



## Kingsborough Manor, Phase 3 Stages 1 and 2, Eastchurch, Isle of Sheppey, Kent

Archaeological Evaluation, Excavation and Strip, Map and record  
Assessment of Results





**KINGSBOROUGH MANOR, EASTCHURCH,  
ISLE OF SHEPPEY, KENT  
PHASE 3 STAGES 1 AND 2**

**Archaeological Evaluation, Excavation and Strip, Map and Record:  
Post-excavation Assessment**

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# KINGSBOROUGH MANOR, EASTCHURCH, ISLE OF SHEPPEY, KENT, PHASE 3 STAGES 1 AND 2

## Archaeological Evaluation, Excavation and Strip, Map and Record: Post-excavation Assessment

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**KINGSBOROUGH MANOR, EASTCHURCH,  
ISLE OF SHEPPEY, KENT  
PHASE 3 STAGES 1 AND 2**

**Archaeological Evaluation, Excavation and Strip, Map and Record:  
Post-excavation Assessment**

**Summary**

Land at Kingsborough Manor was investigated archaeologically by Wessex Archaeology as part of an ongoing programme of works prior to housing development. The site lies 1km from the shoreline on the north side of the Isle of Sheppey and 2km north-west of Eastchurch. The Stage 1 of the Phase 3 fieldwork was carried out from the end of July to the beginning of September 2007, and Stage 2 in February and March 2008.

The strip, map and record area (Phase 3 Stage 1), which covered an area of 0.69ha centred on NGR 597380 172350, revealed a number of medieval ditches forming trackways and field boundaries, as well as a number of undated features including a nine-post structure.

The main excavation area (Phase 3 Stage 2), which covered 0.25ha centred on NGR 597680 172220, some 300m to the east of Stage 1, revealed a section of the previously investigated, 120m diameter Middle-Late Bronze Age circular ditched enclosure, which appeared to have had no associated banks and no traces of any associated settlement. It also revealed a group of five medieval ditches and other features, which may have been used in stock control, and two parallel lines of undated ditches, 8m apart aligned north-west to south-east, of pre-modern date. Three evaluation trenches excavated immediately north-east of the main area revealed nothing of archaeological significance.

Many of the features uncovered were the same as, or of a type similar to, those already recorded during previous stages of fieldwork. The undated nine-post square structure, however, a type of building as yet unknown from Sheppey and therefore of regional importance. The scarcity of associated finds means that there is no potential to refine the chronological framework already established through the extensive radiocarbon programme carried out during previous stages of fieldwork. Equally, there is no potential to amend the functional interpretation of the various features.

Therefore, no additional stratigraphical finds or environmental analyses are proposed. It is proposed to produce a draft report for publication in a regional journal, or other suitable means of publication, providing an illustrated overview of the archaeological landscape of the Kingsborough Manor site as revealed in this and the previous phases of archaeological investigation.

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The Phase 3 Stage 1 fieldwork was led by Jon Milward and Steve Thompson, assisted by Daniel Hart and Chris Hooper. The Stage 2 fieldwork was carried out by David Godden, Neil Fitzpatrick, Piotr Brozyna, Dominika Miodek, Kieron Cheek, Sophie Nias-Cooper and Ken Lyden.

The finds were assessed by Matt Leivers and Lorraine Mephram. Environmental samples were processed by Marta Perez-Fernandez and assessed by Ruth Pelling. Geoarchaeology; soils and sediments (including sampling for micro-fossils) were assessed by David Norcott. Pollen assessment was carried out by Michael J. Grant, with pollen samples prepared by Karen Wicks, AFESS, University of Reading. Selection of radiocarbon samples and reporting on the results was carried out by Chris J. Stevens.

This report was compiled by David Godden and Jon Milward. The project was managed by Richard Greateorex and Jörn Schuster, who also edited this report. The illustrations are by Elizabeth James.

## KINGSBOROUGH MANOR, EASTCHURCH, ISLE OF SHEPPEY, KENT PHASE 3 STAGES 1 AND 2

### Archaeological Evaluation, Excavation and Strip, Map and Record: Post-excavation Assessment

#### 1 INTRODUCTION

##### 1.1 Project Background

1.1.1 Wessex Archaeology was commissioned by CgMs Consulting, acting on behalf of Jones Homes (Southern) Ltd, to undertake a phase of archaeological excavation in advance of housing development at Kingsborough Manor, Eastchurch on the Isle of Sheppey, Kent. This followed on from two earlier phases of archaeological work to the east of Kingsborough Farm – Phase 1 (AREAS I and II of the development footprint) and Phase 2 (AREAS III and IV) (**Figure 1**). The area of the Phase 3 works at the west of the development area (in AREA IV) is hereafter referred to as “the Site”.

1.1.2 In line with PPG16, planning consent was granted by Kent County Council (KCC) and Swale District Council with a condition requiring an archaeological evaluation to be followed, if it produced positive results, by mitigation, excavation and reporting. The evaluation identified five areas (Areas 1-5) within AREA IV where potential archaeological deposits were likely to be impacted by the development.

1.1.3 The Phase 3 Stage 1 mitigation involved the strip, map and record excavation of these five areas, totalling 0.69ha, between 30 July and 7 September 2007 (in this report’s text and figures the development areas are capitalised with Roman numerals [AREAS I-IV], while the Phase 3 Stage 1 excavation areas are not [Areas 1-5].) The Phase 3 Stage 2 mitigation, undertaken in February and March 2008, involved an excavation covering 0.25ha, as well as three further evaluation trenches.

##### 1.2 The Site, location and geology

1.2.1 Kingsborough Manor is located on the second highest hill on the Isle of Sheppey, approximately 2km to the north-west of Eastchurch. It commands wide views to the south across the Swale, the low lying land beside the Swale to the Kent ‘mainland’ and northwards across to the Thames estuary.

1.2.2 The Phase 3 Stage 1 strip, map and record area (Areas 1-5) was centred on NGR 597380 172350. It largely followed the proposed road alignments, but was extended where archaeological features were denser and where the thin colluvial cover would make them more susceptible to development impacts (**Figure 1**). This part of the Site slopes gently from 72m above Ordnance Datum (aOD) at the south-west to 63m aOD at the north-east. To the east, a shallow dry valley aligned north to south separates this part of

the Site from a hill on which two Neolithic causewayed enclosures and three Late Bronze Age enclosures were identified in Phases 1 and 2.

- 1.2.3 The Phase 3 Stage 2 excavation site, centred on NGR 597680 172220, occupied the crown of a hill in the south-eastern end of AREA IV. It lay at a height of 70.4m aOD after 0.4m of topsoil had been removed. The excavation area was roughly triangular, measuring 60m by 60m and covering c. 0.25ha. It was bounded by housing to the east and south-east, by Kingsborough Farm to the south-west, by waste ground to the west and by Hustlings Drive to the north. At the time of the excavation it was bare ground that had previously been used as part of the developer's site compound.
- 1.2.4 Extensive Tertiary London Clay outcrops occur on the Isle of Sheppey (Gallois 1965). To the west and south of the Isle, this is covered by recent (Holocene age) alluvium but the immediate area of Kingsborough Manor is mapped as a localised patch of Eocene Bagshot and Claygate Beds over the London Clay, overlain in places by Pleistocene Head Brickearth (Geological Survey of Great Britain 1977, sheet 272; 1967, sheet 273). The Bagshot Beds comprise fine buff sand with flint pebbles, the Claygate Beds are described as clays and sands transitional between the blue (weathering to brown) clay of the London Clay and Bagshot Beds (Gallois 1965).
- 1.2.5 The associated soils are mapped as stagnogleyic argillic brown earths of the Burlesdon Association, with Pelo-stagnogley soils of the Windsor Association on the London Clay outcrops to the south (Soil Survey of England and Wales 1983, Sheet 6). The former are described as deep fine loamy soils with some seasonally waterlogged loamy over clayey soils.
- 1.2.6 The drift geology on the site in question comprises a yellowish brown clay loam with patchy but common well rounded flint pebbles (20-40mm). These pebbles are concentrated in the top half metre of the profile, as exposed in feature sides. In places the geology is laminated and varies from clays to silty clay loams.

### 1.3 Archaeological background

- 1.3.1 Before the programme of archaeological works at Kingsborough Manor little was known of the archaeology of the immediate area. The works have shown, however, that the Site lies within an extensive prehistoric landscape, large parts of which appear to have been devoted to ritual and mortuary activities (**Figure 1**).
- 1.3.2 The excavation of AREA I, undertaken by Archaeology South-East, revealed part of a previously unsuspected Neolithic causewayed enclosure (Enclosure K1), a Bronze Age enclosure (Enclosure A) containing cremation graves or pyre refuse pits, postholes, a Middle Iron Age D-shaped enclosure (Enclosure D) and various Romano-British and medieval features (S. Stevens 2000 and forthcoming; Allen *et al.* 2008),
- 1.3.3 The further evaluation of the causewayed enclosure and the excavation in AREA II revealed more of the Bronze Age enclosure, and three other Late Bronze Age and Middle Iron Age enclosures (Enclosures B, C and E) to the north associated with a small cemetery (Wessex Archaeology 2002). It also

revealed pits which may have been associated with ritual activities, four-post 'granary' structures and fences (Allen *et al.* 2008). Middle Iron Age and Late Iron Age/Romano-British droveways or boundaries, and later Saxon and medieval boundaries were also recorded, indicating agricultural activity during these periods (S. Stevens, forthcoming).

- 1.3.4 The evaluation of AREA III recorded Neolithic artefacts and Bronze Age and Iron Age settlement features (Oxford Archaeology 2004), while the subsequent excavation revealed a second Neolithic causewayed enclosure (Enclosure K2) occupying the plateau overlooking the dry valley to the west and with views across the Thames Estuary to the north (Wessex Archaeology 2005a).
- 1.3.5 Following an evaluation of AREA IV in the western part of the development site (Wessex Archaeology 2005b), an excavation in the southern part AREA IV revealed low level agricultural activity spanning the Bronze Age and the Roman, Saxon and post-medieval periods. This included a Bronze Age ditch and limited evidence for a wider Bronze Age field system, and a Romano-British polygonal enclosure (Wessex Archaeology 2007).

## **2 AIMS AND METHODOLOGY**

### **2.1 Aims and objectives**

- 2.1.1 The aims and objectives are laid out in detail in the WSI (Wessex Archaeology 2007, 3). The general aims of the excavation were to establish the extent, date, character and condition of any surviving archaeological remains. In particular, the Bronze Age circular ditched enclosure, partially revealed in earlier archaeological excavations, was to be further investigated.

### **2.2 Methodology**

#### ***Fieldwork***

- 2.2.1 All fieldwork was carried out in accordance with the Institute of Field Archaeologists' Standard and Guidance for Archaeological Field Evaluation (revised 2001) and Archaeological Excavation (revised 2001).
- 2.2.2 The stripping of the topsoil and disturbed subsoil was done under constant archaeological supervision using a 360° tracked excavator equipped with a toothless ditching bucket and. The material was removed by dumper and stockpiled on undeveloped land in the vicinity.
- 2.2.3 An electrical cable following a curving course across the north-west corner of the Phase 3 stage 2 Site was detected using the CAT (Cable Avoidance Tool). It was giving out a strong signal although said to be dead. As no confirmation was obtained that the cable was not live it was left in place within a line of unstripped ground.
- 2.2.4 The archaeological features were hand-excavated. Slots were cut in the ditches to reveal the profile and to recover dating material. Most tree throw holes were partially excavated to confirm their nature and also to recover dating material.
- 2.2.5 Archaeological features were drawn and described using Wessex Archaeology *pro forma* recording sheets. A photographic record was made using 35mm colour and monochrome films, and digital photography.
- 2.2.6 A digital survey using a GPS system was taken. This recorded the edges of the stripped area, the outline of features and the positions of sections through features.
- 2.2.7 The spoil heaps were inspected for finds.
- 2.2.8 The three machine-excavated evaluation trenches to the north-west of the Stage 2 excavation area were 30m long and 2m wide.

#### ***Health and Safety***

- 2.2.9 All work was carried out in accordance with the Health and Safety at Work Act (1974), the Management of Health and Safety regulations (1992) and all other relevant Health and Safety legislation in force at the time.
- 2.2.10 A risk assessment was prepared by Wessex Archaeology before the start of the fieldwork.

### 3 STRATIGRAPHIC RESULTS

#### 3.1 Introduction

- 3.1.1 The stratigraphic results are presented separately for Phase 3 Stages 1 and 2, then in chronological order.

#### 3.2 Phase 3 Stage 1

##### ***Bronze Age***

- 3.2.1 A small assemblage of Bronze Age pottery and worked flint was recovered from a tree throw hollow (**407**) in the east of Area 5.
- 3.2.2 In Area 3, there were numerous small depressions, two of which (**242** and **244**) were adjacent and identical in form, and may be related postholes. Posthole **242** contained six fragments of Late Bronze Age/Early Iron Age pottery; posthole **244** contained no finds.

##### ***Medieval***

- 3.2.3 A number of parallel ditches were recorded – ditch **271** (Area 3), ditch **145** (Areas 1, 2 and 5), ditch terminal 414 (Area 5) and ditch 334 (Area 4) – forming possible medieval field boundaries. While ditch 145 produced only a few undiagnostic worked flints, ditch **271** produced pieces of medieval ceramic building material (CBM), and ditch **331** contained medieval pottery. Other ditches were orientated east-west, with ditch 455 (at the southeast of Area 5) also containing medieval pottery.

##### ***Post-medieval/modern***

- 3.2.4 Ditch group **270** (Area 3) comprised three small drainage ditches, which converged into a single ditch, running east down the slope of the dry valley, cutting medieval ditch **271**.
- 3.2.5 A large feature (**428**), at least 12m long and 1.2m deep, interpreted as a probable clay quarry, was recorded on the northern edge of Area 5. It was subsequently filled with a mix of dumped material, containing post-medieval CBM, and washed in soils.
- 3.2.6 To the west, a smaller feature **453**, more rectangular in plan, may also have been a quarry, and although it contained a sherd of medieval pottery it could have been more or less contemporary with **428**.

##### ***Undated***

###### Nine-post structure

- 3.2.7 Nine postholes, 0.12-0.18m in diameter and 0.04-0.09m deep, laid out in a three by three grid c. 3m<sup>2</sup>, was recorded in Area 1, and is interpreted as a small timber structure with an elevated floor, possibly a granary or other storage structure. The only find was a piece of undiagnostic worked flint from the posthole at the north-west corner. A tenth, similar posthole (**140**), c. 2m to the north-west of the structure may be associated with it.

###### Trackway

- 3.2.8 Parallel ditch in Area 4 (**333**, **334**, **335**, **336** and **337**) may represent an east-west trackway. Although there appears to have been more than one phase

of trackside ditch excavation, there were no datable finds or stratigraphic relationships to determine whether this was in fact the case.

#### Other features

- 3.2.9 A 12m long sinuous ditch (**272**) recorded in Area 3 may be associated with a feature (**218**), 2.75m to the north-east, possibly the terminal of a ditch continuing east of the excavation area; the latter contained undiagnostic and undatable CBM and worked flint.
- 3.2.10 A large amorphous feature (**273**), and a smaller feature (**263**) to its south, were interpreted as bioturbation hollows. Both contained fragments of undiagnostic fired clay.
- 3.2.11 Area 3 contained numerous small undated depressions (**214, 222, 224, 228, 236, 261, 266**) of varied character and size, some of which may have been postholes or 'post-pads'.
- 3.2.12 A shallow depression (**112**) recorded towards the base of colluvium in Area 1 contained a deposit of charcoal, from which an environmental sample was taken. As there was no evidence that the surrounding earth had been affected by heat, the deposit is considered to have been a dump of burnt material, rather than an *in situ* hearth. Another feature (**116**), containing charcoal and a charred cereal grain, was also sampled.
- 3.2.13 In contrast, two small features containing burnt deposits in Area 5 (**422** and **440**) displayed heat-affected natural, suggesting either *in situ* burning or the deposition of hot embers.

#### **Discussion**

- 3.2.14 The small number of prehistoric features suggests a low level of activity in AREA IV, although if some of the undated features were prehistoric, particularly the post structure **146**, this might indicate a focus of settlement activity in the vicinity of Areas 1-3. Parallels for the structure include Structure G at Redgate Hill, Hunstanton (Bradley 1993, 76), and a structure at Glastonbury and Meare associated with preserved grain (Gent 1983, 250), both of which are dated to the 1st millennium BC. However, a nine-post granary at the Roman villa at Gorhambury was dated to the later 1st century AD (Goodburn 1978, 445).
- 3.2.15 The numerous medieval ditches in the excavation areas, which are dated by artefacts or association, represent the division and enclosure of the landscape into small land parcels.
- 3.2.16 At some point in the post-medieval period it appears that brickearth was quarried from possibly two locations along the northern edge of Area 5, one of the quarry pits being then used as a dump.

### **3.3 Phase 3 Stage 2**

#### ***Evaluation Trenches***

- 3.3.1 The three evaluation trenches to the north-west of the Stage 2 excavation area revealed no significant archaeological remains (**Figure 1**).

### ***Soils and geology***

3.3.2 The general geological sequence was:

- mid greyish-brown disturbed topsoil/subsoil c. 0.4m thick, covered with rough grass;
- a patchwork of clay and gravel natural c. 0.5m thick;
- mid orange-brown silty clay natural. Several periglacial features (**Plates 5 and 6**) were noted in the natural, exposed in the ditch sides of the Bronze Age circular enclosure **505** (below).

### ***Middle or Late Bronze Age features (1500-700 BC)***

#### Circular ditched enclosure

3.3.3 A 50m length of the ditch (**505**) and part of the interior of the Bronze Age circular enclosure, previously investigated in AREAS I and II (Enclosure A), was exposed. The ditch of the 120m diameter hill-top enclosure was 4.5-5.5m wide and 1.6m deep (from the stripped ground level), with steep sides (in places with a step on the outer side) and a flat base (**Plates 1–4**). No entrance to the enclosure has been found, but one could lie along the unexposed western side.

3.3.4 The presence of a large, contemporary, oval ditched feature (Enclosure B) in the eastern part of the enclosure (as recorded in the previous phases of work) strongly suggests that there was no internal bank, and the symmetrical filling of the circular enclosure ditch also gives no indication of a bank, either inside or outside.

3.3.5 A common fill sequence was noted in the six slots excavated through the enclosure ditch in this phase of work (**Plate 1**):

- A primary fill of mid orangey brown silty clay in the corners at the base of the ditch.
- A fill, up to 0.6m thick, of mid orange-brown silty clay containing discrete chunks of pale grey loess (up to 0.2m by 0.4m in the section); the loess probably represents lumps of turf and topsoil, purged of organic matter, washed into the flooded ditch;
- A secondary fill of mid orange-brown clay silt, up to 0.7m thick;
- An upper fill of dark brown-grey clay silt, up to 0.4m thick.

3.3.6 A monolith sample was taken through the ditch fills in slot **472** to allow detailed sediment descriptions and a search for microfossils.

3.3.7 Although the ditch contained little pottery, several large Middle-Late Bronze Age sherds were recovered from the base of slot **472**, one of which had a carbonised deposit on its interior surface yielding a 14C-date of 1600–1120 cal BC (at 95% certainty). The upper ditch fill also contained occasional Late Bronze Age sherds.

### **Medieval (AD 1066–1500)**

#### Ditches cluster

- 3.3.8 A localised cluster of three short medieval ditches (**626, 627, 628**; see **Plate 7**), a rectangular feature (**484**) and small pit (**486**) may have been associated, and possibly used for the control and sorting of animals. The ditches were 0.6-1.0m wide and up to 0.2m deep, their layout, with gaps between them, contrasting with the more coherent arrangement of the field boundary ditches.
- 3.3.9 Feature **484** differed from the ditches in that it had a regular rectangular outline and a flat base. It contained a single medieval sherd.
- 3.3.10 Small oval pit **486**, located at what would have been the intersection of ditch **626** and feature **484**, had a darker fill than the other features in the cluster and contained a number of bones from a dog. Its function, however, is unclear.

### **Undated features**

#### Features with charcoal-rich fills

- 3.3.11 Two small sub-circular features (**608** and **611**) with charcoal-rich fills, both c. 0.25m in diameter and 0.08m deep, were recorded some 15m inside the enclosure ditch, the former containing fragments of pottery that were too small to date.
- 3.3.12 These features were initially assumed to be cremation burials, as a number of similar features, containing small quantities of cremated human bone, had been found within Late Bronze Age cremation cemeteries recorded during earlier phases of fieldwork on the hill-top. However, the subsequent detailed examination of the fills of features **608** and **611** produced no cremated human bone, and their function was not established.
- 3.3.13 There is evidence, however, that they were of Romano-British or earlier date. Feature **611** predates medieval ditch **626** which cut its south-eastern edge, and the small quantities of spelt and emmer wheat recovered from the fills suggest they also pre-date the Saxon period when there was a change to free-threshing wheat.

#### Parallel ditches

- 3.3.14 Two lines of parallel ditches 8m apart (**621** to the northeast and **622, 623, 624, 625** to the southwest) were revealed running southeast to northwest across the top of the hill, possibly forming a trackway. The ditches, which averaged 1.0m wide with concave sides and bases, had silty clay fills paler in colour than the surrounding natural, probably due to their high pale grey loess content derived from the surrounding land surface.
- 3.3.15 The ditches appeared to be segmented, but as they were only 0.15m deep it is possible that some of the segments simply reflect variations in depth of an initially continuous ditch that has since been severely truncated (**Plate 8**). However, the well-defined gap over 2m wide between ditches **622** and **623** may have been a deliberate break, possibly marked by two nearby postholes **566** and **573** located between, and aligned on, the parallel ditches. Posthole **566** contained several sherds from a small bowl possibly Neolithic date.

3.3.16 Several sherds of Late Bronze Age date were recovered from ditch **623**, but these were abraded and possibly residual and the dating of the ditches remains problematic. They appear to be a continuation of similar parallel ditches recorded previously in AREA II (**Figure 1**), one of which was thought to have cut the ditch of the Bronze Age circular enclosure. However, in AREA IV, no clear stratigraphic relationship was observed between ditch **623** and the enclosure ditch, and the relationship between of ditch **624** and the enclosure ditch had been destroyed by an earlier evaluation trench.

3.3.17 It is possible the ditches pre-date the enclosure, possibly associated with the earlier monuments. If they postdate it, it is likely they are considerably later, after the Bronze Age enclosure ditch had fully silted up, there being no evidence of its being deliberately backfilled.

#### Natural features

3.3.18 A number of other features, usually irregular or oval in shape were interpreted as disturbance by tree roots.

#### **Discussion**

3.3.19 It has yet to be determined whether the circular ditched enclosure had an entrance, and its function remains unclear. While the low level of finds argues against a settlement function, it could also have been used to corral livestock. Alternatively, its hill-top location may have been significant if it had some ceremonial function. The wide date range of the 14C-date of 1600-1120 cal BC (95% certainty) obtained from a carbonised deposit on pottery from the base of the ditch indicates a Middle to Late Bronze Age date for its construction, although the pottery itself suggests a date at the end of this range. In the absence of a bank, either inside or outside it is possible that the material excavated from the ditch was spread inside the enclosure or on the slopes of the hillside outside.

3.3.20 The cluster of medieval ditches and other features might be best explained as traces of barriers for livestock management.

3.3.21 The two small charcoal-filled features (**608** and **611**) are undated, but have similarities to possible cremation-related features previously recorded within two cemeteries. One cemetery, south-east of Enclosures A, B and C, was dated to c. 1400-1200BC, and the other, north-east of the Enclosure E, to c. 1200-900BC (Ellis and Allen in Allen *et al.* 2008, fig. 18). These cremation-related features contained on average only 74g of cremated human bone (compared to an average of c. 400g from cremation burial in this period). It is possible, therefore, that features **608** and **611** may be the truncated bases of similar features which contained bone only in their upper parts. However, this cannot be proved.

3.3.22 Although the parallel ditches running north-west to south-east across the top of the hill almost certainly represent a pre-modern feature, they could not be securely related stratigraphically to the Bronze Age circular enclosure. While it could be a trackway, it could also have had some ceremonial function, possibly related to the Neolithic enclosures; it appears to divide the space between them, skirting both by approximately 50m.

## 4 FINDS

- 4.1.1 The Phase 3 Stages 1 and 2 fieldwork produced a small finds assemblage, ranging in date from prehistoric to post-medieval. Overall quantities are given in **Table 1**.

**Table 1:** Finds totals by material type

Material type	Count	Weight (g)
Animal bone	53	167
Burnt flint	30	230
Ceramic building material	27	6317
Clay pipe	1	2
Fired clay	80	388
Worked flint	48	680
Pottery	155	1014
<i>Prehistoric</i>	118	854
<i>Romano-British</i>	1	3
<i>Saxon</i>	2	5
<i>Medieval</i>	33	149
<i>Post-Medieval</i>	1	3
Slag	1	4

- 4.1.2
- 4.1.3 The condition of the finds ranges from fair to poor; the ceramic materials in particular (pottery, ceramic building material, fired clay) have suffered high levels of abrasion, and identification has been correspondingly hampered.
- 4.1.4 For the purposes of this assessment, all finds have been at least visually scanned in order to determine their range, potential date and condition. Given the close proximity of the site to elements of an extensive prehistoric landscape, including Neolithic, Late Bronze Age and Iron Age activity, the prehistoric pottery assemblage has been treated in some detail in the anticipation of possible future publication of the site.

## 4.2 Pottery

### ***Prehistoric***

#### Introduction

- 4.2.1 The total assemblage of later prehistoric pottery amounts to 118 sherds (854 grammes). The assemblage has a potential date range of Early Neolithic to Middle Iron Age. Condition varies – there are a small number of deposits each containing one partial vessel, in good although fragmentary condition. More commonly, however, context groups comprise sherds from a number of vessels, and these range in condition from relatively fresh (crisp edges and unabraded surfaces) to poor (rounded edges and abraded surfaces).
- 4.2.2 The assemblage has been examined in a single exercise, using the standard Wessex Archaeology recording system for pottery (Morris 1994), which accords with nationally recommended guidelines (PCRG 1997). The recording system focuses on the analysis of fabric, based on the range and frequency of inclusion types, and vessel form, based on diagnostic features such as rims and decorated sherds.

### Fabrics

- 4.2.3 Fabrics have been recorded using the type series created for the ceramic assemblage from earlier investigations at Kingsborough Manor. Twenty fabric types were originally identified, which fell into four groups on the basis of dominant inclusion types: flint-tempered (Group FL), sandy (Group QU), grog-tempered (Group G) and shelly (Group SH). For the 2007 and 2008 phases of work, further fabrics have been added to the series: these are V3 (a vesicular fabric) and FL14. **Table 2** summarises fabric descriptions and quantities. Full fabric descriptions are held in the project archive. Not all of the existing fabric types occurred in the 2007 and 2008 phases of work

**Table 2:** Pottery descriptions and quantities

Fabric code	Description	No. sherds
FL1	Coarse, sparse flint temper (<5mm) in slightly micaceous matrix	4
FL5	Coarse, rare flint temper (<5mm); matrix as FL1	1
FL6	Fine, sparse flint temper (<1mm), slightly sandy matrix	6
FL7	Moderate, well sorted, fine flint temper (<2mm); matrix as FL1	6
FL8	Coarse, rare flint temper (<2mm) in sandy matrix (iron stained quartz)	5
FL9	Sparse, well sorted flint temper (<2mm) and grog (<2mm); slightly soapy texture	1
FL11	Moderate flint temper, quite well sorted, including patinated flint (<3mm; most <1mm); matrix as FL1	20
FL12	Coarse, rare flint (<2mm) in sandy matrix	1
FL13	Very coarse, moderate flint temper (<5mm); matrix as FL1	19
FL14	Frequent poorly sorted fine to very coarse calcined flint temper; sandy matrix with some mica	27
FL99	Unidentifiable flint-tempered crumbs	6
QU1	Medium-grained sandy fabric with some organic inclusions	6
QU2	Fine silty clay matrix with some organic inclusions	9
V3	Vesicular, silty fabric	7
	<b>TOTAL</b>	<b>118</b>

### 4.2.4

- 4.2.5 Flint occurs naturally on Sheppey only as low-grade pebbles derived from Head Gravel deposits. The flint inclusions seen here can be identified, at least in the case of the larger fragments, as calcined flint (i.e. burnt before crushing for use as temper). The similarity in the clay matrix used for many of these fabrics (fine, silty and slightly micaceous) suggests the exploitation of a single clay source, presumably fairly local to the site. Only fabrics FL8 and FL12 utilised a sandy clay matrix. Two sandy fabrics were identified, both containing organic inclusions, and both of which can be considered as 'finewares'. Again, both are likely to be of local manufacture. The vesicular fabric is distinct from these organic sandy wares in terms of both the silty matrix, and the absence of organic matter resulting in voids.

### Forms

- 4.2.6 Diagnostic material is relatively scarce amongst the assemblage, despite the occurrence of two deposits containing partial vessels with reconstructable profiles, especially as one of these is from the lower part of the vessel only.
- 4.2.7 Only one form is reconstructable, and that only partially. PRN 20 consists of 27 sherds (188g) of a cordoned jar. The cordon is a horizontal applied strip, and is decorated with deep finer-tip impressions. The entire circumference of

the vessel is not present, and there are no rim or base sherds, so the dimensions are not reconstructable. The only other substantial deposit (PRN 21: 10 sherds weighing 411g) consists of the flat base and lower wall of a second probable jar.

- 4.2.8 Other diagnostic sherds amount to three small inturned simple rim sherds from a single vessel, probably a bowl, which is more like Early Neolithic than Late Bronze Age forms (although the fabric falls within the Late Bronze Age spectrum, probably due to all vessels being manufactured locally).

#### Discussion

- 4.2.9 The vessel forms and fabrics present here suggest a date range of Late Bronze Age to Early Iron Age, but it must be pointed out that flint-tempered and sandy fabrics have a long currency in east Kent, virtually throughout the 1st millennium BC, and it is possible that some of this assemblage is later in date (see Macpherson-Grant 1991). Equally, some sherds from the coarser end of the spectrum could fall within the range of the Deverel-Rimbury ceramic tradition of the Middle Bronze Age. No identifiable vessel forms, however, have been recognised which pre-date the Late Bronze Age.

- 4.2.10 The material from these stages of excavation falls within the range of vessel types, forms and fabrics encountered in earlier phases of work in the locality. To summarise, parallels for the Kingsborough Manor assemblage can be found widely in post-Deverel-Rimbury assemblages across north Kent and beyond. These assemblages span the post-Deverel-Rimbury 'plainware' and 'decorated' phases, but the preponderance of flint-tempered fabrics, the paucity of decorated vessels, and the absence of classic Early Iron Age forms at Kingsborough Manor would suggest an attribution to the 'plainware' or perhaps 'transitional' post-Deverel-Rimbury phase, with a potential date range of 10th to 7th centuries.

#### Distribution

- 4.2.11 In Phase 3 Stage 1, pottery was recovered from subsoil layers (25 sherds), three gullies (four sherds), a ditch (12 sherds), a stakehole (six sherds) and a tree throw hole (seven sherds). All sherds are small (average weight is only 2.28g) and likely to be redeposited or included by chance.
- 4.2.12 In Phase 3 Stage 2, by far the largest group of later prehistoric pottery came from fills of the circular enclosure ditch (**505**). This material (in total 62 sherds; 620g; average sherd weight 10g) included substantial portions of two vessels (in contexts **523** and **596**) along with smaller groups of sherds (**575**, **602**, **607** and **618**). Medieval ditches **626** and **627** contained most of the rest of the pottery (four sherds weighing three grammes and seven sherds weighing 17g respectively; all of the QU fabrics come from these features). Posthole **566** contained five sherds (10g) from a small bowl, possibly of Neolithic date. Three Late Bronze Age sherds came from undated ditch **623**, one of the parallel ditches.

#### ***Romano-British***

- 4.2.13 One Romano-British sherd was identified, an oxidised ware from context **432** in post-medieval/modern pit **428** in Area 5 (Phase 3 Stage 1).

**Post-Roman**

- 4.2.14 Thirty-six sherds (160g) are dated as post-Roman, with a date range from early/middle Saxon to post-medieval. These have been quantified by fabric type using the local Canterbury Archaeological Trust (CAT) fabric series.
- 4.2.15 Two sherds found in Area 5 have been identified as early/middle Saxon; these are both body sherds in coarse, organic-tempered fabrics (EMS4) typical of this period. They have a potential date range of 5th to 8th century, but both occurred as residual sherds, one with medieval material in context **332** in medieval ditch/tree throw hollow **331**, and one in a post-medieval context (**432** in post-medieval/modern pit **428**).
- 4.2.16 The majority of this small assemblage (33 sherds) is of medieval date, and five fabrics were identified, all of which fall within the range of locally produced fabrics – shelly (EM2), shelly/sandy (EM36), sandy/shelly (EM.M5) and sandy (M38, M40). There are only two diagnostic sherds: a jar rim in EM2 and a bowl rim in EM.M5 with impressed dots on top of the rim.
- 4.2.17 The medieval assemblage has a potential date range of 11th to early 15th century, but the likelihood is that most of the sherds are of 12th or 13th century date. Sherds were recovered from ditch **628** (contexts **204**, **235**, **332**, **402**, **404**, **432**, **454**, **475**), ditch **628** (context **477**) and feature **484** (context **485**) (all from Phase 3 Stage 2).
- 4.2.18 One sherd is post-medieval – a coarse, glazed redware from context **432** in post-medieval/modern pit **428** (Area 5).

**4.3 Ceramic building material and fired clay**

- 4.3.1 This category includes fragments of brick and tile, all of medieval or post-medieval date. The small quantities of fired clay recovered could also be of structural origin, deriving from hearth/pit linings or upstanding structures, but all pieces are small, abraded and undiagnostic, so precise function is uncertain. The date of this material is also unknown, as most came from otherwise undated contexts.

**4.4 Worked flint**

- 4.4.1 Forty-eight pieces were recovered, on a variety of raw materials all of which are likely to have been acquired from the local gravels. Recognisable amongst the material is a small quantity of Bullhead flint.
- 4.4.2 There are no particularly diagnostic tools amongst the assemblage (formal tools are limited to a scraper and a backed edge-flaked knife) so chronological assignments are based on technological traits. Very few contexts contained significant numbers of pieces, again lessening the significance of any chronology based solely on lithics.
- 4.4.3 The potentially earliest piece is an iron-stained fragment of a flake or blade struck from a single-platform blade core from the colluvial subsoil in Area 3 (context **202**). This piece is most likely to be Early Neolithic, although a slightly earlier date cannot be categorically ruled out.

4.4.4 Two flakes struck from blade cores were found in the colluvial subsoil (context **103**); both have abraded platforms indicating a concern with maintaining flaking angle. These pieces (and a possible backed knife) may belong to the earlier part of the Neolithic period. A large thinning flake may be of a similar age, although a crude multi-platform core and some other flakes need not pre-date the Bronze Age. Flake material of a similar age was recovered from contexts **251** (ditch **272**), **332** (ditch/?tree throw hollow 331), **408** (tree throw hollow **407**; including a small horseshoe-shaped scraper) and **577** (in ringwork ditch **505**; a backed edge flaked knife on a blade).

4.4.5 Other contexts contained small quantities of crude flakes likely to be Middle or Late Bronze Age, some with fewer redeposited earlier pieces.

#### **4.5 Animal bone**

4.5.1 The animal bone includes a group of bones from a single animal (dog) from pit **486**. This group accounts for 44 of the 53 pieces recovered. Other fragments are in very poor condition; one is from a large mammal, probably cattle, but others are unidentifiable.

#### **4.6 Other finds**

4.6.1 Other finds comprised small quantities of clay tobacco pipe (stem), clinker (probably post-medieval), and burnt, unworked flint (unknown date and origin).

## 5 PALAEO-ENVIRONMENTAL EVIDENCE

### 5.1 Introduction

- 5.1.1 Palaeo-environmental samples comprised two monolith samples from cut **472** in the ditch (**505**) of the Bronze Age circular enclosure (Enclosure A), and eight bulk samples – two from features containing burnt material **112** and **116**, two each from charcoal-filled features **608** and **611**, one from burnt feature **422** and one from medieval pit **486**. The monoliths were further sampled for the assessment of pollen. A single radiocarbon determination was also obtained from residue from prehistoric pottery recovered from a primary fill of ditch **505**.

### 5.2 Methodology

- 5.2.1 Bulk samples were processed by standard flotation methods; the flots were retained on a 0.5mm mesh, and residues fractionated into 5.6mm, 2mm and 1mm fractions and dried. The coarse fractions (>5.6mm) were sorted, weighed and discarded. Flots were scanned under a x10 – x40 stereo-binocular microscope and the presence of charred remains quantified (**Table 3**) to record the preservation and nature of the charred plant and wood charcoal remains. Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997).
- 5.2.2 The flots were generally small with variable quantities of roots and modern seeds that may be indicative of stratigraphic movement, reworking or contamination by later intrusive elements. Charred seeds and chaff tended to be poorly preserved.

### 5.3 Charred plant remains

#### **Phase 3 Stage 1**

- 5.3.1 Two features in Area 1 containing burnt material were sampled (**112** and **116**). A single indeterminate cereal grain was noted in feature **116**, but no plant remains other than charcoal were noted in feature **112**, or from the sample from feature **422** in Area 5.

#### **Phase 3 Stage 2**

- 5.3.2 The four samples taken from two charcoal-filled features (**608** and **611**) produced small flots with limited charcoal, fairly frequent roots and occasional recent leaf buds and scales. A single cereal grain, occasional chaff and weed seeds were recovered from the southern half of feature **608**. The grain was tentatively identified as *Triticum dicoccum* (emmer wheat), while the rare chaff included a glume base of *Triticum spelta* (spelt wheat). Weed seeds noted were of *Carex* sp. and *Chenopodium album*. Feature **611** produced slightly larger flots but with very limited charred plant remains other than charcoal. A single seed of *Fallopia convolvulus* (black bindweed) and fragments of a fruit stone of possible *Prunus spinosa* (sloe) were the only plant remains noted.
- 5.3.3 A sample was examined from small medieval pit **486**. Occasional grain of *Triticum aestivum/turgidum* type (bread/rivet wheat) and *Hordeum vulgare* (barley) and a capsule fragment of *Raphanus raphanistrum* (wild radish) were noted in the sample.

**Table 3:** Plant remains and charcoal present in the samples

Feature	Context	Sample	Volume	Flot size (ml)/ % roots	Grain	Chaff	Weed seeds/ other	Comments	Charcoal 4/2mm
<b>Phase 3 Stage 1</b>									
Feature 112	113	1	20	150	-	-	-	-	90/50
Feature 116	117	2	10	30	C	-	-	Indet	5/2
Feature 422	423	3	1	120	-	-	-	-	40/35
<b>Phase 3 Stage 2</b>									
Pit 486	488	4	8	15/20	C	-	C	<i>T. aestivum/turgidum</i> ; <i>Hordeum</i> , <i>Raphanus</i>	2/2
Feature 608	609	7	10	12/50	C	C	-	<i>T. cf. dicoccum</i> ; <i>T. spelta</i> glume; <i>Carex</i> , <i>Chenopodium album</i>	<1/<1
	609	8	10	2/80	-	-	-	-	-
	612	9	10	30/5	-	-	C	<i>Fallopia convolvulus</i> ; ? <i>Prunus spinosa</i>	10/8
Feature 611	612	10	10	15/40	-	-	-	-	2/5

KEY: A\*\*\* = exceptional, A\*\* = 100+, A\* = 30- 99, A = ≥10 items, B = 9 - 5 items, C = < 5 items

**Table 4:** Sediment descriptions and sub-samples

Cut 472 in Bronze Age circular enclosure ditch 505 (drawings 114, monoliths 12 and 13)				<i>Full sediment description</i>		<i>Interpretation</i>
Depth (m)	Pollen samples taken					
0-0.30		10YR 5/4 yellowish brown silty clay loam. Med blocky / prismatic structure, 1-2% fine macropores, occ. to rare stones <20mm. Diffuse boundary, some manganese concretions to base				Tertiary fill (ploughed in material)
0.30-0.70		10YR 5/4 yellowish brown silty clay loam, with clear but diffuse iron mottling. Similar to above, stones slightly more frequent. Manganese concretions increasing down. 0.5% fine macropores. Clear to diffuse boundary.				Secondary / tertiary fill
0.70-1.14	0.95 – 0.96	10YR 5/6 yellowish brown silty clay loam, 2% fine macropores, coarse prismatic / blocky structure, rare rounded stones <20mm, some iron mottling. Clear to sharp boundary.				Secondary fill
1.14-1.25	1.17 – 1.18	10YR 4/4 dark yellowish brown silty clay loam, 30% manganese staining, some iron staining also. 2% fine / very fine macropores. Clear boundary				Possible weakly developed soil horizon
1.25-1.70	1.45 – 1.46	10YR 5/6 yellowish brown clay loam with common strong brown iron stains, containing abruptly bounded large lumps / inclusions (up to 500mm from site observations) of perfectly sorted grey (2.5Y 7/2 light grey) silt at 1.26-1.40m and 1.52-1.59m. These silts are loessic in origin. Abrupt boundary				Primary fill including large pieces of former loessic land surface
1.70-2.00	1.64 – 1.65	Dark yellowish brown / grey laminated silty clay loam / silt loam geology				Geology

## 5.4 Wood charcoal

- 5.4.1 Wood charcoal was noted from the flots of the bulk samples and is recorded in **Table 3**. Charcoal was present in fairly large quantities in features **112** and **422**. That from feature **112** was of mixed taxa, while that from feature **422** consisted predominantly of *Quercus* sp. (oak). The pit/hollow samples produced only very small amounts of charcoal with no identifiable fragments in cremation feature 608.

## 5.5 Discussion of charred plant remains

- 5.5.1 Identifiable plant remains other than charcoal were present in features **608** and **611** and small medieval pit **486**. Two species of hulled wheat were recorded in the features, emmer wheat (*Triticum dicoccum*) and spelt wheat (*Triticum spelta*). Both have been recorded, in Bronze Age and Iron Age features, in earlier stages of work and it is likely that both were being cultivated locally by at least the later Bronze Age (C.J. Stevens in press). Spelt wheat is known from the region from the Middle Bronze Age (Pelling 2003), while emmer wheat is recorded from across Britain from the Neolithic period. The density of remains are suggestive of background scatters of crop processing waste rather than being derived from primary activity areas. The weed seeds identified are from species of catholic habitat requirements, although *Carex* species (sedges) tend to have a preference for wetter ground. The possible sloe stone may have entered the deposit with fuel wood rather than as a food item. Given the amount of roots and the shallow nature of the features it is possible that such material may be intrusive or reworked.

- 5.5.2 The plant remains from medieval pit **486** include a free-threshing wheat grain (*Triticum aestivum/turgidum* type). Free-threshing wheats, in which the grains fall free from the ear with little processing required, are more usually associated with the Saxon and medieval periods, although they are identified as occasional finds throughout prehistory and are present in Neolithic and later prehistoric features at the site (C.J. Stevens in press). A barley grain was also noted. As in the deposits from feature **611** the number of grains involved is indicative of background scatters of material.

## 5.6 Sediments in Bronze Age circular enclosure ditch 505

- 5.6.1 Two monoliths (12 and 13) were taken through the profile of the ditch in slot **472**, where it was 1.75m deep and c. 4m wide, for detailed description/interpretation and possible microfossil assessment. They were cleaned prior to recording and standard descriptions used (following Hodgson 1976), including Munsell colour, texture, structure and nature of boundaries, as given below in **Table 4**.
- 5.6.2 The ditch contained discrete 'lumps' of firm grey, apparently perfectly sorted silt, up to 0.3m across, sometimes containing rare charcoal lumps and sometime with one flat surface (**Plate 1**). These tended to lie towards the top of the primary fills and were in striking contrast in both colour and texture to the yellowish brown clay loam sediments in which they lay. This material was present in every intervention through the feature and appeared to be distributed roughly evenly to both sides of the ditch.

- 5.6.3 This material is interpreted as loessic in origin (late Devensian glacial wind blown deposit common across eastern England (Goudie and Brunsden 1994)). It represents a loessic Bronze Age ground surface, directly overlying the clay loam geology, which has since been eroded away (the presence of loessic material was noted during the assessment of sediments from Neolithic features in a previous phase of fieldwork (Allen *et al.* 2008). The lumps probably slumped into the ditch as its sides eroded, the ditch edges possibly undercut by water filling the ditch.

## 5.7 Pollen in sediments in Bronze Age circular enclosure ditch 505

- 5.7.1 Pollen samples were taken from the stratified sediment samples (monoliths/cores), as described above, from the ditch **505**, slot **472** (**Table 4**). The samples were assessed firstly to provide information on the contemporary environment at the time of sediment filling, and secondly to determine whether the sediment fills are associated with the features' primary function or if they were cleaned out whilst in use and are contemporary with a disuse phase of the site.
- 5.7.2 Samples were processed using standard procedure (Moore *et al.* 1991), with 2cm<sup>3</sup> of sediment being sampled. A Lycopodium spike was added to allow the calculation of pollen concentration. All samples received the following treatment: 20ml of 7% HCl at 60°C for 30 minutes; 20ml of 10% KOH (60°C for 2 minutes); 20ml of 60% HF (overnight); 15ml of acetolysis mix (60°C for 5 minutes); stained in 0.2% aqueous solution of safranin and mounted on glass microscope slides in Silicone Oil.
- 5.7.3 It was hoped that pollen counts of 100-150 Total Land Pollen (TLP – excluding aquatics and spores) would be made for each level to allow the calculation of percentage data. However, pollen concentrations were very low. A minimum of one whole slide and 100 Lycopodium spores (added spike) were counted to allow an estimate of the pollen concentration (actual Lycopodium spores counts ranged from 355-1828). Identification was made using a Nikon SE microscope at x400 magnification. Pollen nomenclature is based on Bennett (1994; Bennett *et al.*, 1994) and ordered according to Stace (1997).

Pollen concentrations were found to be extremely low. It was therefore not possible to count a sufficient number of pollen grains to be able to assess the environment at the time of sediment deposition. No interpretation can therefore be made of the local vegetation from this pollen assemblage. The pollen identified from each sample is shown in **Table 5**.

**Table 5:** Pollen counts from Bronze Age enclosure ditch 505, monoliths 12/13

Depth below surface (m)	0.95 – 0.96	1.17 – 1.18	1.45 – 1.46	1.64 – 1.65
<i>Pinus sylvestris</i>	1			
<i>Ulmus</i>	2			
<i>Quercus</i>	2	1	1	
<i>Fraxinus excelsior</i>	1			
<i>Corylus avellana</i> -type	6	1		1
Chenopodiaceae	1			
<i>Lychnis flos-cuculi</i>				1
Brassicaceae	2	1		
<i>Cichorium intybus</i> -type		5		
<i>Solidago virgaurea</i> -type	1			1
Poaceae undiff.	2	1	1	3
<i>Polypodium</i>	1			
Pteropsida (monolete) indet.				1
<b>Total land pollen sum</b>	<b>19</b>	<b>9</b>	<b>2</b>	<b>7</b>
<b>Pollen concentration (grains cm<sup>-3</sup>)</b>	<b>193</b>	<b>376</b>	<b>99</b>	<b>366</b>

## 5.8 Radiocarbon dating

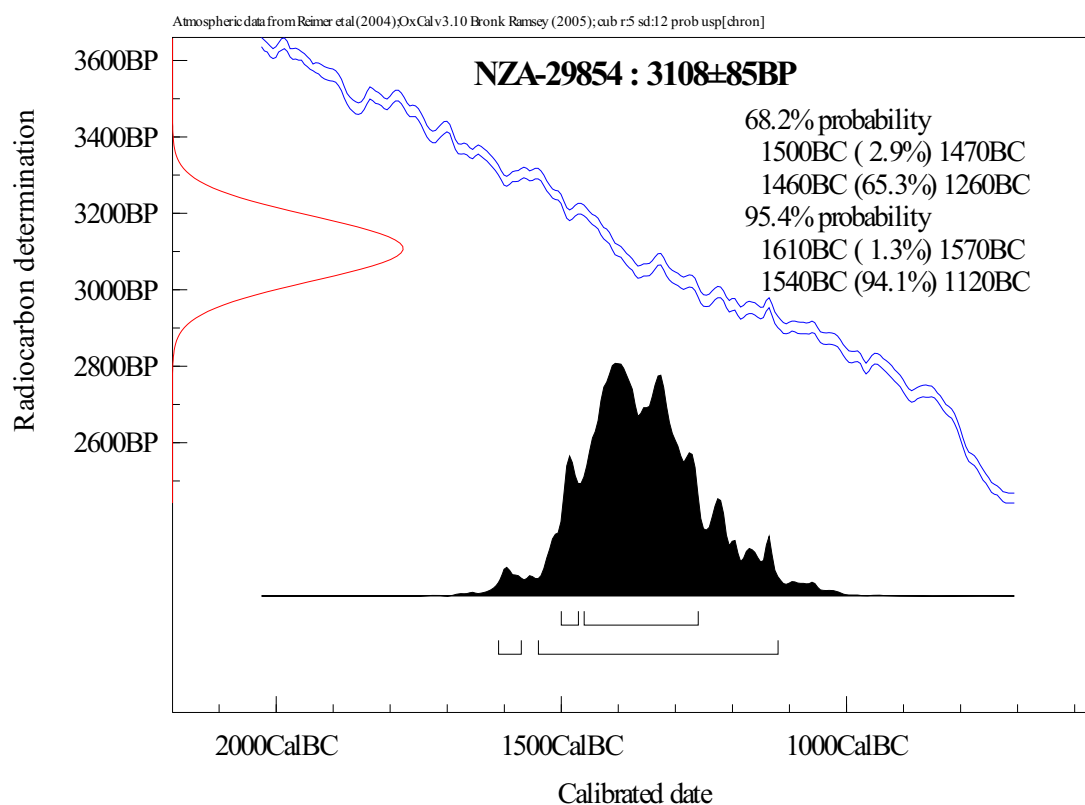
- 5.8.1 A single sample of charred residue from pottery recovered from a depth of 1.6m in Bronze Age circular enclosure ditch **505**, slot **472**, context **596**, was selected for radiocarbon determination. The returned date showed the pottery to be between 1610–1120 cal. BC (3108±85 BP, NZA-29854) and probably therefore of Middle Bronze Age date. It might be noted that the radiocarbon error on the pottery is relatively large, ±85 years due to low-carbon content (**Table 6**, **Figure 4** below)).

**Table 6:** Radiocarbon date from Bronze Age circular enclosure ditch **505**

Material	Feature	Context	Result no.	C13 ‰	Result BP	Cal date BC (2 sigma, 94.5%)
Pottery residue	Enclosure ditch 505, cut 472	596	NZA-29854	-24.1	3108±85	1610-1570 BC (1.3%) 1540-1120 BC (94.1%)

- 5.8.2 Previous radiocarbon determinations from Kingsborough from the final fills of the Neolithic causewayed enclosures (K1 and K2), lying either side of the Bronze Age enclosure, demonstrate activity during the Middle to Late Bronze Age with dates of 1190-920 cal BC (2868±35 BP, NZA-22280) and 1430-1210 cal BC (3069±35 BP, NZA-22277) from K1 and K2 respectively (Ellis and Allen in Allen *et al.* 2008). Four further dates from two separate cremation cemeteries showed similar Middle and Late Bronze Age date ranges.

**Figure 4.** Oxcal probability distribution for radiocarbon determination from residue on pottery recovered from ditch 505 (472)



## 6 POTENTIAL AND PROPOSALS FOR ANALYSIS AND PUBLICATION

### 6.1 Potential

#### ***Structural evidence***

6.1.1 The Phase 3 Stage 1 investigations revealed medieval ditches forming field boundaries and a possible trackway, two possible post-medieval/modern quarries and a number of undated features. The only feature of note was an undated nine-post square structure, a type of building as yet unknown from Sheppey and therefore of regional importance.

6.1.2 The Phase 3 Stage 2 fieldwork has added further information about features already known from previous phases of work, including a north-western segment of the Bronze Age circular ditched enclosure (Enclosure A), and parallel ditch segments which line up others also previously recorded. As before, it has not been possible to establish the stratigraphical relationship between enclosure and the parallel ditches, or the function of the ditches.

6.1.3 Apart from the nine-post structure, therefore, these works have only added to our knowledge of features that were already known. The scarcity of associated finds means that there is no potential to refine the chronological framework already established by the extensive radiocarbon programme carried out as part of the earlier phases of work. Equally, there is no potential to amend the functional interpretation of the various features. Therefore, no additional structural analysis is proposed.

#### ***Finds evidence***

6.1.4 The potential of the small finds assemblage is limited, as much of the material replicates elements of the larger assemblages from previous phases of fieldwork. Given the location of the Site within a complex of prehistoric activity, further publication might be warranted, and this could incorporate information on the prehistoric pottery and flint as presented here, although no finds are worthy of illustration. Beyond this, no further analysis is proposed for any of the finds categories.

#### ***Environmental evidence***

6.1.5 The charred plant remains and the sediments have been described and have no further potential. Due to the very low pollen concentrations present, any attempt to count a sufficient number of pollen grains for analysis would not be cost-effective. They therefore have little further potential.

### 6.2 Proposals for further work

6.2.1 There is no potential for further analysis of the stratigraphic, finds and environmental data retrieved during the Phase 3 Stages 1 and 2 fieldwork. However, the archaeological investigation of the Kingsborough Manor site has now reached a stage where various elements of the archaeological landscape can be drawn together in the form of an overview combining and summarising the results of previous publications (Allen *et al.* 2008, S. Stevens forthcoming), augmented by the Phase 3 results (Wessex Archaeology 2007), including site plans illustrating all features excavated to date. It is therefore proposed to produce a draft report for publication in a regional journal or other suitable means of publication.

6.2.2 A proposed synopsis for the publication report is outlined in **Table 7**

**Table 7: Report synopsis**

Section Heading	Pages (c. 700 words/ page)	Figures	Tables
<b>Summary</b>	0.25		-
<b>Introduction</b>			
<i>Project background (site location, topography, geology, methodology)</i>	0.5	1	
<i>Archaeological and Historical background</i>	0.5		
<b>Site description</b>			
<i>Introduction</i>	0.25		
<i>Neolithic</i>	1	1	
<i>Bronze Age</i>	1	1	
<i>Romano-British</i>	0.5		
<i>Saxon</i>	0.25		
<i>Medieval and later</i>	0.25		
<b>Finds Reports</b>			
<i>Pottery</i>	0.5		1
<i>Other finds</i>	0.5		
<b>Environmental Reports</b>			
<i>General overview</i>	0.5		1
<b>Discussion</b>	0.5		
<b>Acknowledgements</b>	0.25		
<b>Bibliography</b>	1		
<b>Totals (c. 13 pages)</b>	<b>7.75</b>	<b>3</b>	<b>2</b>

## 7 PUBLICATION PROGRAMME

### 7.1.1 Designated Project Team

7.1.2 The team consists entirely of internal Wessex Archaeology staff. Wessex Archaeology reserves the right to replace any member of the named team at its discretion. The project will be managed by Jörn Schuster, who will be responsible to the Head of Specialist Services.

7.1.3 The following staff and external specialists are provisionally scheduled for the programme:

Head of Specialist Services	Karen E Walker BA MPhil, MIFA
Post-Excavation Manager	Jörn Schuster MA Dr phil, MIFA
Senior Publications Manager	Julie P Gardiner BA PhD, FSA MIFA
Senior Project Officer Finds	Matthew Leivers BA PhD, AIFA
Senior Project Officer Environmental	Chris Stevens BSc PhD, MIFA

7.1.4 Further qualification details and experience of project team members will be provided if required.

## 7.2 Management Structure

- 7.2.1 Wessex Archaeology operates a project management system. The team will be headed by the Post-Excavation Manager, in this instance Jörn Schuster, who will assume ultimate responsibility for the implementation and execution of the Project Specification, and the achievement of performance targets, be they academic, budgetary, or scheduled.
- 7.2.2 The Post-Excavation Manager may delegate specific aspects of the project to other key staff, who both supervise others and have a direct input into the compilation of the report. They may also undertake direct liaison with external consultants and specialists who are contributing to the publication report, and the museum named as the recipient of the project archive. The Post-Excavation Manager will have a major input into the writing of the publication report. He will define and control the scope and form of the post-excavation programme.

## 7.3 Performance Monitoring and Quality Standards

- 7.3.1 The Project Manager is assisted by the Reports Manager, who will help to ensure that the report meets internal quality standards as defined in Wessex Archaeology's guidelines. The overall progress will be monitored internally by the Operations Director.

## 7.4 Work Programme

- 7.4.1 **Table 8** lists the main tasks required to achieve the project objectives and states the personnel required to achieve each task.

**Table 8:** Task list

Task	Staff	Scheduled Work
<b>Report preparation</b>		
Finds overview	M Leivers	1 d
Enviro overview	CJ Stevens	1 d
Background research	J Schuster	1 d
Site overview	J Schuster	0.5d
Discussion, synthesis, acknowledgements and bibliography	J Schuster	1 d
Site illustrations	Drawing Office	2 d
<b>Internal editing, final revisions, proof reading</b>	J Schuster	0.5d
	J Gardiner	0.5d
	M Leivers/C Stevens	0.5d
QA	KE Walker	0.5 d
Submit publication	J Schuster	
<b>Archive (combining all stages of work)</b>		
Final archive ordering/indexing	Archives Officer	3 d
Microfilm job-sheets/checking	Archives Officer	1 d
Microfilm preparation costs		Costs
Archive Storage Grant		Costs
Archive deposition	Archives Officer	1 d
Archive deposition car hire		Costs
Management	J Schuster	1 d

## **8 STORAGE AND CURATION**

### **8.1 Archive**

8.1.1 The project archive is currently held by Wessex Archaeology at its Salisbury office, under the project code **62621**. It comprises:

- two ringbinders containing paperwork and drawings;
- a collection of digital photographs;
- a collection of 35mm colour transparencies and 35mm monochrome film;
- two boxes of finds;
- a digital survey.

8.1.2 The complete archive, which will include finds and ecofacts, written, drawn and photographic records, etc. will be prepared following nationally recommended guidelines (SMA 1995).

### **8.2 Conservation**

8.2.1 No immediate conservation requirements were noted in the field and during assessment.

### **8.3 Storage**

8.3.1 The finds are currently stored in perforated polythene bags in two cardboard boxes, ordered by material type, following nationally recommended guidelines (Walker 1990).

### **8.4 Discard policy**

8.4.1 Wessex Archaeology follows the guidelines set out in *Selection, Retention and Dispersal* (SMA 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis.

8.4.2 The discard of environmental remains and samples follows the guidelines laid out in the 'Wessex Archaeology Archive Disposal Policy for Environmental Remains and Samples'. The archive policy conforms with nationally recommended guidelines (SMA 1993; 1995; English Heritage 2002) and is available upon request.

### **8.5 Museum**

8.5.1 The final destination of the project archive is uncertain as no appropriate repository has been identified. In due course, and once legal transfer of title has been obtained, this archive will be deposited for long-term curation, with the most appropriate regional museum. Final deposition of the finds with any museum or other repository will only be carried out with the full agreement of the landowner.

8.5.2 For final deposition it is proposed to combine this archive with the archives of previous archaeological investigations by Wessex Archaeology, including project codes 46792, 57170, 57171, 56930 and 62620–1.

## **8.6 Copyright**

- 8.6.1 The full copyright of the written/illustrative archive relating to the Site will be retained by Wessex Archaeology Ltd under the Copyright, Designs and Patents Act 1988 with all rights reserved. The recipient museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profitmaking, and conforms with the Copyright and Related Rights regulations 2003.
- 8.6.2 This report, and the archive generally, may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which we are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. You are reminded that you remain bound by the conditions of the Copyright, Designs and Patents Act 1988 with regard to multiple copying and electronic dissemination of the report.

## **8.7 Security copy**

- 8.7.1 In line with current best practice, on completion of the project a security copy of the paper records will be prepared, in the form of microfilm. The master jackets and one diazo copy will be submitted to the National Monument Record (English Heritage). A second diazo copy will be deposited with the paper records, and a third diazo copy will be retained by Wessex Archaeology.

## REFERENCES

- Allen M.J., Leivers M. and Ellis C., 2008, Neolithic Causewayed Enclosures and Later Prehistoric Farming: Duality, Imposition and the Role of Predecessors at Kingsborough, Isle of Sheppey, Kent, UK, *Proceedings of the Prehistoric Society* 74, 235–322
- Bennett, K. D., 1994, Annotated catalogue of pollen and pteridophyte spore types of the British Isles. Unpublished manuscript, University of Cambridge
- Bennett, K.D., Whittington, G. and Edwards, K.J., 1994, Recent plant nomenclatural changes and pollen morphology in the British Isles, *Quaternary Newsletter* 73, 1–6
- Bradley, R., Chowne, P., Cleal, R.M.J, Healy, F. and Kinnes, I., 1993, *Excavations on Redgate Hill, Hunstanton, Norfolk, and at Tattershall Thorpe, Lincolnshire*, East Anglian Archaeology Report 57. Dereham and Sleaford: Norfolk Museum Service and Heritage Trust of Lincolnshire
- Ellis, C. and Allen, M.J., 2008, The excavated evidence, in Allen M.J., Leivers M. and Ellis C., Neolithic Causewayed Enclosures and Later Prehistoric Farming: Duality, Imposition and the Role of Predecessors at Kingsborough, Isle of Sheppey, Kent, UK, *Proceedings of the Prehistoric Society* 74, 282–88
- English Heritage 2002, *Environmental Archaeology; a guide to theory and practice of methods, from sampling and recovery to post-excavation*. Swindon, Centre for Archaeology Guidelines
- Gallois, R.W., 1965. *British Regional Geology, the Wealden District*. NERCC Institute of Geological Sciences. London: HMSO
- Gent, H., 1983, Centralized Storage in Later Prehistoric Britain, *Proceedings of the Prehistoric Society* 49, 243–67
- Goodburn, R., 1978, Roman Britain in 1977: I Sites explored, *Britannia* 9, 403–72,
- Goudie, A.S. and Brunson, D., 1994, *The Environment of the British Isles: An Atlas*. Oxford: Clarendon Press
- Greig J., 1991, The British Isles, in W. van Zeist, K. Wasylikowa, K.-E. Behre (eds) *Progress in Old World Palaeoethnobotany*. Rotterdam, 229–334
- Grimm, E.C. 1991, *TILIA and TILIA.GRAPH*. Springfield: Illinois State Museum
- Hodgson, J.M., 1976, *Soil Survey Field Handbook*. Harpenden, Soil Survey Technical Monograph No. 5
- Macpherson-Grant, N., 1991, A re-appraisal of prehistoric pottery from Canterbury, *Canterbury's Archaeology 1990/1991*, 38–48
- Moore, P.D. and Webb, J.A., 1978, *An illustrated guide to pollen analysis*. London: Hodder and Stoughton.

- Moore, P.D., Webb, J.A. and Collinson, M.E., 1991. *Pollen analysis* Second edition. Oxford: Blackwell Scientific.
- Morris, E.L., 1994, *The Analysis of Pottery*, Wessex Archaeology Guideline 4, Salisbury
- Oxford Archaeology, 2004, Kingsborough Manor Phase 2 Stage 1, Eastchurch, Isle of Sheppey, Kent: Archaeological Evaluation Report. Oxford Archaeology, unpublished client report for CgMs Consulting Ltd.
- PCRG 1997, *The Study of Later Prehistoric Pottery: General policies and guidelines for analysis and publication*, Prehistoric Ceramics Research Group Occas. Paper 1/2 (revised edition)
- Pelling, R., 2003, Charred Plant Remains, pages 71-74 in Hutchings, P., Ritual and Riverside Settlement: A Multi-Period Site at Princes Road, Dartford, *Archaeologica Cantiana* 123, 41–79
- SMA 1993, *Selection, retention and dispersal of archaeological collections. Guidelines for England, Wales and Northern Ireland*, Society of Museum Archaeologists
- SMA 1995, *Towards an accessible archaeological archive*, Society of Museum Archaeologists
- Stace, C., 1997, *New flora of the British Isles*. 2nd Edition. Cambridge: Cambridge University Press
- Stevens, C.J., 2008, Cereal Agriculture and cremation activities, in Allen, M.J., Leivers, M., and Ellis, C., Neolithic Causewayed Enclosures and Later Prehistoric Farming: Duality, Imposition and the Role of Predecessors at Kingsborough, Isle of Sheppey, Kent, UK, *Proceedings of the Prehistoric Society* 74, 296–99
- Stevens, S., 2000, Archaeological investigations at Kingsborough Farm, Eastchurch, Isle of Sheppey, Kent, Post-excavation assessment and draft proposals for future work. Archaeology South-East, unpubl. client report, Proj. No. 1067
- Stevens, S., forthcoming, An Archaeological Investigation of land at Kingsborough Farm and Kingsborough Manor, Eastchurch, Isle of Sheppey, *Archaeologia Cantiana* forthcoming (Vol. 129)
- Walker, K., 1990, *Guidelines for the preparation of excavation archives for long-term storage*, UKIC Archaeology Section
- Wessex Archaeology, 2002, Kingsborough Manor Development, Eastchurch, Isle of Sheppey, Kent: Watching Briefs, Evaluation and Phase 1, Stage 2 Archaeological Excavation: Assessment Report on the Results of the Excavation including proposals for Post-Excavation Analysis and Publication, Unpubl client report Ref. 46792.

Wessex Archaeology, 2005a, Kingsborough Manor Phase 2 Stage 1, Eastchurch, Isle of Sheppey, Kent: Assessment of archaeological excavation results. Unpubl client report ref 57170.01 (October 2005)

Wessex Archaeology, 2005b, Kingsborough Manor Phase 2 Stage 2, Isle of Sheppey, Kent: Archaeological evaluation report. Unpubl client report ref 59630.01 (June 2005)

Wessex Archaeology, 2007, Kingsborough Manor Phase 3, Eastchurch, Isle of Sheppey, Kent: Archaeological excavation report. Unpubl client report ref 62620.01 (March 2007)

## APPENDIX 1: FEATURE LISTS

### Phase 3 Stage 1

Group	Cut or slot	Fills (+pot dating)	Description
	106	107	Undated bioturbation. >2.0x0.2m. 0.09m deep. Concave profile with diffuse edges.
	108	109	Undated bioturbation. 0.41m diameter. Circular in plan with diffuse boundaries.
	112	113	Undated depression containing hearth material. 0.88x0.23m. 0.11m deep. Irregular shape in plan. This is interpreted as being a natural depression containing a dumped deposit rather than a deliberate cut.
	114	115	Undated depression containing hearth material. 0.15m diameter. 0.15m deep. Sub-rounded in plan with shallow concave profile with diffuse boundaries. This is associated with 112 which is a similar type of feature.
	116	117	Undated depression. 0.55m in diameter. 0.12m deep. Sub-rounded in plan with moderate sloping sides and a concave profile.
	136	137	Undated depression. 0.33m in diameter. 0.19m deep. Circular in plan with steep sides and flat base. This is possibly a post-hole.
	138	139	Undated depression, probably bioturbation. 0.6m diameter. 0.07m deep. Sub-rounded in plan with shallow sloping sides and a concave profile.
145	101	102	Ditch group spanned Areas 1,2 and 5 over a length of 27.5m. It is on the same north north east – south south east orientation and very similar to medieval ditch group 271 in Area 2 and 414, a terminus to a ditch present in Area 5.
	110	111	
	142	143	
	411	412	
	416	417	
146	118	119	Cluster of stake-holes arranged in a 3.5m <sup>2</sup> grid. 140 is slightly off-set from grid but it is in immediate vicinity and is considered an associated feature. This arrangement is considered as being a prehistoric raised-floor structure, possibly a corn drier. The individual stake-holes ranged in size from 0.12m – 0.18m in diameter and 0.04m – 0.09m in depth.
	120	121	
	122	123	
	124	125	
	126	127	
	128	129	
	130	131	
	132	133	
	134	135	
	140	141	
	210	211	Undated stake-hole. 0.09m in diameter. 0.09m in depth. Circular in plan with steep sides and a conical profile. Abundance of charcoal in fill suggestive of <i>in situ</i> burning.
	212	213	Undated stake-hole. 0.07m in diameter. 0.07m deep. Circular in plan with steep sides and conical profile.
	214	215	Undated depression, possibly a post-pad. 0.2x0.17m. 0.04m deep. Oval-shaped in plan with shallow concave profile.
	218	219	Undated pit feature or ditch terminus. >0.86x0.38m. 0.2m deep. Steeply sloping slightly concave sides with slightly concave base dipping towards baulk.

Group	Cut or slot	Fills (+pot dating)	Description
	222	223	Undated pit feature. 0.45m diameter. 0.15m deep. Sub-rounded shape in plan with vertical sides and flat base in profile.
	224	225	Undated depression, possibly bioturbation. ). 0.5m in diameter. 0.14m deep. Sub-rounded shape in plan with steep-vertical sides and a shallow v-shaped profile.
	228	229	Undated possible post-hole. 0.2m in diameter and 0.05m deep. Sub-rounded shape in plan with moderate-steep sloping sides and a shallow concave base in profile.
	236	237	Undated depression. 0.5m in diameter. 0.14m deep. Sub-rounded shape in plan with moderate sloping sides and a shallow concave profile.
	242	243	Undated stake-hole. 0.18m in diameter. 0.14m deep. Sub-rounded shape in plan with steep-vertical sides and a deeply concave base in profile.
	244	245	Undated stake-hole. 0.2m in diameter. 0.15m deep. Sub-rounded shape in plan with steep-vertical sides and a deeply concave base in profile.
	259	260	Undated gully. >0.45x0.3m. 0.2m deep. Straight and parallel sided shape in plan. Steep flat sides and a narrow concave base in profile.
	261	262	Undated post-pad/hole. 0.2m in diameter. 0.05m deep. Sub-oval shape in plan with shallow sloping sides and a concave base in profile.
	263	264	Undated tree throw hollow. >1.5x1. 0.15m deep. Irregular shape with moderate-steep sloping sides and a shallow concave base in profile.
	268	269	Undated post-hole. 0.25m in diameter. 0.2m deep. Circular shape in plan. Gently sloping sides and narrow base in profile.
270	226	267	Undated small network of interconnecting drainage ditches only detected in Area 2. This feature encompassed three small ditches which converged into a single ditch orientated down the slope of the dry valley to the west. This must have been for drainage purposes.
	234	235	
	206	207	
	232	233	
	208	209	
	238	239	
	230	231	
271	204	205	
	240	241	Medieval boundary/drainage ditch. >33x0.8m. Straight and parallel sided shape in plan with slightly concave sides and a wide slightly concave base.
	247	246	
	248	249	
	266	267	
	253	252	
272	216	217	Undated stretch of ditch in area 3. >12x0.45m. 0.2m deep. Moderate-steep sloping sides in profile. Possible association with feature 218.
	220	211	
	250	251	
	331	332 (med)	Undated ditch/?tree throw hollow. >1.3x>0.6m. 0.29m deep. Slightly crescent shape in plan. Irregular sides and concave base with diffuse edges in profile.
333	302	303	Undated ditch. >11x0.42m. 0.25m deep. Straight and parallel

Group	Cut or slot	Fills (+pot dating)	Description
	306	307	sided shape in plan. Shallow concave sides with shallow concave base in profile.
334	310	311	Undated ditch. >11.8x0.31m. 0.05m deep. Straight and parallel sided in plan. Slightly concave sides and flat base in profile.
	313	314	
335	304	305	Undated ditch. >38.6x1m. 0.05m deep. Straight and parallel sided shape in plan with moderate-steep sloping sides and shallow concave-flat shaped base in profile.
	308	309	
	325	326	
336	315	316	Undated gully. 16x0.3. 0.04m deep. Straight and parallel sided shape in plan with shallow concave shaped profile.
	317	318	
337	319	320	Undated gully. 22.9x0.45. 0.08m deep. Straight and parallel sided shape in plan. Moderate sloping sides with slightly concave base.
	321	322	
	323	324	
338	327	328	Undated ditch. 4.6x0.3. 0.06m deep. Straight and parallel sided shape in plan. Shallow-moderate sloping sides and very shallow concave shape in profile.
	329	330	
400	403	404 (med)	Ditch/ gully. >1x0.45–0.7m. 0.1–0.16m deep.
	405	406	
	407	408 (LBA/EIA)	Undated tree throw hollow. 0.9m diameter. 0.65m deep. Irregular shape in plan with steep concave sides and concave base in profile.
	409	410	Undated depression. 0.4m diameter. 0.03m deep. Circular in plan with shallow concave sides and flat base in profile.
	414	415	Undated ditch terminus. >3.5x1.8m. 0.31m deep. Parallel sided with rounded end in plan. Shallow concave sides and a concave base in profile.
	420	421	Undated tree throw hollow. 1.2m in diameter. 0.34m deep. Irregular rounded shape in plan with concave sides and base.
	422	423	Undated depression with <i>in situ</i> burning. 0.51m in diameter. 0.03m deep. Circular in plan with very shallow concave profile.
	424	425	Undated tree throw hollow. 0.59x1.14m. 0.07m deep. Circular in plan with irregular concave sides and a flat base.
	426	427	Undated tree throw hollow. 1x0.5m. 0.27m deep. Irregular crescent –shape in plan with steeply concave sides and a concave base.
	428	429 (post med)	Post-medieval pit. <12x>4m. 1.2m deep. Sub-oval shape in plan with steep-vertical sloping sides and uneven base in profile. This was interpreted as being a possible backfilled quarry pit.
		430 (post med)	
		431	
		432	
		433	
		434	
		435	
	435	436	Undated depression. 4x0.48. 0.08m deep. Oval in plan with shallow concave sides and a slightly concave base in profile. This feature is probably bioturbation.
	437	438	Undated tree throw hollow. 1.12m in diameter. 0.04m deep. Irregular rounded shape in plan with shallow concave sides and a slightly concave base.
	440	441	Undated depression with <i>in situ</i> burning. 0.48m in diameter. 0.04m deep. Circular in plan with a shallow concave profile.

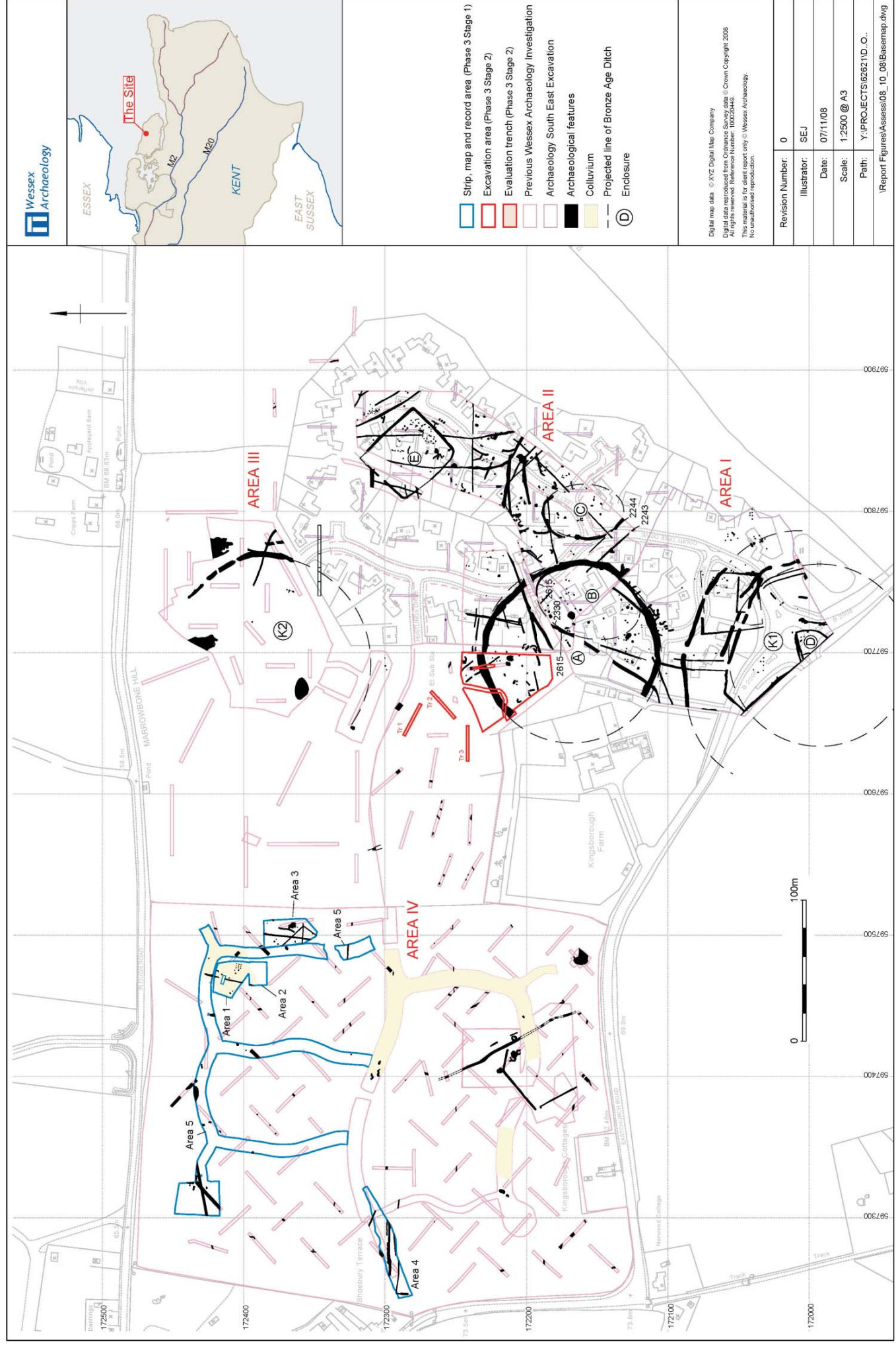
Group	Cut or slot	Fills (+pot dating)	Description
	443	444	Undated tree throw hollow. >1.3x1.3m. 0.3m deep. Irregular sub-oval shape with moderate-steep sloping sides and an irregular base.
	445	446	Undated tree throw hollow. 0.76x0.65m. 0.29m deep. Oval shape in plan with steep slightly convex sides and an irregular base.
		447	
		448	
		449	
		450	
	451	452	Undated bioturbation hollow. 0.8m in diameter. 0.12m deep. Sub-rounded shape in plan with moderate sloping sides and a shallow concave base.
	453	454 (med)	Undated pit feature. 2.4x>1.1m. 0.3m deep. Rectangular shape in plan with shallow concave sides and a flat base in profile.
	455	456	Undated tree throw hollow. >2.5x>1.3m. 0.18m deep. Irregular to sub oval in plan with gentle to moderate sloping sides and irregular shallow base.

**Phase 3 Stage 2**

Group	Cut or slot	Fills (+pot dating)	Description
	459	460, 461	Undated tree disturbance? 1.0m+ long. Only W end exposed. 0.7m wide and 0.3m deep with steep-sloping irregular sides and a concave base.
	462	463	Undated tree disturbance. Sub-oval. 1.2x0.6m. 0.15m deep with moderate-sloping irregular sides and a concave base.
	464	465	Undated tree disturbance. Sub-oval. 1.0x0.4m. 0.10m deep with steep-sloping concave sides and a slightly concave base.
	470	471	Undated posthole? Sub-circular. 0.40m diameter. 0.17m deep with steep-sloping sides and a concave base.
	484	485 (med)	Med cut. Sub-rectangular. 3.2x0.9m. 0.07m deep with steep-sloping sides and a flat base.
	486	487, 488	Med? cut. Sub-oval. 0.50x0.27m. 0.08m deep with moderate-sloping concave sides and a concave base. Darker coloured fill 488 contained a dump of animal bones.
	489	490	Undated tree disturbance. Sub-circular. 0.75m diameter and 0.07m deep with very shallow-sloping sides and an irregular base.

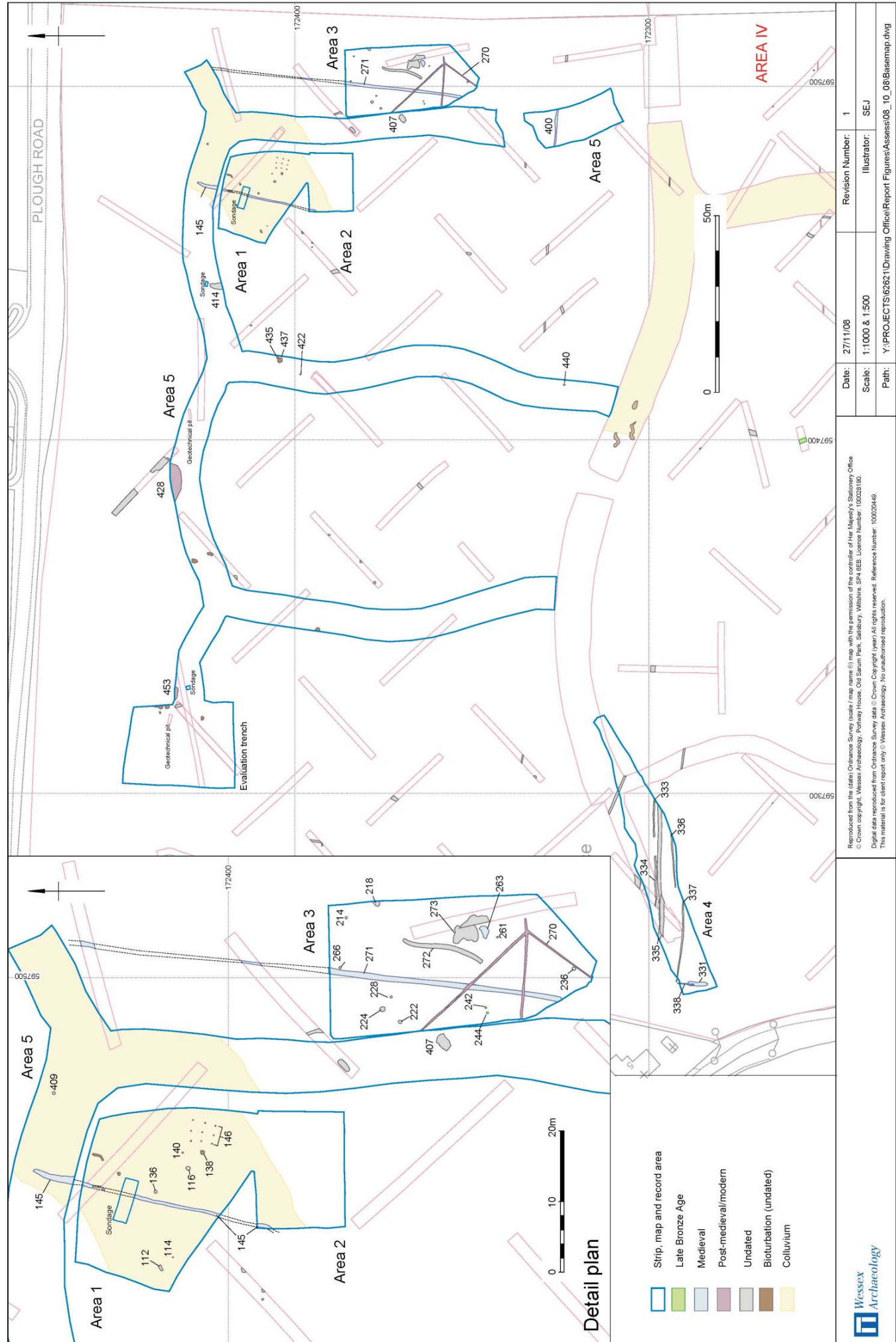
Group	Cut or slot	Fills (+pot dating)	Description
505	472	473, 596 (LBA/EIA), 597, 598, 599, 600, 601, 602 (LBA/EIA), 603, 604, 605, 606, 607 (LBA/EIA), 614	Part of a Bronze Age ringwork ditch situated on the crown of the hill. Complete ring diameter 120m with a 45m length on the northern part of the ring exposed on this excavation. 4.5-5.5m wide and 1.6m deep with steep-sloping sides and a flat base. There is sometimes a step in the slope of the outer side. There were broadly four episodes to the filling of the ditch that were noted in every slot: 1) mid orangey brown silty clay primary fills in the corners, 2) mix of mid orangey brown silty clay and discrete chunks of pale grey loess (up to 0.4x0.2m in the section) that fills the base of the ditch and is up to 0.6m thick. The loess is thought to be chunks of the existing land surface i.e. turf and topsoil, now purged of organic matter, that slumped in, possibly as a result of water action in the flooded ditch, 3) mid orangey brown clayey silt up to 0.7m thick, 4) dark brownish grey clayey silt top fill up to 0.4m thick and containing occasional Iron Age pottery. There was no definitive evidence for a bank on either side. The sparse pottery finds and lack of features suggest that there was no settlement on top of the hill. No entranceway has ever been found, it presumably lies in unexcavated ground to the West.
	483	491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504 (LBA/EIA)	
	506	515, 516, 517, 518, 519, 520, 521, 522, 523 (Lpreh), 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536	
	507	508, 509, 510, 511, 512, 513, 514, 561, 562, 563	
	537	538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558	
	574	575 (LBA/EIA), 576, 577, 578, 579, 581, 582, 583, 584, 585, 586, 587	
	617	618 (LBA/EIA)	
	566	567 (LBA/EIA)	LBA/EIA posthole. Sub-oval. 0.28x0.20m. 0.10m deep with steep-sloping sides and a concave base. Possibly paired with 573.
	573	572	LBA/EIA? posthole. Sub-oval. 0.28x0.24m. 0.10m deep with moderate-sloping sides and a narrow base. Possibly paired with 566.
	590	591	Undated tree disturbance. Sub-oval. 1.8x0.6m. 0.10m deep with shallow-sloping concave sides and an irregular base.
	592	593	Undated tree disturbance. Sub-oval. 2.8x1.1m. 0.35m deep with moderate-sloping irregular sides and an irregular base.
	608	609, 610	Possible Bronze Age cremation-related burial. Sub-circular. 0.36m diameter. 0.09m deep with moderate-sloping sides and a flat base.

Group	Cut or slot	Fills (+pot dating)	Description
	611	612 (LBA/EIA), 613	Possible Bronze Age cremation-related burial. Sub-circular. 0.32m diameter. 0.07m deep with moderate-sloping sides and a flat base.
621	559	560	Undated ditch. Aligned NW-SE. 11m+ long. Only SE end exposed. 1.0m wide and 0.23m deep with moderate-sloping concave sides and a slightly concave base.
	564	565	
622	481	482	Undated ditch. Aligned NW-SE. 5m+ long. Only SE end exposed. 0.75m wide and 0.18m deep with moderate-sloping sides and a slightly concave base.
623	570	571	Undated ditch. Aligned NW-SE. 4.5m+ long. SE end exposed, NW end cut by earlier evaluation trench. 0.50m wide and 0.11m deep with moderate-sloping sides and an irregular base.
	615	616 (LBA/EIA)	
624	466	467	Undated ditch. Aligned NW-SE. 6m+ long. NW end exposed, SE end cut by ring ditch 505. 0.55m wide and 0.13m deep with shallow-sloping sides and a concave base.
	479	480	
625	619	620	Undated ditch. Aligned NW-SE. 3.8m long. 0.55m wide and 0.10m deep with moderate-sloping sides and a flattish base.
626	568	569 (LBA/EIA)	Med? ditch. Aligned WSW-ENE. 3m+ long. Only E end exposed. 0.55m wide and 0.08m deep with moderate-sloping concave sides and a slightly concave base.
627	594	595 (LBA/EIA)	Med? ditch. Aligned SW-NE. 3.9m long. 0.55m wide and 0.13m deep with possible steep-sloping concave sides and a flat base. The cut was not certainly identified in the section.
628	474	475 (med)	Med ditch. Aligned WSW-ESE. 14m+ long. Only E end exposed. 0.70m wide and 0.20m deep with moderate-sloping concave sides and a concave base.
	476	477, 478 (med)	
629	457	458	Modern ditch. Aligned ESE-WNW. 7.5m+ long. Only W end exposed. 1.0m wide and 0.10m deep with very shallow-sloping sides and a concave base.
	468	469	
	630	631	Prehistoric tree hole. Sub-oval. 3.5x2.4x0.5m deep. Contained some worked flint.



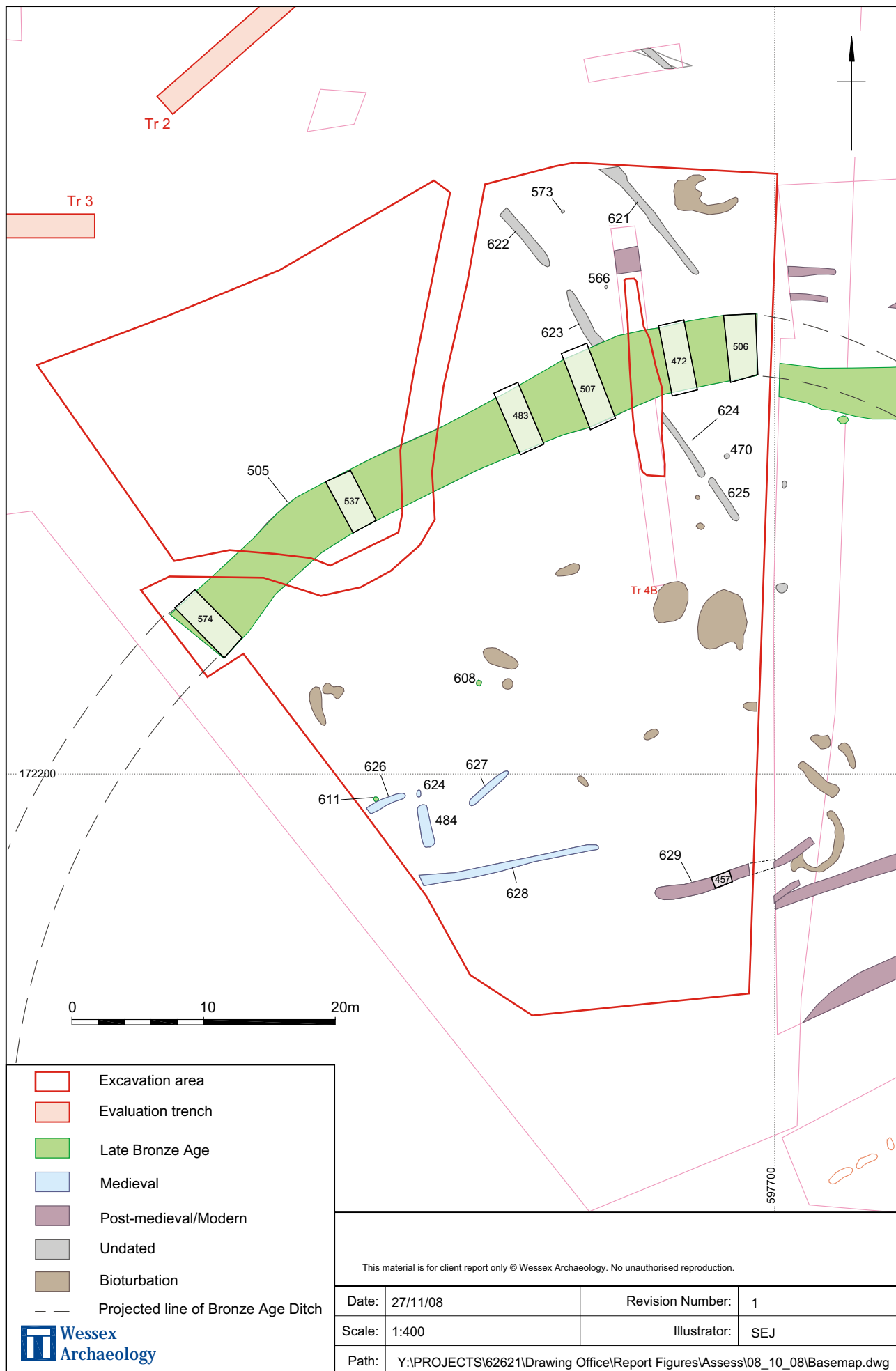
Site location showing phases of previous archaeological works

Figure 1



Plan of AREA IV strip, map and record with detail plan of east end. (Phase 3 Stage 1)

Figure 2



Plan of Phase 3 Stage 2 excavation area

Figure 3



Plate 1: Cut 506 in ringwork ditch 505, view to the west



Plate 2: Cut 537 in ringwork ditch 505, view to the east


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	Scale:	N/A	Illustrator: SEJ
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Plate 3: Cut 483 in ringwork ditch 505, view to the west



Plate 4: Cut 574 in ringwork ditch 505, view to the south-west



Plate 5: Chunks of loess in primary fill of ringwork ditch 505



Plate 6: Periglacial feature in side of cut 574 , view to the south-east



Plate 7: Cut 476 through medieval ditch 628

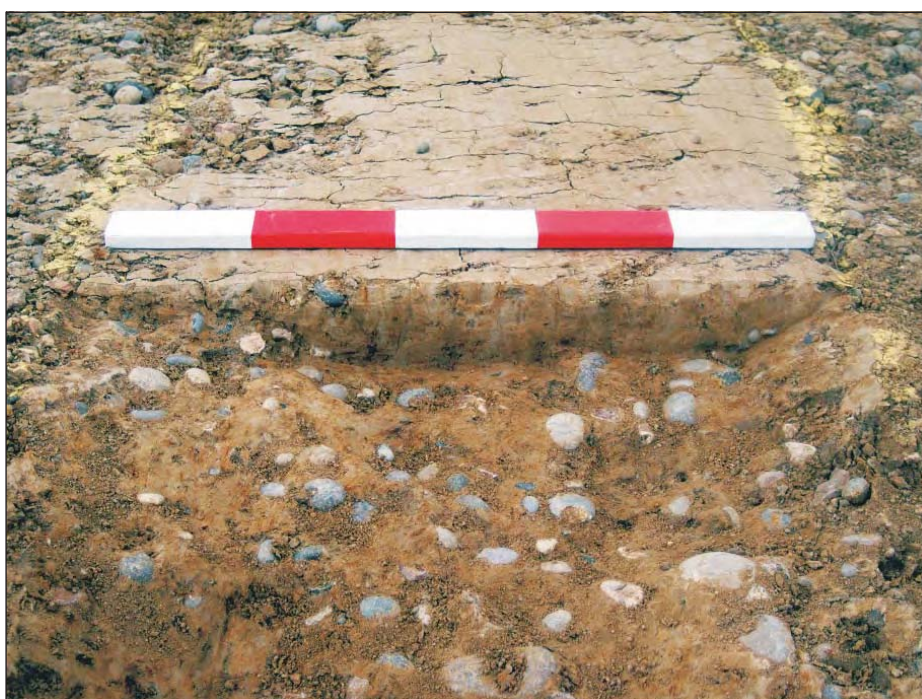



Plate 8: Cut 559 through undated ditch 621

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