering is relatively common in this assemblage, although fabrics tempered more or less exclusively and/or densely with sand are scarce. Most characteristic of the middle Iron Age is a fabric group with quartz sand, clay pellets and organic inclusions as its major components. Although subject to some variation, the inclusions usually occur in that order of importance. Firing of these fabrics is typically unoxidised, and vessel forms are characteristically simple types such as barrel shaped jars or ovoid jars with slightly everted rims.

The clay pellets in the main middle Iron Age fabric group are usually rounded, but more angular inclusions identified as grog also occur in this period, both in combination with sand tempering and also as a dominant inclusion type. It is possible that the move to increased use of grog is a technological progression from the incorporation of clay pellets in slightly earlier fabrics (in any case, the distinction between the two is not always clear). Grog tempering, usually seen as characteristic of the late Iron Age, is undoubtedly well-established in the middle Iron Age, as is clearly demonstrated in the area at sites such as the CTRL Section 1 Beechbrook Wood complex. Typical middle Iron Age forms such as simple barrel shaped jars in grog-tempered fabrics are relatively common both there and at Ashford. In a local context, therefore, an already-established tradition forms the basis for the dominant use of grog-tempering in the late Iron Age. The grog-tempered fabrics of both the later part of the middle Iron Age and the late Iron Age are mostly hand made, so undiagnostic body sherds in these fabrics could potentially be of either date. A subjective impression is that the late Iron Age grog-tempered fabrics are more densely tempered, but this requires more work involving comparison of the ceramic records with the detailed stratigraphic sequence before it can be confirmed (or refuted).

A relatively small number of vessels, mostly in grog-tempered fabrics, are of types recognisable from the 'Belgic' repertoire (eg Thompson 1982). These consist principally of bead rimmed and slack shouldered jars. A single carinated cup (ibid. type E1 - 1, from context 1890) and the base of a pedestalled urn (from context 1174) are relatively unusual pieces within the context of the assemblage as a whole, and forms such as dishes seem to be absent altogether.

Minor tempering traditions include the use of glauconitic 'sand', often in combination with quartz sand. This seems to be characteristic of the middle Iron Age, but diagnostic pieces are very scarce.

Later periods are represented by a single Roman sherd, a dish or bowl rim in fine Upchurch grey ware (Canterbury fabric R16) from context 2287, and a single large body sherd of Ashford Potter's Corner fabric, of late 12th-13th century date, from context 2637.

Context

The pottery derives from 253 context groups. The resulting average of only just over 8 sherds (or 67 g) per group means that many groups are small, and even those of medium size may not contain material with any diagnostic characteristics beyond fabric. Particularly problematic areas in this regard, as indicated above, relate to flint-tempered and grog-tempered fabrics. Only 31 groups contained more than 100 g of pottery, of which 7 had over 500 g each, including a single group, 1688, which was exceptional in weighing over 1600 g. The 127 sherds in this group had a mean weight of c 12.6 g; not a high figure, but well above that for the site as a whole.

Group 1688 was from the fill of a ring gully of middle Iron Age date, and presumably represents relatively concentrated deposition of material close to a focus of domestic activity, but most of the pottery on the site was recovered from the fills of ditches. This probably accounts in part for the low mean sherd weight, and could also have resulted in a high level of redeposition as ditches were recut. This is evident in the extreme case of the possible Neolithic fragments from context 2041. The middle Bronze Age globular jar is less clearly redeposited in ditch fill 1629,



since a large part of the vessel was present in this context, with no later material, and it is possible that this feature (ditch/gully 1628) is dated by the associated vessel. The occurrence of a concentration of material indicative of a possible structure (1688 above) suggests that close examination of the contexts of other larger groups might reveal associations of similar character.

Two complete vessels (SF 1 and 2) were recovered from ditch 1229. One vessel was a carinated bowl, while the other was a comb-decorated, bead-rimmed jar. Both are likely to date to the late Iron Age.

Chronology

The assemblage contains fragmentary evidence of activity of earlier prehistoric, potentially Neolithic, date, and more convincing indications that at least one linear feature (1628) may be of middle Bronze Age date. The status of a few flint-tempered body sherds is uncertain, and it is possible that they too relate to activity in the Bronze Age, perhaps broadly contemporary with that reflected by the globular jar. This apart, however, the pottery only indicates intensive activity on the site in the middle and late Iron Age periods. The absence of both early Iron Age and Roman pottery is very marked and it is likely that there was effectively no activity of either period on the site. A single medieval sherd gives a similar indication. In the case of both medieval and Roman periods activity is attested in closely adjacent areas, such as at Boys Hall Moat just to the north-west, so the occurrence of apparently stray sherds need occasion no surprise.

B.2 Clay pipe

John Cotter

A single piece of pipe stem (weighing 3 g) was recovered from the subsoil (context 1001). The piece has a maker's mark allowing it to be dated to c 1851-8.

The stem fragment is 41 mm long and exhibits slight wear at both ends. It has an elliptical or lentoid section with an angular lateral 'seam' or ridge running down both sides into which the stamp was directly impressed or moulded. At one end the stem is thicker (to left of surname), presumably where it approached the bowl. The style of the stamp – applied to opposite sides of the stem with lettering contained in elongated cartouches or labels with pointed ends – is typically Victorian (Plate 6). The lettering is in incuse capitals with slight serifs. One side bears the name 'J PHILLIPS', and the other 'ASHFORD'. It is fortuitous that the complete inscription has survived and in such good condition on such a small piece of stem.

Oswald (1975, 176) records a Kent pipe maker of this name listed in local directories for Chatham (1847) and Ashford (1851). Additional research into the 1851 census shows that a John Phillips, aged 35 and a tobacco pipe manufacturer, lived in New Street, Ashford, and that he was born in Chatham. He was still alive in 1858 when Melville's Directory records him at the same address and still advertising as a pipe manufacturer.



B.3 Fired clay

Cynthia Poole

Fired clay amounting to 21 fragments (369 g) was recovered from seven contexts by hand excavation. Fragments ranged from 8 g to 130 g with an overall mean fragment weight of 18 g, and most are moderately to highly abraded. All has been identified as fired clay apart from one fragment, which may be a Roman tile fragment, but without any surfaces surviving it is not possible to be certain. The assemblage is summarised in Table 1.

Table 1: Summary and quantification of fired clay

Ctx	Nos	Wt g	Fabric	Description	Thickness
1108	3	81	A	Two smooth well finished parallel surfaces; general character similar to oven or hearth furniture such as oven plate or triangular perforated bricks.	50 mm
1385	1	130	Ao	SF86 Oven wall: smooth moulded surface, with 2 or 3 wattle impressions 17-24 mm on the back suggestive of an interwoven wattle framework. The clay fabric contained a fragment of flint tempered pot.	42 mm
1639	1	8	Ao	Flat moulded surface	17 mm
1770	1	13	A	Single smooth flat moulded surface, with broken and worn back.	15 mm
2103	13	96	Ao	Heavily abraded fragments retaining only small areas of original moulded surface.	20 mm
2402	1	29	A	Oven wall: remnant of exterior moulded surface and worn wattle impression 12 mm dia on the interior face.	27 mm
2640	1	12	A	Indeterminate broken fragment with no surviving surfaces, though possibly a fragment of RB tile.	12 mm
Total	21	369			

All pieces were made in a similar fabric consisting of a fine sandy-silty laminated clay containing a low to moderate density of quartz sand and ferruginous clay grits 0.5-3 mm (fabric A). Some pieces were more porous with the suggestion of an added organic component (fabric Ao). It is likely that the natural Atherfield Clay present on site or the clayey subsoil derived from it was the source of this fabric, though no comparison has been made and the local alluvial clays would be an alternative source.

Apart from two fragments with wattle impressions, which are interpreted as oven wall or structure, the remainder is indeterminate, though the finish on one piece with two parallel surfaces is consistent with oven furniture such as oven plate or triangular brick.



B.4 Lithics

Mike Donnelly

Introduction

A total of 432 struck flints and 22 pieces (307 g) of burnt unworked flint was recovered. The flint assemblage included a small number of diagnostic artefacts, but these, along with the morphological and technological attributes suggest a concentration of Neolithic artefacts with some possible residual Mesolithic flints amidst a very low-level background scatter of later prehistoric material. The Neolithic assemblage appeared to be heavily concentrated in an area of preserved soil, though many of the pieces were recovered as residual finds in features which cut this buried horizon. The flint assemblage from the site is shown in Table 2.

Table 2: The flint assemblage from the Ashford Orbital Park site by excavation area

CATEGORY TYPE	Northern area	South-west area	Grand Total
Flake	222	20	242
Blade	16	3	19
Bladelet	14		14
Blade-like	13		13
Irregular waste	19	2	21
Chip	43		43
Sieved Chips 10-4mm	7	1	8
Sieved Chips 4-2mm	14		14
Rejuvenation flake core face/edge	2		2
Crested blade	2		2
Single platform blade core	1		1
Other blade core	2		2
Single platform flake core		1	1
Multi platform flake core	5	1	6
Discoidal flake core	4		4
Keeled flake core	2		2
Unclassifiable/fragmentary core	1		1
Core on a flake	1	1	2
Scraper end	5		5
Scraper end of blade	1		1
Scraper end & side	1		1
Scraper side	2		2
Scraper other	1		1
Arrowhead leaf-shaped	1		1
Awl	2	1	3
Burin	1		1
Denticulate	1	1	2
Fabricator	1		1
Knife other	2		2
Microdenticulate	2		2
Notch	1		1
Misc retouch	1		1
Retouched blade	3		3



Retouched flake	7	1	8
Grand Total	400	32	432

Burnt unworked flint No./g	13/231g	9/76g	22/307g
No. burnt (exc. chips) (%)	28 (8.33%)	3 (9.68%)	31 (8.45%)
No. broken (exc. chips) (%)	88 (26.19%)	5 (16.13%)	93 (25.34%)
No. retouched (exc. chips) (%)	30 (8.93%)	2 (6.45%)	32 (8.72%)

Methodology

The artefacts were catalogued according to OA's standard system of broad artefact/debitage type. The general condition was noted and dating was attempted where possible. Unworked burnt flint was quantified by weight and number. The assemblage was catalogued directly onto a Microsoft Access database but was manipulated in Open Office spreadsheet.

Provenance

Flintwork was recovered from 65 contexts, with 42 contexts in the northern area of the site and 23 contexts in the south-western part of the site yielding flint. The vast bulk of the flint originated from the northern area of the site (400/432, 92.59%). The distribution of flints was far from uniform; three contexts (1306, 1349 and 1607) accounted for 323 flints or 80.75% of the total from this area. One of these contexts, 1306, accounted for *c* 33% of the area's assemblage. This included several pieces which were visible in the fills of later features. As all these flints were recorded by GPS, it will be possible to assign these pieces to individual features. However, in terms of technology and surface condition, these flints should be regarded as part of the artefact scatter. Some 25% of the flints recovered from the northern area originated from a probable contemporary natural hollow (1607, fill of 1606). The flint from the south-western part of the site was generally found as residual finds in later archaeological features, primarily of Iron Age and Roman date. One small pit (2658) in the area may, however, be a contemporaneous feature.

Raw material and condition

The raw materials exploited at Ashford were represented primarily by good quality flint despite a range of secondary sources having been exploited. The cortex present ranges from a quite rare, thick whiteish cortex probably off small primary source nodules, through to more commonly rolled, abraded and sometimes frost-pitted cortex. Some flakes and blades exhibit an olive green cortex with and underlying orange band attributable to flint from the Bullhead Beds (Dewey and Bromehead 1915), but these may have been obtained from derived material found locally. The vast majority of assemblage was struck from local river gravel sources. However, the high quality of the finished product indicates that some care went into selecting appropriate nodules.

Many of the pieces have a light patina while some are more heavily patinated and several are iron stained. Most are in relatively fresh condition, particularly those recovered from the buried soil, contemporary hollows or ditches cutting the buried soil in the northern area. In contrast, the condition of the remainder of the northern area assemblage and the south-western area material is far more variable with some heavily rolled examples and a higher incidence of burning. Many of the pieces recovered are broken and this may in part reflect the thinness of many of the pieces rendering them susceptible to breakage.



Storage and curation

The struck flints are bagged individually and boxed; this is adequate for long-term storage and curation. The burnt unworked flint is bagged by context. It is not recommended that the burnt unworked flint is retained for long-term storage.

The assemblage

The flint assemblage recovered from Ashford Orbital Park will be considered by excavation area. These areas are not very distinct or separated by any great distance and simply allowed for a staged hand over of areas to the developers. However, there was a clear distinction between the assemblages recovered from each area.

Northern area

A total of 400 struck flints were recovered from 41 contexts in the northern area of the site. The bulk of the assemblage is either fresh or shows evidence of slight damage (Table 3). The freshest assemblage appears to be that from contemporary natural hollows (1607) while the material redeposited in probable later context 1349 (?ditch 1350) appears to be in better condition than those recovered from buried soil 1306. This suggests flints from the buried soil had been reworked or perhaps moved as waste, knapped at one location and deposited elsewhere. The buried soil/scatter material and clearly residual artefacts had a higher incidence of heavily damaged/rolled flints with many exhibiting post-depositional edge damage.

Table 3: Northern area and key contexts by condition

Condition	Scatter 1306		Later context 1349		Hollow 1607		North area Total	%
Fresh	43	31.86%	36	41.86%	47	46.08%	145	36.25%
Light	54	40.00%	47	54.64%	41	40.20%	178	44.50%
Moderate	25	18.52%	2	2.32%	10	9.80%	53	13.25%
Heavy	7	5.18%	1	1.16%	0		11	2.75%
Unclassified	6	4.44%	0		4	3.92%	13	3.25%
Total	135		86		102		400	

The flint assemblage from the northern area, including key contexts 1306, 1349 and 1607, is shown in Table 4. The assemblage contains significant number of cores (16), the majority of which display flake scars with evidence of a careful reduction sequence. Tested nodules are absent here and single platform examples are rare (2), cores with two platforms are present (2) but multi-platform cores dominate (12).

*Table 4: The flint assemblage from the northern area by key context. (*GI = ground implement, AT = axe thinning)*

CATEGORY TYPE	Contexts				Grand Total
	1306	1349	1607	Other contexts	
Flake	73	62 (1GI)*	47 (2GI)	40	222



Blade	5	3	2AT)*	6	16
Bladelet	5	3	4	2	14
Blade-like	7	1	4	1	13
Irregular waste	6	4	7	2	19
Chip	9	7	25	2	43
Sieved Chips 10-4mm		1	4	2	7
Sieved Chips 4-2mm		2	6	6	14
Rejuvenation flake	1	1			2
Crested blade				2	2
Single platform blade core	1				1
Other blade core	2				2
Multi platform flake core	5				5
Discoidal flake core	1		1	2	4
Keeled flake core	1			1	2
Fragmentary core				1	1
Core on a flake	1				1
Scraper end	3			2	5
Scraper end of blade	1				1
Scraper end & side	1				1
Scraper side	1			1	2
Scraper other	1				1
Arrowhead leaf-shaped	1				1
Awl	1			1	2
Burin				1	1
Denticulate	1				1
Fabricator				1	1
Knife other				2	2
Microdenticulate	2				2
Notch	1				1
Misc retouch			1		1
Retouched blade		1	1	1	3
Retouched flake	5	1		1	7
Totals	135	86	102	77	400

Many of these represent specialised core types such as keeled (2) and discoidal examples (4), which are usually seen to be of Neolithic date with the discoidal examples more typical of the late Neolithic-early Bronze Age. There are also two multi-platform cubic cores with flake, blade and bladelet scars typical of early Neolithic assemblages (Butler 2005). Some of the cores, especially a single platform blade core, could just as easily be of late Mesolithic date as early Neolithic, though in general the cores are more complex in platform orientation and the number of platforms than is the norm for the Mesolithic.

Blade/bladelet scars are present on four of the sixteen cores showing that blade production was important here. However, the vast majority of the cores have been very heavily worked. The average size of the cores from the northern area is 33.3 g, but one core is very atypical of the assemblage and may be of much later date. The remaining assemblage averages just 26.8 g. In such an exhausted state, the final use of such cores is often to remove small flakes and this may have removed traces of earlier blade reduction. Many of the flakes and flake tools in the assemblage display blade scars on their dorsal surfaces.



While flakes dominate the assemblage, the percentage of blade forms is also quite high (16.26%). The figure for blades indicates either a mixed assemblage or one in which blade production is prominent but not dominant. This would appear to argue against a Mesolithic date. However, caution should be observed as Kent is known for producing some very odd flake-based Mesolithic assemblages (eg Finglesham – Butler forthcoming).

The flakes found in the northern area were often quite thin and elegant; a great many display signs of platform edge abrasion and microflaking, evidence of the care in the reduction sequence employed by the knappers and typical of Mesolithic or Neolithic assemblages. Nearly half of all flakes and blades that could be categorised displayed this form of preparation (124/250, 49.6%). Additionally, three polished flakes of ground stone implements and two probable axe thinning/working flakes were also recovered. Typical later prehistoric broad, squat hard-hammer struck flakes with large plain platforms account for only 10 examples, though more of the flake debitage may also belong to this period.

Nearly three-quarters of the blades found here show evidence of platform edge preparation (29/40, 72.5%). The blade assemblage includes many blade-like examples which probably relate to the small size of the nodules prohibiting blank length causing many pieces to fall slightly short of true blade length-width ratios. A number of bladelets are also present and while these are usually seen as being more typical of Mesolithic assemblages, they may also be prevalent here due to the small core size. Two partially crested blades were also recovered, as were two core face/edge rejuvenation flakes, again a Mesolithic-early Neolithic tradition. However, one of the crested blades is highly incongruous. This piece – 92 mm long and weighing 42g, more than all but one core from the northern area – represents a very long blade for the assemblage and is highly patinated. It has detached from the core mostly along a thermal fracture, but the lower 30 mm on its left edge display a true ventral surface with ripples and a hinge termination. This piece would appear to be more typical of terminal Upper Palaeolithic long blade assemblages (Barton 1989). These are not known from the Ashford region, though they have been found close to the Thames estuary (Burchell 1938) and at Riverdale, Canterbury (Barton 1998), and it is perhaps more likely that this piece represents a stray and unusual early Mesolithic blade.

Overall, the characteristics of the flake and blade assemblage indicate a probable early Neolithic focus continuing into the later Neolithic (as evidenced by the discoidal cores) with some likelihood of residual Mesolithic material.

A small number of diagnostic tools was recovered from Ashford Orbital Park along with many less diagnostic examples and simple retouched flakes and blades. Tools consist of a finely made leaf-shaped arrowhead of Greens's 2C type (1980), ten scrapers (five end of flake, one end of blade, two side, one end and side and one other type), two simple knives, a notch, a denticulate, two microdenticulates, two awls, a single angled burin on a break and a fabricator.

Many of the tools could belong equally to the Mesolithic or early Neolithic. This includes the burin, an awl, the microdenticulates and many of the scrapers. However, the scrapers are more typical of the carefully made Neolithic forms on elongated flake or blade blanks rather than expedient end scrapers on preparatory flakes which typify Mesolithic assemblages. The knives and one very large awl on a regular flake with parallel blade scars would also be quite out of place in Mesolithic assemblages. The leaf-shaped arrowhead would appear to be unequivocally early Neolithic in date and the knives, and, while simple, are more complex than Mesolithic examples.

Less formal tools include seven retouched flakes, three retouched blades and a flake with miscellaneous retouch. Such tools are commonly found in Neolithic assemblages. Overall, the sizeable range of tools, the choice of tool blanks and the diagnostic elements of this tool



assemblage could all be readily accommodated in an early Neolithic assemblage. Alternatively some of the pieces could belong to the late Mesolithic and/or later Neolithic periods; particularly the awls and some of the scrapers.

The retouched pieces accounted for 8.93% of the assemblage (not counting chips), which is relatively high and may indicate that the much of the initial working of flint took place away from site and that tool use/repair and knapping from prepared cores occurred here. Many of the pieces were recovered from later features and it is possible that the more obvious examples such as tools and cores were spotted more readily than small flakes. The two main candidates for contexts contemporary with the knapping episode(s), 1349 and 1607, produced far lower incidences of retouch (2.63% and 2.98% respectively) and no formal tool types, though several classic cores and tools were found within the main focus of the flint scatter and some may have been initially recovered as scatter flints from the surface of contexts 1349 and 1607.

South-western area

Thirty-two flints were recovered from 23 contexts. Most contexts produced only a single piece, which were mainly found as residual material in much later features, primarily Iron Age in date. One pit (2658) produced a small assemblage of four pieces which have technological characteristics similar to the main assemblage from the northern area of the site and may date to the Neolithic. Overall, the flints from the south-western area appeared to show a greater range of surface conditions and degree of patination than from the northern area and also appeared to have more variety in the quality and colouration of the raw material chosen (Table 5).

Table 5: Comparison of flint between areas of the site

Condition	South-western area Total	%	Northern area Total	%
Fresh	6	18.75%	145	36.25%
Light	14	43.75%	178	44.50%
Moderate	10	31.25%	53	13.25%
Heavy	0		11	2.75%
Unclassified	2	6.25%	13	3.25%
Total	32		400	

The assemblage from the south-western area is too small to merit detailed discussion here. However, the flakes appear to display a range of colours, surface conditions and forms to suggest a mixture of Neolithic material alongside later prehistoric flint knapping. One patinated and edge damaged retouched flake may be early in date as it is in a similar condition to the potential long blade described above.

B.5 Metalwork

Ian Scott



The assemblage includes five finds from post-medieval contexts: three horseshoes (two from contexts 1042, one from 1503), a length of bar (context 1042) curved with slightly hooked ends which might have been a handle, and a large figure-of-eight-shaped link (context 1505). The other three finds comprise a small fragment of iron bar (context 1211) from a ditch (group 1823, cut 1210) dated to the middle to late Iron Age (Phase B), a dense block of iron (context 1216) from a late Iron Age ditch (group 1574, cut 1217; Phase D), and a copper alloy bracelet (sf 2000) from pit 2251 (context 2254) dated to the middle Iron Age.



APPENDIX C. ASSESSMENT OF ENVIRONMENTAL EVIDENCE

C.1 Animal bone

Lena Strid

The animal bone assemblage consisted of 209 re-fitted fragments, a full record of which can be found with the site archive. All the animal bone was recovered through hand collection during excavation; sieved soil samples did not contain identifiable bone and the hand-collected bone was in fairly poor condition. This means that smaller fragments and bones from small animals are likely to be under-represented.

The majority of the contexts containing animal bones have been dated to the middle to late Iron Age and it is likely that contexts so far unphased also date to this period.

Bones were identified using a comparative reference collection, as well as osteological books and articles. An attempt was made to distinguish bones from sheep and goat using published criteria (Boessneck *et al.* 1964; Prummel and Frisch 1986), but no speciable elements proved to be present. Ribs and vertebrae were classified by size: 'large mammal' representing cattle, horse and deer, and 'medium mammal' representing sheep/goat, pig and large dog. All bones were counted, weighed and zoned using Serjeantson (1996) and Worley (forthcoming).

Mandibular third molars were used to estimate age at death following Grant (1982), with ages assigned using Halstead (1985) and Payne (1973). Age estimation based on the state of epiphyseal fusion followed Habermehl (1975). No measurable or sexable bones were present.

Most bones were in a fairly poor condition (Table 6). Traces of animal gnawing were absent, probably in part attributable to the generally poor bone preservation. Three bone fragments were burnt.

Table 6: Preservation level for animal bones from Orbital Park, grade 0 equating to very well preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable.

No. fragments	0	1	2	3	4	5
209	-	7.7%	23.0%	45.5%	23.9%	-

Almost all the bone fragments came from ditch fills, which may account for the smaller number of bones from sheep/goat and medium sized mammals. At Iron Age and Roman-period sites in Hampshire, it was found that cattle tend to be over-represented within ditch fills, while sheep/goat bones tend to dominate within pit fills, and it seems likely that this relates to deliberate disposal strategies (Maltby 1994, 88). This pattern may also be true in Kent, although this proposition is untested.

Table 7: Species and skeletal element distribution

	Cattle	Sheep/ goat	Horse	Roe deer	Medium mammal	Large mammal	Unident.
Horn core							
Skull	1						
Mandible		1					



Loose teeth	11	10	4			1	2
Axis							
Vertebra					1	2	
Rib						1	
Humerus						1	
Scapula						1	
Metacarpal	1						
Pelvis							
Femur	4						
Tibia	1	2				1	1
Astragalus	1						
Tarsals	1						
Metatarsal	1			1			
Lateral metatarsal							
Phalanx 2							
Sesamoid							
Long bone					13	22	
Unidentifiable						15	108
TOTAL	22	13	4	1	14	44	111
Weight (g)	274	24	96	11	23	41	163

Of the 209 re-fitted fragments, only 40 (19.1%) fragments were identified more closely than large or medium sized mammal (Table 7). The species present included cattle (*Bos taurus*), sheep/goat (*Ovis aries/Capra hircus*), horse (*Equus caballus*) and roe deer (*Capreolus capreolus*). Of those bones and teeth from cattle and sheep/goat which could be aged, all came from sub-adult and adult animals. Cut marks were present on one cattle tarsal bone and were indicative of skinning or disarticulation of the lower leg. A tibia from a large mammal (probably cattle) had been chopped through mid-shaft, either for marrow extraction or portioning. One cattle metatarsal displayed minor exostoses at the proximal end and had parts of a tarsal bones fused to the proximal articulation. This may be a sign of the initial stages of degenerative joint disease or of an infection. More severe examples of such pathologies are often interpreted as associated with the use of cattle for traction (Bartosiewicz *et al.* 1997).

C.2 Charred plant remains, including charcoal

John Giorgi

Introduction

During excavations at Orbital Park, environmental bulk soil samples were systematically collected across the site for the potential recovery of biological materials, including macro-plant remains. The following report is concerned with the assessment of charred plant material from the site, which may provide information on crop-husbandry and processing, the function of the sampled features and thus the spatial distribution of different activities across the settlement. The samples were also assessed for the presence of identifiable charcoal fragments for potential information on woodland resources and management and fuel selection for domestic, economic and ritual use.



A total of 67 environmental samples were selected for assessment. The samples were collected from a range of feature types, with 30 samples being from ditch fills. The other sampled fills were from post-holes (eight samples), pits (seven samples), charcoal-rich deposits (six samples), gullies (six samples, two of which were from the ring gully 1627), hollows/channels (four samples), possible hearths (three samples), pots (two samples) and a possible palaeo-channel (one sample).

Virtually all (62 of the 67) the samples were from contexts dating from the mid to late Iron Age, with four samples provisionally dated to the Neolithic period and one sample associated with medieval/post-medieval activity on the site. The volume of the soil samples ranged from under one to 40 litres, although most were at the upper end of this scale, with just over 70% being 30 litres or more. The samples were processed using a Siraf-style type flotation tank with mesh sizes of 0.25 mm and 0.5 mm for the recovery of the flot and residue respectively.

The residues were dried and sorted for biological remains and other archaeological material. The flots were also dried and measured, ranging in volume size from under 1 ml to 550 ml; the majority were small, however, with only ten flots being greater than 100 ml and 52 being 50 ml or less. The flots were divided into fractions using a stack of sieves for ease of assessment and scanned using a stereo-binocular microscope, with a magnification of up to x40.

The presence and relative abundance of charred grain, cereal chaff and other remains (potential food remains and wild plants/weed seeds) were recorded, along with the frequency of charcoal fragments larger and smaller than 2 mm, the larger pieces being potentially identifiable and thus suitable for analysis. Other biological remains in the flots were also recorded, which included uncharred plant material, bones, molluscs and insect remains.

The item frequency of the charred plant and other environmental remains was scored using the following scale: + = <5 items; ++ = 5-25 items; +++ = 26-100 items; ++++ = 101-300 items; ++++ = >300 items. Recommendations for analysis was based on the size of the individual charred plant assemblages in terms of the number of identifiable items, with the following codes being used to define their potential: A = rich charred plant assemblages (containing more than 300 identifiable items); B = good assemblages (between 100 and 300 identifiable items); C = moderately good remains (between 50 and 100 identifiable items); D = poor assemblages containing less than 50 and usually less than ten items); and F (unproductive flots with no identifiable charred plant remains). Provisional identification of the charred botanical remains was carried out during assessment although without direct comparison to reference material and seed reference manuals. Nomenclature used for these identifications followed Stace (2005).

Charcoal fragments (greater than 2 mm) showing the transverse section were provisionally identified (using a magnification of up to x40) although this was based only on material with existing breaks which greatly restricted the number of fragments available for examination. At the analysis stage the radial and tangential sections will also be examined.

There follows a general discussion of the results and then a breakdown by period, followed by an assessment of potential and recommendations for further analysis, based on the quantity and quality of the individual charred plant assemblages.

Results

The flot assessment results are listed by sample number in Table 8. This table shows the frequency of the different biological remains in the individual flots and comments on each assemblage, including provisional identifications of any botanical materials.



Identifiable charred plant remains were present in only 20 flots, all from mid to late Iron Age contexts and from the following range of feature types: ditch fills (seven samples), charcoal-rich deposits and (ring) gully fills (four samples each), pit fills (two samples), and individual samples from post-pipe, hollow/hearth and hollow/channel fills. Just three samples produced good sized (B) assemblages, the other 17 flots only containing occasional or small amounts (D) of identifiable remains. Moreover, the preservation of the material was generally poor with limited species diversity represented by the remains. The small charred plant assemblages were completely or partially sorted during assessment. Forty-seven flots produced no identifiable charred botanical material.

Charred cereal grains were present in 18 samples although most of the grains were poorly preserved and not identifiable to genus or species, identifiable grain being noted in 15 flots. Only two samples produced moderately large grain assemblages, with several hundred grains in hollow/hearth 1670 (fill 1771, sample 22) and up to a hundred grains in ditch 2104 (fill 2103, sample 2001). The other 16 samples contained occasional (fewer than five) or very small numbers (between five and 25) of grains in 11 and five flots respectively.

Triticum sp. (wheat), including *Triticum dicoccum/spelta* (emmer/spelt), was the most frequent grain, being identified in nine samples, and the best represented cereal in the two richest assemblages. *Hordeum vulgare* (barley) was not as common and was recorded in four samples. A few *Avena* sp. (oat) grains were noted in several samples, although it was not possible at this stage to establish whether these were from cultivated and/or wild species.

Charred cereal chaff was present in just two flots, with a moderately rich assemblage in sample 2001 from ditch 2104 (fill 2103), most of the chaff in this sample consisting of frequent oat awn fragments. A few chaff fragments, including a *Triticum spelta* (spelt wheat) glume base, were recorded in pit 1079 (fill 1080, sample 3), a charcoal-rich feature initially regarded as a cremation burial.

Other identifiable charred plant material, consisting largely of wild plant/weed seed remains, was present in 11 flots; only sample 2005 from ditch 2416 (fill 2341), however, produced a large seed assemblage, consisting virtually entirely of several hundred *Rumex* sp. (dock) seeds but few other identifiable remains. The other ten flots contained only occasional or very small numbers of wild plant/weed seeds, with limited species diversity. In addition to *Rumex* sp., the most frequent remains appear to be indeterminate Fabaceae (leguminous) seeds, several of which were identified as *Lathyrus/Vicia/Pisum* sp. (vetch/tare/vetchling/pea) and which may possibly include cultivated species, and small and large Poaceae (grass) seeds including *Bromus* sp. (bromes). There were also a few *Corylus avellana* (hazel nut) shell fragments in two flots, which may represent the burnt by-products of gathered and consumed wild plant food.

Potentially identifiable charcoal fragments (greater than 2 mm) were present in 60 or almost 90% of the samples, with moderately or large amounts in 24 samples from a range of the sampled features, including gullies, ditches, pits and post-hole fills and a possible hearth deposit. Scanning of a small number of the larger charcoal fragments showed the tentative presence of *Quercus* sp. (oak) and Pomoideae (hawthorn, apple, pear etc.) on the site.

Uncharred plant remains, consisting virtually entirely of seeds and fruits, were present in 57 or 85% of the flots, with these remains being mainly from disturbed/waste ground environments; the most common species were *Atriplex/Chenopodium* spp. (oraches/goosefoots) etc., *Polygonum aviculare* (knotgrasses), *Carduus/Cirsium* spp. (thistles), *Ranunculus* sp. (buttercups), *Rubus* sp. (brambles), Fabaceae (leguminous plants) and *Betula* sp (birch). These assemblages, however, were small, 40 of the 57 flots producing less than five uncharred seeds, 16 containing between just five and 25 seeds, and only one sample having more than 25 seeds. The low seed numbers and the absence of other organic remains, together with the presence of



large amounts of roots/rootlets in these samples, suggest that these remains are probably intrusive.

Other biological materials included a few very small indeterminate bone fragments (some of which were burnt) in eight samples, from ditch and pit fills. There were also occasional insect (including beetle) remains in 13 flots although this material is probably intrusive.

Discussion by period

The results were limited in terms of the quantity and quality of the charred plant remains, although an examination of the spatial distribution of the remains (including the charcoal) may provide information on potential areas of activity and settlement.

Just four samples were provisionally dated to the Neolithic period, two samples from hollow/channel fills 1349 (sample 14) and 1607 (sample 15) in the north-east area of the site, and two pit fills 2658 (sample 2006) and 2673 (sample 2013), in close proximity to one another, in the central western area of excavation. None of these samples produced any identifiable remains with fairly small flots (under 40 ml), consisting mainly of roots and (fine) sediment crumb together with a little fragmented charcoal including a few potentially identifiable fragments.

Sixty-two of the 67 samples were from mid to late Iron Age features, including all 20 flots with identifiable charred plant remains, although most of these assemblages only contained small amounts of material.

The spatial distribution of the charred plant remains, along with the ten largest charcoal assemblages (measuring in excess of 100 ml) show their distribution over a wide area of the site, with no obvious concentration of material within any one particular area. The three richest botanical assemblages were all located in separate areas of the site: in the central eastern area, ditch 2416 (fill 2431 sample 2005) contained several hundred *Rumex* seeds, occasional indeterminate cereal grain and *Corylus avellana* shell; in the south-western corner of the site, ditch 2104 (fill 2103, sample 2001) contained up to 100 grains, a large amount of oat awn fragments and traces of wheat chaff; and, in the north-western periphery of the excavated area, the hollow/hearth 1670 (fill 1771, sample 22) contained several hundred poorly preserved grains and a few weed seeds. All three rich charred plant assemblages also contained good charcoal assemblages (over 100 ml).

The remaining 17 small charred plant assemblages were distributed over the following different areas of the site: in the north-eastern area, channel/hollow fill 1607 (sample 35) and ditch fills 1835 (sample 39) and 1850 (sample 40) contained a few charred grains; in the south-eastern quadrant of the site (the same area as rich sample 2005), charcoal-rich deposits 1076 (sample 2), 1080 (sample 3), 1082 (sample 4), 1094 (sample 6), pit fill 1091 (sample 5) and ditch fill 2250 (sample 2003), had occasional or very small numbers of grain, with several also producing a few weed seeds and one with occasional chaff fragments. Three of the charcoal-rich samples and the ditch fill from this area also contained large amounts of charcoal with *Quercus* and Pomoideae being provisionally identified in some of the charcoal-rich deposits. On the southern fringes of the excavation, two small assemblages were found in ditch fill 2229 (sample 2007) (occasional grain and weed seeds) and post-pipe fill 2424 (sample 2019) (a few weed seeds, *Corylus avellana* shell and a large amount of charcoal including Pomoideae), while post-pipe fill 2422 (sample 2018) in the same area also contained a relatively large quantity of charcoal. In the western area of the site, ditch fill 2597 (sample 2026) towards the south-west (and in the same area as rich grain sample 2001) contained occasional grains, while towards the north-west, two samples from the ring gully, fills 1321 (sample 42) and 1033 (sample 1) had



small numbers of cereal grain (and *Quercus* charcoal in sample 42). Sample 30 from gully fill 1134 also produced a few grains and *Quercus* charcoal. Finally, in the northern half of the site, pit fill 1305 (sample 12) contained a few weed seeds and a large amount of charcoal (including *Quercus*) while gully fill 2364 (sample 2004) produced occasional grains and charcoal including Pomoideae.

One sample was assessed from the fill (2640) of medieval/post-medieval ditch 2638 (sample 2011), although no charred plant remains or identifiable charcoal fragments were present in this sample, with the flot consisting virtually entirely of fine sediment crumb.



Table 8. Charred plant remains. Key: Phase ?NEO = ?Neolithic; ?M/LIA = unphased but probably Middle to Late Iron Age; M/LIA = Middle/Late Iron Age; LIA= Late Iron Age; M/PM = medieval/post-medieval. Frequency of items: + = <5; ++ = 5-25; +++ = 26-100; ++++ = 101-300; +++++ =>300 items. CPR pot (potential of charred plant assemblages): A = rich (more than 300 identifiable items); B = good (100 to 300 identifiable items); C = moderate (50 to 100 identifiable items); D = poor (fewer than 50, usually fewer than 10 items); F (no identifiable charred plant remains). CPR (charred plant remains); Chd (charred); unchd (uncharred)

sample	context	dating	feature type	group	proc. soil vol (l)	flot vol (ml)	charcoal >/<2mm	chd grain	chd chaff	chd other	unchd seeds	bone	insect	CPR pot	comments
1	1033	LIA	Ring gully [1034] fill	1627	11	32	++++/+++++	+			+			D	OCC CPR (<i>Triticum cf dicoccum/spelta</i> (1), <i>Triticum</i> sp (3) (sorted); mix of charcoal (mod nos id'ble fragments), roots & fine sediment crumb; uncharred seeds (<i>Carduus/Cirsium</i> sp., <i>Atriplex</i> sp., <i>Rubus</i> sp.)
2	1076	?M/LIA	Charcoal -rich [1075] fill		30	120	+++++/+++++	++		+	+	+		D	OCC CPR (c 20 grains (est) (part sorted) poorly preserved & few id'ble - <i>Triticum dicoccum/spelta</i> , <i>Triticum</i> spp., indet grains; <i>Vicia/Lathyrus/Pisum</i> sp., Poaceae (cf <i>Bromus</i> sp.); mainly charcoal (>nos id'ble fragments, cf. Pomoideae); some roots & sediment crumb; small indet bone frag; uncharred seeds (<i>Rubus</i> sp., <i>Atriplex</i> sp.)
3	1080	?M/LIA	Charcoal -rich [1079] fill		38	150	+++++/+++++	+	+	+	+	+	+	D	OCC CPR (1-2 grains <i>Triticum</i> sp., one <i>Triticum spelta</i> glume base & <i>Rumex</i> sp seed (sorted)); mainly charcoal (>nos id'ble fragments, cf. Pomoideae); v small indet burnt bone fragments; fine sediment crumb; uncharred seeds (<i>Ranunculus</i> sp., <i>Polygonum aviculare</i> , Fabaceae)
4	1082	?M/LIA	Charcoal -rich [1081] fill		3	16	++++/+++++	+			+			D	OCC CPR (<i>Triticum</i> sp grain (1) (sorted)); mainly charcoal (mod to large nos of id'ble fragments); sediment crumb; uncharred seeds (<i>Taraxacum</i> sp.)
5	1091	?M/LIA	Pit fill		9.5	72	++++/+++++	+		+	+			D	OCC CPR (poorly preserved indet grain (3), Poaceae indet (1) (sorted)); mainly charcoal (large nos id'ble fragments); uncharred seeds (<i>Ranunculus</i> sp.)
6	1094	?M/LIA	Charcoal -rich [1093] fill		16	450	+++++/+++++	++		+		+		D	OCC CPR (traces of c 5 grains <i>Triticum dicoccum/spelta</i> (2 sorted), indet and frags & small indet rounded leguminous seeds); virtually all charcoal (>nos id'ble fragments, cf. <i>Quercus</i> sp.); v small indet burnt bone fragments
9	1213	?M/LIA	Charcoal -rich [1212] fill		30	44	+++ /++++				++			F	NO CPR; mod amount charcoal (large nos id'ble fragments); mainly roots; some sediment crumb; uncharred seeds (<i>Rubus</i> sp., <i>Ranunculus</i> sp., moss)
10	1277	?M/LIA	?Hearth		20	15	+ /++++				+		+	F	NO CPR; little charcoal (v occ id'ble fragments); virtually all



			[1276] fill												roots; uncharred seeds (Fabaceae)				
11	1278	?M/LIA	?Hearth [1276] fill		28	10	+ /++++							+	+	F	NO CPR; little charcoal (1-2 id'ble fragments); mix of mainly roots & fine sediment crumb; uncharred seeds (<i>Polygonum aviculare</i> , <i>Sonchus</i> sp.)		
12	1305	?M/LIA	Pit [1303] fill		39	550	+++++/+++++							++	++		D	OCC CPR (v occ small rounded legume seeds); virtually all charcoal (> nos id'ble fragments, cf. <i>Quercus</i> sp.); uncharred seeds (<i>Rubus</i> sp., <i>Polygonum aviculare</i> , <i>Sonchus</i> sp.)	
13	1308	?M/LIA	Post-hole [1307] fill		2	1	+ /++								+		F	NO CPR; v little; traces of charcoal (1-2 id'ble fragments); virtually all roots; uncharred seeds (<i>Betula</i> sp.)	
14	1349	?NEO	Feature/channel [1350] fill	1857	40	38	+++ /+++								+		F	NO CPR; little fragmented charcoal (occ id'ble fragments); virtually all roots/rootlets; uncharred seeds (<i>Atriplex</i> sp., <i>Sambucus</i> sp., <i>Betula</i> sp.)	
15	1607	?NEO	Hollow/channel [1606] fill		40	17	++ /+++								+		F	NO CPR; little fragmented charcoal (v occ id'ble fragments); mainly roots & sediment crumb; uncharred seeds (<i>Sambucus</i> sp., <i>Ranunculus</i> sp., Fabaceae)	
16	1544	?M/LIA	Pit [1542] fill		36	15	+ /+++								+		F	NO CPR; v little charcoal (1-2 id'ble fragments); virtually all roots; uncharred seeds (<i>Fallopia convolvulus</i> , <i>Sambucus</i> sp., Fabaceae)	
20	1719	?M/LIA	Pit/hollow [1718] fill		40	40	+++++ /+++++								+	+	+	F	NO CPR; mix of charcoal (mod nos id'ble frags, cf. Pomoideae), roots & sediment crumb; occ indet burnt bone frags & beetles; uncharred seeds (<i>Rubus</i> sp.)
21	1723	?M/LIA	Pit/hollow [1722] fill		34	15	+ /+++											F	NO CPR; little fragmented charcoal (v occ id'ble fragments); virtually all roots; sediment crumb
22	1771	?M/LIA	Hollow/hearth [1670] fill	1229	40	200	+++++ /+++++	++++						+	++		B	GOOD CPR (>nos grains but mainly poorly preserved & fragmentary – <i>Triticum dicoccum/spelta</i> , <i>Triticum</i> sp., <i>Hordeum</i> sp. c 200-300 grains; occ small Poaceae & Fabaceae seeds); mostly <i>Triticum (dicoccum/spelta)</i> > charcoal (>nos id'ble fragments); fine sediment crumb; uncharred seeds (<i>Atriplex</i> sp., <i>Chenopodium</i> sp., Fabaceae)	
23	1785	?M/LIA	?Post-pipe fill in post-hole [1345]		2	1	+ /+++								+		+	F	NO CPR; v little; mix of v fragmented charcoal (1-2 id'ble frags), roots & sediment crumb; uncharred seeds (<i>Polygonum aviculare</i>)
24	1784	?M/LIA	Post-pipe fill		2	2	++ /+++											F	NO CPR; little charcoal (occ id'ble fragments) & fine sediment crumb



			in post- [1333]													
25	1769	?M/LIA	Ditch [1792] primary fill	1824	32	8	+++/++++						+	F	NO CPR; some charcoal (occ id'ble fragments); mainly fine sediment crumb	
26	1770	LIA	Ditch [1671] fill	1229	36	8	++/+++++						+	F	NO CPR; mix of v fragmented charcoal (v occ id'ble frags), fine sediment crumb & roots; uncharred seeds (<i>Sonchus</i> sp.)	
27	1408	?M/LIA	Ditch [1407] fill	1842	40	28	-/+++						++	F	NO CPR; v little v fragmented charcoal (no id'ble fragments); uncharred seeds (<i>Carduus/Cirsium</i> sp., <i>Sonchus</i> sp., Fabaceae); virtually all roots	
28	1775	M/LIA	Ditch [1773] primary fill	1823	36	15	++/+++++							F	NO CPR; some charcoal (occ id'ble fragments); mainly roots & sediment crumb	
29	1130	LIA	Gully [1129] terminus fill		36	30	+/++++						+	+	F	NO CPR; little fragmented charcoal (occ id'ble fragment); virtually all roots & some sediment crumb; uncharred seeds (<i>Rubus</i> sp.)
30	1134	LIA	Gully [1121] fill	1574	40	38	+++/+++++	+					+	+	D	OCC CPR (cf. <i>Hordeum</i> sp. (1) (sorted) & indet grain fragments; fragmented charcoal (mod nos id'ble fragments, cf. <i>Quercus</i> sp.) & roots; uncharred seeds (<i>Rubus</i> sp.)
31	1337	LIA	Ditch [1336] fill	2726	23	8	++/+++						++	F	NO CPR; some charcoal (occ id'ble frags); mainly roots; uncharred seeds (<i>Viola</i> sp., <i>Carduus/Cirsium</i> sp., <i>Chenopodium</i> sp.)	
32	1741	?M/LIA	Ditch [1740] fill		40	58	+++/+++++						+	++	F	NO CPR; some charcoal (mod nos id'ble frags); mainly roots; some fine sediment crumb; small indet bone frags; uncharred seeds (<i>Sambucus</i> sp., Fabaceae)
33	1451	?M/LIA	Ditch [1440] fill		40	20	-/+++						++	F	NO CPR; traces of charcoal (no id'ble frags); virtually all roots; some fine sediment crumb; uncharred seeds (<i>Rubus</i> sp.++)	
34	1452	?M/LIA	Channel [1817] fill		36	15	-/+++						++	F	NO CPR; traces of charcoal (no id'ble frags); virtually all roots & fine sediment crumb; uncharred seeds (<i>Rubus</i> sp.++, <i>Chenopodium</i> sp.)	
35	1607	?M/LIA	Channel/ hollow [1606] fill		34	18	++/++++	+					+	+	D	OCC CPR (one <i>Hordeum/Triticum</i> sp. grain sorted); some fragmented charcoal (occ id'ble fragments); >roots & sediment crumb; uncharred seeds (Fabaceae)
38	1837	?M/LIA	?Palaeo-		40	18	++/++++						++	F	NO CPR; v fragmented charcoal (occ id'ble fragments) &	



			channel [1838] fill												>roots & sediment crumb; uncharred seeds (<i>Betula</i> sp., <i>Fallopia convolvulus</i> , <i>Carduus/Cirsium</i> sp., <i>Rubus</i> sp.)
39	1835	?M/LIA	Ditch [1836] fill	1856	40	50	+ /++++	+			+			D	OCC CPR (one cf <i>Triticum dicoccum</i> grain sorted, indet); some charcoal (v occ id'ble fragments); virtually all roots; uncharred seeds (<i>Atriplex</i> sp.)
40	1850	?M/LIA	Ditch [1851] fill	1856	40	15	++ /++++	+			++		+	D	OCC CPR (2 poss sorted cereal grains indet one possibly <i>Hordeum</i> sp.); charcoal (occ id'ble frags); virtually all roots; uncharred seeds (<i>Rubus</i> sp.++, <i>Chenopodium</i> sp., <i>Ranunculus</i> sp.)
41	1853	LIA	Ditch [1855] fill	1857	40	24	++ /+++				++			F	NO CPR; some fragmented charcoal (occ id'ble fragments); virtually all roots & > sediment crumb; uncharred seeds (<i>Rubus</i> sp.++, <i>Atriplex/Chenopodium</i> sp., <i>Betula</i> sp.)
42	1321	?M/LIA	Ring gully [1320] fill	1627	32	68	++++ /+++++	++			+			D	OCC CPR (poorly preserved grain – cf <i>Hordeum</i> sp., <i>Triticum</i> sp., indet (c 10 grains sorted); mod amount charcoal (large amount id'ble fragments cf. <i>Quercus</i> sp.); large amount of roots & sediment crumb; uncharred seeds (<i>Ranunculus</i> sp., Fabaceae)
43	1858	?M/LIA	Pot [1860] fill		0.5	<1	+ /++							F	NO CPR; virtually nothing; fine sediment crumb & traces of v fragmented charcoal (one pot id'ble fragment)
44	1859	?M/LIA	Pot fill		1	<1	- /++++				+			F	NO CPR; traces of charcoal (no id'ble fragments); very little except fine sediment crumb; uncharred seeds (<i>Atriplex/Chenopodium</i> sp.)
2000	2076	?M/LIA	Charcoal -rich [2075] fill		3	3	++ /++++						++	F	NO CPR; very fragmented charcoal (occ id'ble fragments); mainly roots plus fine sediment crumb
2001	2103	LIA	Ditch [2104] fill	1574	40	100	++++ /+++++	+++	++++	+	+			B	MOD GOOD CPR but v. fragmented/poorly preserved (c 50-100) grain with few id'ble to species (<i>Triticum dicoccum/spelta</i> , <i>T. aestivum/spelta</i> , <i>Triticum</i> sp., <i>Hordeum vulgare</i> , <i>Avena</i> sp., >indet grain & fragments), > <i>Avena</i> sp. awn fragments, occ <i>Triticum</i> sp. glume bases & occasional weeds (<i>Rumex</i> sp., indet Fabaceae (small); CPR part sorted; charcoal (>nos id'ble frags); virtually all roots
2002	2114	?M/LIA	Stake/po st fill in post- hole [2113]		2	4	+ /+++++							F	NO CPR; virtually all very fragmented (flecks) charcoal; v. occ potentially id'ble fragments.
2003	2250	LIA	Ditch [2248] fill	2697	29	130	++++ /+++++	++		+	++	+		D	OCC CPR; Mainly charcoal with >nos id'ble fragments; occ poorly preserved grain (c10-15) <i>Hordeum/Triticum</i> sp., cf



																Avena sp., indet grain & weed seeds (<i>Bromus</i> sp., <i>Rumex</i> sp., indet); uncharred seeds (<i>Ranunculus</i> sp., <i>Polygonum aviculare</i> , <i>Betula</i> sp.); occ indet burnt bone frags; fine sediment crumb
2004	2364	?M/LIA	Gully fill	2709	38	50	++++/+++++	+			++			D	OCC CPR (indet poorly preserved grain (4) (sorted) & v fragmented charcoal (mod nos id'ble frags); uncharred seeds (<i>Rubus</i> sp., <i>Carduus/Cirsium</i> sp., <i>Plantago lanceolata</i>); mainly roots	
2005	2431	LIA	Ditch [2416] fill	2699	34	150	++++/+++++	++		++++	++	+		B	MOD GOOD CPR but virtually all <i>Rumex</i> sp seeds (c 200); occ <i>Corylus avellana</i> shell frag & poorly preserved indet grain frags; mainly charcoal (>nos id'ble fragments) & sediment crumb; uncharred seeds (<i>Ranunculus</i> sp., Fabaceae); v small indet bone frags	
2006	2658	?NEO	Pit [2657] fill		30	13	+/+++						+	F	NO CPR; virtually all roots; little fragmented charcoal(occ id'ble frags); fine sediment crumb	
2007	2229	?M/LIA	Ditch [2224/2226] fill		40	43	+++/>+++	+		+	+			D	OCC CPR but poorly preserved (sorted) grain (cf <i>Hordeum</i> sp. (1), indet grain (1)) <i>Vicia/Lathyrus/Pisum</i> sp. (1); fragmented charcoal (mod nos id'ble fragments); uncharred seeds (<i>Polygonum aviculare</i> , <i>Ranunculus</i> sp., <i>Carduus/Cirsium</i> sp.); virtually all roots; v fine sediment crumb	
2008	2227	?M/LIA	Ditch [2226] fill	2633	40	14	++/++++							F	NO CPR; very fragmented charcoal (occ id'ble fragments); virtually all roots plus fine sediment crumb	
2009	2150	LIA	Ditch [2149] fill	2698	40	25	+++/>+++++				+			F	NO CPR; mainly roots & fragmented charcoal (mod nos id'ble fragments); fine sediment crumb; uncharred seeds (<i>Betula</i> sp., Fabaceae indet)	
2010	2228	LIA	Ditch [2043] fill	2696	40	25	++/+++				+			F	NO CPR; virtually all roots; small amount of v fragmented charcoal (occ id'ble); uncharred seeds (<i>Rubus</i> sp., <i>Chenopodium</i> sp., <i>Betula</i> sp.)	
2011	2640	M/PM	Ditch [2638] fill	2711	36	17	-/+++				+			F	NO CPR; virtually all fine sediment crumb; v frag charcoal (flecks); uncharred seeds (<i>Chenopodium</i> sp.)	
2012	2637	?M/LIA	Ditch [2635] fill	2738	40	2	+/+++				+			F	NO CPR & v little fragmented charcoal (flecks) (potentially 1-2 id'ble fragments); uncharred seeds (<i>Betula</i> sp.); mainly roots	
2013	2673	?NEO	Pit [2672] fill		40	35	++/++++				+			F	NO CPR; mainly roots & fine sediment crumb; some v fragmented charcoal (occ id'ble fragments)	
2014	2296	LIA	Ditch [2295] fill	2415	40	55	++/+++				+			F	NO CPR; v little charcoal (occ id'ble fragments); virtually all roots; some fine sediment crumb; uncharred seeds (<i>Ranunculus</i> sp.)	



2015	2137	?M/LIA	Ditch [2136] fill	2634	40	38	+ / ++							F	NO CPR; virtually all roots plus fine sediment crumb; v fragmented charcoal (one pot id'ble frag); uncharred seeds (<i>Polygonum aviculare</i> , <i>Fumaria</i> sp., <i>Sonchus</i> sp., <i>Chenopodium</i> sp., <i>Juncus</i> sp.)
2016	2386	?M/LIA	Ditch [2385] fill	2694	40	32	++ / +++						++	F	NO CPR; very fragmented charcoal (v occ id'ble fragments); virtually all roots plus fine sediment crumb
2017	2666	?M/LIA	Ditch [2665] fill	2713	40	45	+++ / ++++	+					+	F	NO CPR; Virtually all roots; v occ poorly preserved grain (3) & fragmented charcoal (mod nos id'ble frags); uncharred seeds (<i>Carduus/Cirsium</i> sp., <i>Polygonum aviculare</i>); fine sediment crumb
2018	2422	?M/LIA	Post pipe fill in post-hole [2421]		12	130	+++++ / +++++							F	NO CPR; virtually all charcoal (>nos id'ble frags)
2019	2424	?M/LIA	Post pipe fill in post-hole [2423]	2222	15	300	+++++ / +++++		+	+				D	OCC CPR (one <i>Rumex</i> sp seed, one <i>Corylus avellana</i> shell fragment); V RICH charcoal samples (virtually all charcoal with >nos id'ble fragments. cf. <i>Quercus</i> sp.); uncharred seeds (<i>Betula</i> sp.); some sediment crumb & fine rootlets; 50% flot <1mm scanned
2020	2425	?M/LIA	Post packing in [2423]		13	34	++ / +++++							F	NO CPR; mainly roots; v fragmented charcoal (occ id'ble fragments > flecks); uncharred seeds (<i>Alnus</i> sp., <i>Polygonum aviculare</i> , <i>Carduus/Cirsium</i> sp.); fine sediment crumb
2021	2449	?M/LIA	Post packing in [2421]		10	18	+++ / +++++							F	NO CPR; mainly fragmented charcoal (mod nos id'ble frags) & sediment crumb; uncharred seeds (<i>Betula</i> sp., <i>Polygonum aviculare</i>)
2022	2207	LIA	Gully [2206] fill	2269	40	20	+ / +++							F	NO CPR virtually all roots; v little fragmented charcoal (occ id'ble frag); uncharred seeds (<i>Plantago</i> sp., <i>Torilis</i> sp., <i>Sonchus</i> sp.)
2023	2309	?M/LIA	Linear ditch [2312] fill		40	32	- / +++							F	NO CPR; virtually all roots; little v fragmented charcoal (flecks) & fine sediment crumb; uncharred seeds (<i>Ranunculus</i> sp., <i>Polygonum aviculare</i> , <i>Carduus/Cirsium</i> sp., <i>Atriplex</i> sp.)
2024	2644	LIA	Ditch [2643] fill	1571	40	20	+ / +++							F	NO CPR; virtually all roots; traces v fragmented charcoal (v occ id'ble frags); mod nos uncharred seeds (> <i>Sonchus</i> sp., <i>Chenopodium/Atriplex</i> sp., <i>Torilis</i> sp., <i>Taraxacum officinalis</i> , <i>Ranunculus</i> sp., <i>Carduus/Cirsium</i> sp.); fine sediment crumb
2025	2594	LIA	Ditch [2593] fill	1574	40	30	- / +++							F	NO CPR; virtually all roots; little v fragmented charcoal & fine sediment crumb; uncharred seeds (<i>Ranunculus</i> sp.,



																		<i>Polygonum aviculare</i>)	
2026	2597	?M/LIA	Ditch [2596] fill	2710	38	60	+ / ++	+				+						D	OCC CPR; one charred <i>Hordeum/Triticum</i> sp grain; traces of charcoal (v occ id'ble fragment); virtually all roots; uncharred seeds (<i>Polygonum aviculare</i>)
2027	2663	M/LIA	Ditch [2664] fill	2705	36	30	++ / ++++					+						F	NO CPR; mainly roots & sediment crumb; some v fragmented charcoal (occ id'ble fragments); uncharred seeds (<i>Rubus</i> sp., <i>Ranunculus</i> sp., <i>Sonchus</i> sp.)
2028	2612	LIA	Ditch [2611] fill	2709	40	38	++ / +++					+						F	NO CPR; mainly roots & fine sediment crumb; some very fragmented charcoal (occ id'ble fragments); uncharred seeds (<i>Ranunculus</i> sp., <i>Sonchus</i> sp.)
2029	2348	?M/LIA	Ditch [2347] fill	2367	?	15	+++ / ++++					+						F	NO CPR; mainly roots & fine sediment crumb; little v fragmented charcoal (mod nos id'ble fragments)



C.3 Environmental monoliths

Carl Champness

Introduction

Four monolith samples (forming two sequences) were taken through two Iron Age ditches for further sedimentary and environmental assessment. The sequences were recorded and assessed to interpret the nature of the feature fills. The main objective of the assessment was to determine whether the ditch fills were laid down in a water-logged environment and whether any periods of stabilisation or drier episodes were represented in these sequences.

The samples were examined and recorded as part of the assessment. The monoliths were taken from ditch 1350 (sample 36) and part of the enclosure ditch 1454 (samples 17-19).

Each of the monoliths were examined, photographed and logged in detailed. The sediments were recorded according to Jones *et al.* (1999) to include information about depth, texture, composition, colour, clast orientation, structure, and contacts between deposits. Note was also made of any visible ecofactual, or artefactual inclusions, eg pottery, daub or charcoal fragments.

Results

The samples are discussed in terms of the interpretation of feature fills and the sedimentary environments in which they represent. Particular mention is given to the presence of artefacts and environmental remains that can help with the wider interpretation of activity at the site.

Ditch 1350 (sample 36)

A monolith was taken through a possible mid-late Iron Age ditch that was identified near to a focus of Neolithic activity at the site. The ditch was located towards the north eastern edge of the site, an area of slightly higher ground just off the floodplain.

The primary fill of the feature was a firm light greenish yellow clay silt/sand (1383?) with frequent manganese staining and signs of oxidation. This deposit contained occasional sub-angular small pebbles that might indicate in-washed of material from the surrounding soils. The deposit appears to represent the erosion and stabilisation of the ditch profile, most likely accumulating during the initial years following its creation. This was overlain by light yellowish brown fine sandy silt (1349) with occasion small pebbles and frequent manganese staining. This deposit was recorded as dipping horizontally within the monolith and may represent the in-wash of the surrounding soils into the edges of the feature. The ditch was finally in-filled with a firm mid greyish brown slightly sandy silt (1382) with frequent signs of rooting and biological reworking.

The environmental potential of the feature fill is considered to be low, as signs of seasonal fluctuating water-levels and oxidation are not generally good environments for preservation. The absence of water-logging or the preservation of shells within the sequence may also further limit its potential.

Enclosure ditch 1454, group 1229 (Samples 17, 18 and 19)



A series of three monolith samples were taken through intervention 1454 of late Iron Age ditch 1229. The monolith sampled the secondary re-cut of the ditch that had previously silted up over time and was then re-dug. This enclosure ditch was located on the very edge of the floodplain near to the main focus of activity identified on the site.

The basal fill (1455) was recorded as firm yellowish brown silty clay with manganese staining and signs of oxidation, possibly representing a mixture of edge erosion and sediment in-wash. This deposit accumulated within a predominantly dry environment and was overlain by a thick deposit of soft dark bluish structureless silty clay (1456), which represented over-bank alluviation or ground-water flooding within a permanently waterlogged feature. A second similar gleyed deposit of low-energy grey silty clay (1457) accumulated above and appeared to represent a similar waterlogged environment, possibly of different water depth. The upper two fills (1458 and 1497) of the ditch exhibit increasing signs of oxidation and may indicate a slightly drier ditch environment, possibly relating to more recent drainage of the area. Some of these signs of drying out may represent post-depositional changes in the deposit due to the effects of rooting and oxidation caused by later vegetation.

Interpretation

The small number of sampled sequences from the excavation reveal a site that may have been initially dry, with areas closest to the floodplain becoming increasingly prone to water-logging and flooding. The low-energy, gleyed and structureless nature of the enclosure ditch fills (1456 and 1457) suggests an area of the site that was permanently wet and was supporting a good depth of water in the enclosure ditch, which may never have fully dried out during the summer months. Only away from the floodplain edge in areas like ditch 1350 were conditions dry enough to be utilised all year round.

The nature of the enclosure ditch fill and the dense network of ditches across the site suggests that increasing water-levels and flooding were growing problems, possibly in the late Iron Age. The increasing in water-levels on the site may have been a response to increased run-off and alluvial sedimentation caused by widespread Iron Age woodland clearance.



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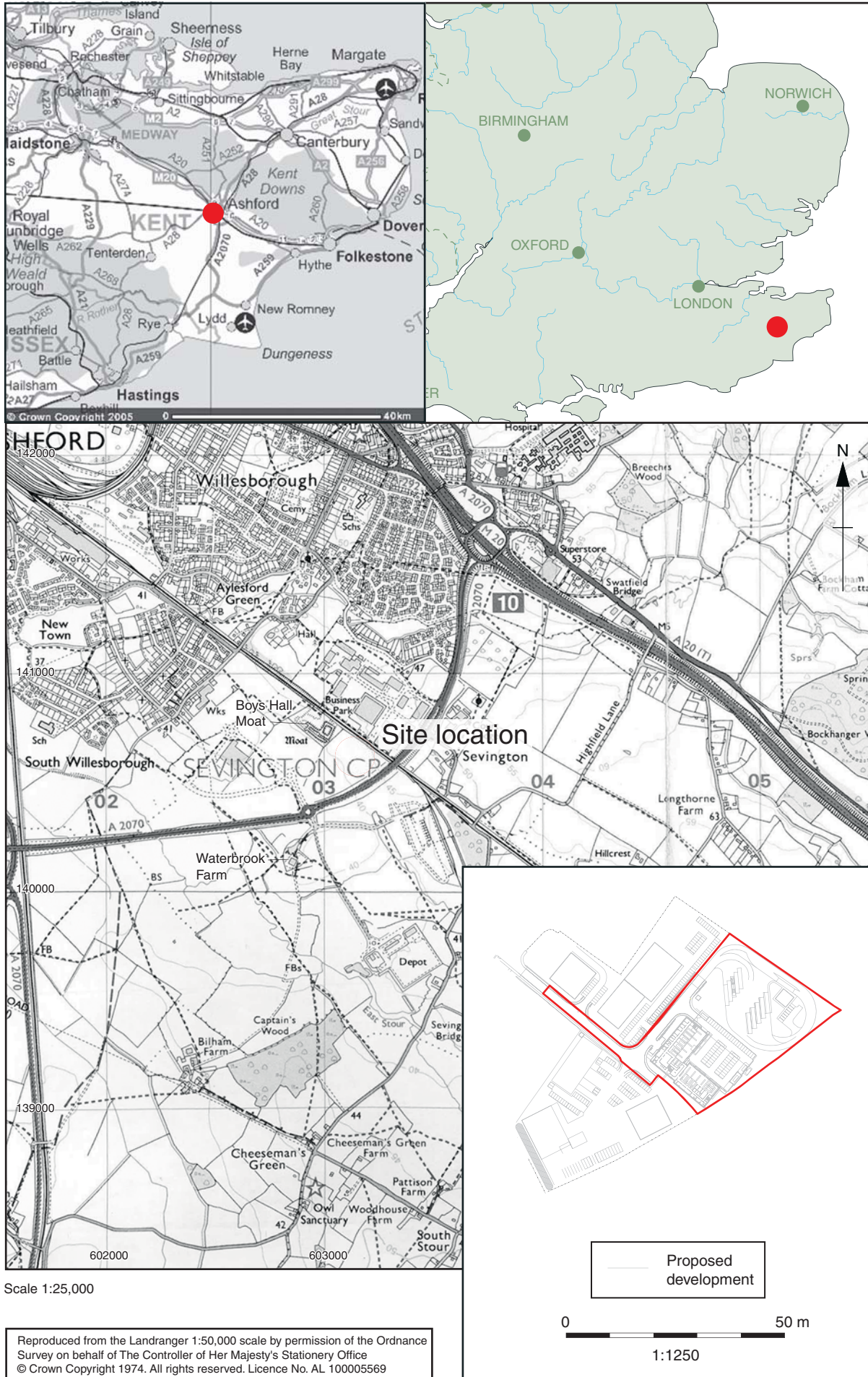


Figure 1: Site location



0 10 m

1:250

Figure 2: Phased site plan



Key
■ Areas to be resolved
┌─┐ Limit of excavation

0 10 m
1:250

Figure 3: Areas to be resolved



Plate 1: Flooding on site



Plate 2: Tree throw 1606



Plate 3: Ditches 1823, 1229 and 1824



Plate 4: Complete pots within ditch 1229



Plate 5: Ring gully 1627



Plate 6: Clay pipe with maker's mark



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