Archaeological Excavation Report



Ref: 62620.01 March 2007

## **Archaeological Excavation Assessment Report**

Prepared on behalf of:
Jones Homes (Southern) Ltd
3 White Oak Square
Swanley
Kent
BR8 7AG

Through:

CgMs Consulting Morley House 26 Holborn Viaduct London EC1A 2AT

By:

Wessex Archaeology Portway House Old Sarum Park Salisbury Wiltshire SP4 6EB

Report reference: 62620.1

March 2007

## **Archaeological Excavation Assessment Report**

## **Contents**

		mmaryknowledgements	
1	IN'	TRODUCTION	1
	1.1	PROJECT BACKGROUND	1
	1.2	SITE LOCATION AND DESCRIPTION	1
	1.3	Archaeological Background	2
2	AI	MS AND OBJECTIVES	3
3	MI	ETHODOLOGY	3
	3.1	HEALTH AND SAFETY	3
	3.2	Fieldwork	3
4	RF	ESULTS	4
	4.1	SOILS AND GEOLOGY	4
	4.2	LATE BRONZE AGE OR EARLIER FEATURES (BEFORE C. 700 BC)	
	4.3	Late Bronze Age features ( <i>c</i> . 1100 - 700 BC)	5
	4.4	ROMAN FEATURES (AD 43 – 410)	
	4.5	SAXON FEATURES (AD 410 – 1066)	
	4.6	POST-MEDIEVAL AND MODERN FEATURES (LATER THAN AD 1500)	
	4.7	Undated features	7
5	FII	NDS	7
	5.2	Prehistoric	7
	5.3	ROMAN	
	5.4	SAXON	8
	5.5	Undated	8
6	PA	ALAEO-ENVIRONMENTAL EVIDENCE	8
	6.1	FEATURES SAMPLED	8
	6.2	ASSESSMENT RESULTS; METHODS AND DATA	8
		E 10.3 ASSESSMENT OF THE CHARRED PLANT REMAINS AND CHARCOAL	
	6.3	IMPLICATIONS OF RESULTS	9
7	DI	SCUSSION	10
8	RF	EFERENCES	12
9	ST	ATEMENT OF POTENTIAL	13
	9.1	STRATEGRAPHIC ASSESSMENT	13
	9.2	POTENTIAL AND FURTHER RECOMMENDATIONS FOR FINDS	
	9.3	PALAEO-ENVIRONMENTAL POTENTIAL	
10	) PU	UBLICATION AND ARCHIVING PROPOSAL	13
	10.1	Publication	
	10.1	Archiving	
12		THOD STATEMENT FOR FINDS	
		TASK LIST	15
	14 1	LASK LIST	15

14.2 PER	SONNEL	,
Nominate	d Wessex Archaeology Personnel16	6
14.3 PRO	GRAMME	,
1 APPEND	IX1	
LIST OF FEAT	TURES	
ILLUSTRA	ΓIONS	
Cover	Saxon ditch 155 with a dump of shellfish. Looking north-west.	
Figure 1	Site location plan showing all phases of previous work.	
Figure 2	Site layout showing areas stripped and features revealed.	
Figure 3	Cross-sections of ditches 150, 151, 152, 153, 154 and 155.	
Plate 1	Roman tile with dog paw print.	
Back cover	Roman ditch 151 under excavation. Looking north-west.	

### **Archaeological Excavation Assessment Report**

#### **Summary**

Farmland at Kingsborough Manor was investigated archaeologically by Wessex Archaeology prior to further housing development. This was part of an ongoing programme of works. The site was centred on NGR 597380 172250 and was located 1km from the shoreline on the north side of the Isle of Sheppey and 2km north-west of Eastchurch. The site was a gently sloping field running down to the north towards the coast and to the east to a small dry valley. The sea was visible in the distance.

Three areas were stripped of ploughsoil: a 40 by 40 metre square, an irregular area under what is to be plot 142 and the footprint of the road that will serve the estate. The road was generally ten metres wide although where planned to be cycle and footway it was only six metres wide. The ploughsoil was approximately 0.3 metres deep and its removal revealed natural silty clay on the west side of the site and hillwash predominantly on the lower eastern side of the site. The hillwash was not removed as it was to remain beneath the road construction.

The archaeological features revealed included:

- Two Late Bronze Age ditches
- Two Roman ditches. One respected a tree hole containing Saxon pottery
- A Saxon ditch that contained a dump of shellfish
- An undated ditch
- Traces of thirteen tree holes, many of probable prehistoric date
- Hillwash covering the lower slopes contained both Bronze Age and Saxon pottery

The fieldwork discussed in this report was carried out in two phases, March to April and June 2006.

The excavations confirmed the findings of an evaluation undertaken in 2005; that the prehistoric ceremonial landscape identified on the eastern scarp of the dry valley at Kingsborough Manor is not repeated on the western scarp. Instead there is evidence of non-intensive farming activity during the Bronze Age, Roman and Anglo-Saxon periods. It is possible that an Anglo-Saxon settlement was focused beyond the immediate development area in the locality of The Mount to the north-west.

### **Archaeological Excavation Assessment Report**

#### **Acknowledgements**

Wessex Archaeology is grateful to Rob Bourn of CgMs Consulting for commissioning the work on behalf of Jones Homes (Southern) Ltd. and to Jim Ridley of Jones Homes for practical co-operation on the site. The advice of Simon Mason and Casper Johnson of Kent County Council is also gratefully acknowledged.

The fieldwork was carried out by David Godden, Steve George and Paul Cooke. The finds were assessed by Lorraine Mepham, the palaeo-environmental samples by Dr Chris J. Stevens and the illustrations were prepared by Linda Coleman. This report was compiled by David Godden. The project was managed by Richard Greatorex, who also edited this report.

### **Archaeological Excavation Assessment Report**

#### 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 excavations in advance of further housing development at Kingsborough Manor, Eastchurch on the Isle of Sheppey, Kent. This part of the development was centred on National Grid Reference (NGR) 597380 172250 and is hereafter referred to as the Site.
- 1.1.2 In line with PPG16, planning consent was granted by Kent County Council (K.C.C.) and Swale District Council with a condition requiring an archaeological evaluation to be followed by mitigation, excavation and and reporting of the evaluation produced positive results.
- 1.1.3 An archaeological evaluation, consisting of 94 trial trenches, took place in April 2005.
- 1.1.4 The first mitigation (excavation) fieldwork phase took place between the 20<sup>th</sup> of March and the 7<sup>th</sup> of April 2006.
- 1.1.5 In order to gather more information on the features revealed, additional fieldwork was carried out (on the instruction of K.C.C.) between the 19<sup>th</sup> and 29<sup>th</sup> of June 2006.

#### 1.2 Site Location and Description

- 1.2.1 The Site lay approximately 2km to the north-west of Eastchurch and was located in the west part of Kingsborough Farm, Eastchurch Road, Sheppey, Kent. It was centred on NGR 597380 172250 (see **Figure 1**).
- 1.2.2 The Site was approximately square in plan, measured 300 by 300 metres and covered an area of 9 hectares. It was bounded by Eastchurch Road on the south and west sides and Plough Road to the north. The east side was bounded by a line of tall trees in a dry valley just to the west of a paddock close to the buildings of Kingsborough Farm.
- 1.2.3 The Site slopes gently down from the south-west (at 72m above Ordnance Datum (aOD)) to the north-east (at 63m aOD) in which direction the sea is visible. The hill to the east, where a Neolithic interrupted causwayed enclosure was identified in earlier phases of the development is separated from the present Site by a shallow dry valley aligned north to south along which a line of tall poplar trees grow.
- 1.2.4 The natural geology of the Site revealed during machine stripping comprised for the most part a silt/clay. Sheet 272 of the Geological Survey of Great

- Britain (England and Wales) marks the geology as Bagshot sands on Claygate sands and clays.
- 1.2.5 At the time of the excavation the Site was a large grass/bramble-covered field.

#### 1.3 Archaeological Background

- 1.3.1 Kingsborough Manor is located on the second highest hill on the Isle of Sheppey. 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. Prior to the investigations of **Phase 1** of the development, little was known of the archaeology of the immediate vicinity. However, subsequent to these investigations, it is clear that the Site lies within an extensive prehistoric landscape, large parts of which appear to have been essentially devoted to ritual and mortuary activities.
- 1.3.2 **Phase 1** of the Kingsborough Manor development was subject to archaeological evaluation trenching and two large excavations. The **Phase 1**, **Stage I** excavation by Archaeology South-East, located towards the southern end of the development, revealed part of a previously unsuspected Neolithic causewayed enclosure, a Late Bronze Age enclosure containing cremation or pyre refuse pits, post holes and various Roman and medieval features (see Figure 1).
- 1.3.3 Wessex Archaeology undertook further evaluation of the causewayed enclosure and further excavation to the north of the Archaeology South-East investigations, ahead of the construction of **Phase 1 Stage II** of the development. The investigations by Wessex Archaeology revealed further remains of the Late Bronze Age enclosure, three more Late Bronze Age enclosures further to the north associated with a small cemetery, four post granary structures, fences and pits which may have been associated with ritual activities.
- 1.3.4 Middle Iron Age and Late Iron Age/Roman droveways or boundaries, later Saxon and Medieval boundaries were recorded. These are all indicative of agricultural usage during these periods.
- 1.3.5 Oxford Archaeology undertook an evaluation of the **Phase 2 Stage I** area during which Neolithic artefacts, Bronze Age and Iron Age settlement features were recorded. Wessex Archaeology subsequently undertook the excavation and a second Neolithic causwayed enclosure was recorded occupying the plateau overlooking the dry valley to the west and with views across the Thames Estuary to the north.
- 1.3.6 In 2005 Wessex Archaeology undertook an evaluation of the Phase 2 Stage II development area located in the western part of Kingsborough Manor. Located on the western scarp of a dry valley, the results revealed low scale agricultural activity spanning the Bronze Age, Roman, Anglo-Saxon and Post-medieval periods.

#### 2 AIMS AND OBJECTIVES

- 2.1.1 The general aims of the excavation were to establish the extent, date, character and condition of any surviving archaeological remains.
- 2.1.2 In particular a square area incorporating the north-west end of evaluation **Trench 31** was to be stripped of ploughsoil to further investigate the area around a feature at the north-west end of the trench from which Saxon pottery had been recovered (see **Figure 2**).
- 2.1.3 An area to the north of evaluation **Trench 34** was to be stripped to further investigate several ditches found in that trench, one of which contained a small amount of Iron Age and Saxon pottery (see **Figure 2**).
- 2.1.4 The proposed **Phase 3** road layout was also to be stripped and monitored to assess any wider distribution and density of features (see **Figure 2**).

#### 3 METHODOLOGY

#### 3.1 Health and Safety

- 3.1.1 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.
- 3.1.2 A risk assessment was prepared by Wessex Archaeology before the start of the fieldwork.

#### 3.2 Fieldwork

3.2.1 All fieldwork was carried out in accordance with the Institute of Field Archaeologists' Standard and Guidance for Archaeological Field Evaluations (as amended 1999).

#### Ploughsoil stripping March and April 2006

- 3.2.2 The stripping of the ploughsoil and subsoil/colluvium (hillwash) was done by a 360 degree tracked excavator equipped with a toothless ditching bucket and under constant archaeological supervision. The ploughsoil and colluvium were removed by dumpers to two separate stockpiles located to the north of the Site.
- 3.2.3 The 40 by 40m square area incorporating the end of evaluation **Trench 31** was stripped of ploughsoil first. It then became apparent that there remained colluvium lying on the eastern third of the area. This was then removed revealing the natural silt/clay beneath.
- 3.2.4 The area to north of Evaluation **Trench 34**, called **Plot 142**, was then stripped of ploughsoil. There was no colluvium in this part of the Site.
- 3.2.5 The outline of the road (without the northern loop) was then stripped of ploughsoil. This was generally six or ten metres wide depending on whether it was designed for pedestrians or vehicles. The outline of the road strip was very approximately rectangular and measured 200m east to west and 100m north to south. The construction depth of the road was approximately 300mm

which coincided with the depth of the ploughsoil. The colluvium that lay underneath in places was not removed.

#### Ploughsoil stripping June 2006

- 3.2.6 The area stripped of ploughsoil was increased to include an approximately rectangular shaped block immediately south of the original 40 by 40m square area. This new stripped area eventually measured approximately 80 by 35m and incorporated the previously stripped area called **Plot 142** within it. The ploughsoil was removed by dumper and stockpiled on the southern border of the Site.
- 3.2.7 This newly stripped area was then extended further west to confirm the western extent of ditches 150 and 151 and to investigate the nature of a feature seen in evaluation **Trench 35**.
- 3.2.8 In the south-east corner of the Site three slots were cut by machine through the colluvium down to the natural bedrock to confirm the suspected course of Bronze Age ditch **152** (see **Figure 2**). A slot was cut through the ploughsoil by machine ten metres north of the main stripped area to confirm the northerly course of ditch **152**.
- 3.2.9 An additional 4 by 4m slot was cut by machine through the colluvim midway along evaluation **Trench 33** in order to confirm the nature of a feature recorded during the 2005 evaluation.

#### The recording of the features

- 3.2.10 The archaeological features were hand-excavated. Slots were cut in the ditches to reveal the profile and to recover dating material. Most tree holes were partially excavated to confirm their nature and also to recover dating material.
- 3.2.11 Archaeological features were drawn and described using Wessex Archaeology *pro forma* recording sheets. A photographic record of 35mm colour and monochrome film was made and additional digital photographs were taken.
- 3.2.12 A digital survey using a GPS system was taken. This recorded the edges of the stripped area, the area covered with hillwash, the outline of features and the positions of sections through features.
- 3.2.13 The spoil heaps were inspected for finds.

#### 4 RESULTS

#### 4.1 Soils and Geology

- 4.1.1 The general geological sequence was:
  - 0.30m of mid greyish brown ploughsoil **100** covered with grass.
  - Mid orangey brown silty clay colluvium **101**. This was only present on the eastern part of the Site on the ground sloping down to the dry river valley where it was up to 0.8m deep. There was also a presumably shallow area of colluvium towards the south-west where there was a

- shallow dip in the topography. The colluvium contained mainly Late Bronze Age pottery but also included some Anglo-Saxon sherds.
- Natural mid orangey brown silt/clay **102** containing very occasional flint pebbles. The natural was varied and included large patches where it contained frequent pebbles and other large patches where it was of a smoother paler yellow clay containing very occasional flint pebbles.

#### 4.2 Late Bronze Age or earlier features (before c. 700 BC)

- 4.2.1 Tree hole **160** is cut by Late Bronze Age ditch **152** and so can be dated to the Late Bronze Age or earlier. It had a pale sterile fill.
- 4.2.2 The group of tree holes **120**, **122**, **127** and **159** had pale sterile fills similar to **160** which is Bronze Age or earlier in date. Tree throws **137** and **139** located 100 metres further west had similar pale fills. On this basis they have all been tentatively dated to that same period.
- 4.2.3 Tree hole **176** was originally partly exposed in evaluation **Trench 33** where it was mistaken for the end of a small ditch. It was covered with colluvium **101** and so dated to the Bronze Age or earlier.

#### 4.3 Late Bronze Age features (*c*. 1100 - 700 BC)

- 4.3.1 Two parallel ditches, aligned north-north-west to south-south-east were identified five metres apart. The larger and westernmost of the ditches, 152, was 1.4 metres wide and 0.55 metres deep with an asymmetrical profile that suggested a recut had deepened the feature on the eastern side although this could not be completely traced in the section (see Figure 3). In fact the ditch was so difficult to see that a machine slot was cut through it and the vertical edge allowed to weather before the profile was drawn. Most of the southern part of the ditch was covered by colluvium 101 but it appeared again in the south-east corner where the colluvium ran out. Three machine-cut slots were made through the colluvium down to the natural ground below to confirm the course of the ditch. The section in slot 163 at the southernmost end of ditch showed a similar asymmetrical profile to that which had already been noted in slot 129.
- 4.3.2 A further machine-cut slot was made through the ploughsoil ten metres north of the main stripped area. This confirmed the continuation northwards of ditch **152** and showed it to be at least 100 metres long. Evaluation **Trench 28** may show a further northern extension if the ditch then bends to the northeast. This was seen and surveyed when the trench was originally stripped although it had faded to invisibility by the time the features came to be investigated and hence it was not recorded in the context records.
- 4.3.3 Smaller ditch **153** ran parallel to and five metres north east of ditch **152**. This smaller ditch was 0.6 metres wide and 0.3 metres deep with a steep-sloping U-shaped profile (see **Figure 3**). It was also very difficult to see. Two lengths could be traced which may have been part of the same feature. The ditch could not be traced in an exploratory slot that was cut approximately ten metres further north.
- 4.3.4 Ditches **152** and **153** together with probable tree hole **176** were the only features stratigraphically sealed by the colluvium in this part of the Site.

4.3.5 Ditch **152** was not seen in evaluation **Trench 24**. A feature at its north-east end was thought to be natural and does not line up correctly with the ditch. It is however entirely possible that the ditch was missed simply because of its indistinct nature.

#### 4.4 Roman features (AD 43 – 410)

- 4.4.1 The dogleg shaped ditch (150) and the straight ditch 151 (see back cover) together formed parts of a Roman field boundary with a three metre wide entrance on the western side (see Figure 2). The ditch was an average of one metre wide but the depth varied from nearly 0.5 metres at the southern end of 151 to 0.2 metres at the eastern end of 150 where it may have been more truncated (see Figure 3). The eastern part of 150 was very difficult to see and its eastern end was uncertain. The change in direction of 150 seemed to respect tree position marked by tree throw 107 which, contained Saxon pottery (see below).
- 4.4.2 Several pieces of Saxon pottery (two from the evaluation phase and a further piece during further excavation) were recovered from tree hole 107, which was located where Roman ditch 150 changed direction. It also contained fragments of fired clay, some worked flint, two pieces of prehistoric pottery and a larger piece of iron slag. The tree would appear to have been extant during the Romano-British period since the Romano-British ditch 150 respects its position. The incorporation of Saxon material in the tree throw suggests the tree survived into the latter period before its eventual collapse.
- 4.4.3 Tree hole **172** lay near the south-west end of Roman ditch **150**. Although it was undated its position suggests the tree was part of the Roman landscape. The line of ditch **150** would have been just to the south-east of the trees that grew at **172** and **107** which could have been used for the original setting out of this ditch.
- 4.4.4 There was a group of recuts of ditches with similar alignments to the Roman ones above in evaluation **Trench 34** but it cannot be said which one if any is a southern continuation of ditch **151**. The area of **Trench 34** was not excavated because it lay outside the immediate development impact footprint.

#### 4.5 Saxon features (AD 410 – 1066)

4.5.1 The west-north-west to east-south-east aligned ditch 155 in the north-western corner of the Site dated to the Saxon period (see Figure 2). It was 0.6 metres wide and 0.6 metres deep with a noticeably steep-sloping V-shaped profile (see Figure 3). It contained a large dump of shellfish including mussels, oysters and whelks that had been thrown into the ditch from the northern side (see Cover).

#### 4.6 Post-medieval and modern features (later than AD 1500)

4.6.1 An area around evaluation **Trench 35** was stripped of topsoil in order to further investigate a feature identified in the evaluation. It proved to be a modern disturbance, possibly a tree throw that had a dark-coloured fill containing some pieces of clinker. It was not further investigated.

4.6.2 Tree throws **156**, **157** and **158** lying on the northern part of the stripped course of the road contained darker fills and two of the three lay above the hillwash. They were probably of modern date.

#### 4.7 Undated features

4.7.1 The east to west aligned ditch **154** was just visible in two places where the road area had been stripped in the north-western part of the Site. It was 0.5 metres wide and 0.15 metres deep with a shallow concave profile (see **Figure 3**). One iron nail was recovered from it. The profile shape and its pale, difficult to see fill suggested that it was a pre-modern feature.

#### 5 FINDS

5.1.1 The **Phase 3** excavation produced a small quantity of finds in a restricted range of material types. The assemblage is chronologically mixed, including material of prehistoric, Romano-British and Saxon date. The finds have been quantified by material type within each context (see **Table 10.2** below).

**Table 10.2** List of all finds by context (number / weight in grammes)

Context	Fired Clay	Worked Flint	Prehist pottery	Roman pottery	Saxon pottery	Other Finds
101	23/78	14/94	21/43	pottery	3/7	2 burnt flint
104	20,70	2.,,,	1/7			2 0 0,1110 11110
106			4/7			
108	3/4	6/104	2/2		1/11	381g slag
110		1/6	3/6	1/2		4 stone
111				5/8		
113			1/1			1 CBM*
119			1/5	1/6		
142						1 iron
146					1/62	
162						1 iron
166		5/138				1 burnt flint
168		1/18	(4/14)			
175					3/14	
TOTAL	26/82	27/360	37/85	7/16	8/94	

<sup>\*</sup>CBM = ceramic building material

#### 5.2 Prehistoric

- 5.2.1 Prehistoric material comprises 27 pieces of worked flint (flakes and cores) and 37 sherds of pottery. The flint includes a mixture of raw materials, some good quality black flint (including at least two pieces of Bullhead flint) alongside more cherty material. None of the flakes or cores is chronologically distinctive, and this small group is dated broadly as Neolithic/Bronze Age.
- 5.2.2 The pottery sherds are nearly all in flint-tempered fabrics, mostly coarse but with two very finely tempered sherds from tree hole **107**. There are two grog-tempered sherds, and eight in probable calcareous (shelly?) fabrics, now heavily leached. Sherds are small, undiagnostic and most are heavily abraded

(mean sherd weight for this small group is just over 2g). The coarser flint-tempered fabrics are typical of Late Bronze Age ceramics in southern England, although the use of flint tempering continued in Kent well into the 1<sup>st</sup> millennium BC, as did grog and calcareous temper.

#### 5.3 Roman

- 5.3.1 Seven sherds of pottery are of Romano-British date, as well as a single piece of ceramic building material, a tile fragment bearing an animal paw print (**Plate 1**). Like the prehistoric sherds these are all highly abraded, particularly five tiny sherds of a fine, oxidised ware from ditch **151** (fill **111**), possibly originally a colour coated ware. None of these sherds are more closely datable.
- 5.3.2 Fragments of lava quernstone from ditch **151** (fill **110**) may be Roman, or could equally well be Saxon.

#### 5.4 Saxon

5.4.1 Saxon material comprises eight pottery sherds, seven organic-tempered (from hillwash 101, tree holes 107 and 174) and one sandy greyware, possibly a continental import (ditch 155; fill 146).

#### 5.5 Undated

5.5.1 Some small, heavily abraded fragments of poorly fired clay, possibly hearth lining, came from hillwash deposit **101**. A further three small fragments from tree hole **107** are likewise undated, as is a piece of iron smithing slag, possibly part of a hearth bottom, from the same context. Two iron nails (ditch **155**, fill **142**; ditch **154**, fill **162**) are Roman or later.

#### 6 PALAEO-ENVIRONMENTAL EVIDENCE

#### 6.1 Features sampled

- 6.1.1 Two 20 litre samples were taken for the recovery and assessment of environmental data:
  - Roman ditch 150 (from fill 104)
  - Saxon ditch **155** (from fill **146**)

#### 6.2 Assessment results; methods and data

6.2.1 Bulk samples were processed by standard flotation methods; the flot retained on a 0.5 mm mesh, residues fractionated into 5.6 mm, 2mm and 1mm fractions and dried. The coarse fractions (>5.6 mm) were sorted, weighed and discarded. Flots were scanned under a x10 - x40 stereo-binocular microscope and the presence of charred remains quantified (see **Table 10.3**) in order to present data to record the preservation and nature of the charred plant and charcoal remains. Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997).

#### **Flots**

- 6.2.2 The flot from **104** comprised mainly root material that may be indicative of stratigraphic movement, reworking or the degree of contamination by later intrusive elements.
- 6.2.3 The flot from Saxon ditch fill **146** comprised almost entirely of degraded shell of mussel (*Mytilus edulis*). The flot also included spines from Thornback ray (*Raja clavata*) and some eight fish vertebrae some of which are quite large and assumingly could be of this same species. Some charred material including poorly preserved cereal grains were present.

#### Charred plant remains

6.2.4 The sample from Roman ditch fill **104** contained no cereal or other charred macroscopic remains. The sample from Saxon ditch fill **146** contained approximately fifty cereal grains. These were poorly preserved, but both free-threshing wheat (*Triticum aestivum sl*) and barley (*Hordeum vulgare sl*), could be identified. The grains were in approximately equal proportions, no rye or cereal chaff was seen and the only other identified remain was a single seed of cleavers (*Galium aparine*). The cereal remains are consistent with a Saxon date (cf. Greig 1985) and other Saxon sites in the region, such as Kingsborough Manor itself (Wessex Archaeology 2002; 2005a) and Cliffs End, Ramsgate (Wessex Archaeology 2005b), although such remains also occur on later medieval and post-medieval settlements.

#### Charcoal

6.2.5 Charcoal was noted in the flots of the samples. Only a few fragments of wood charcoal were recovered from **104**, while that from **146** contained a few larger but degraded wood charcoal fragments.

**Table 10.3** Assessment of the charred plant remains and charcoal

								Flot				Residue
Feature	Context	Sample	Size	Flotsiz	æ	Grain	Chaff	Weed seeds	Weed	Charcoal	Other	Charcoal
		No.	litres	ml				uncharred	seeds	>5.6mm		>5.6mm
									charred			
Roman Ditch 150	104	1	20	60	100	-	-	-	-	-	-	-
Saxon Ditch 155	146	2	20	250	20	A*	-	-	С	В	marine shell A*** Fish (A) - ear	-

KEY:  $A^{**}$  = exceptional,  $A^{*}$  = 30+ items, A =  $\geq$ 10 items, B = 9 - 5 items, C = < 5 items, h = hazelnuts, smb = small mammal bones; Moll-t = terrestrial molluscs Moll-f = freshwater molluscs

NOTE: 1 flot is total, but flot in superscript = ml of rooty material.

#### 6.3 Implications of results

- 6.3.1 The assemblage from the Roman ditch **150** contained very little charred material and no cereal remains. Such an assemblage is consistent with the feature being a field ditch located away from occupation or settlement areas that produce charred material.
- 6.3.2 The sample from Saxon ditch **155** contained high quantities of degraded mussel shell, high quantities of charred grains of both free-threshing wheat

and barley and several fish vertebrae including a spine of thornback ray. Such remains are consistent with activities surrounding food production and consumption and are probably associated with a settlement. They are also similar in their composition of environmental remains to assemblages seen within Middle Saxon pits from Cliffs End, Ramsgate (Wessex Archaeology 2005b).

#### 7 DISCUSSION

- 7.1.1 Most of the features or at least parts of them were unusually difficult to see on the surface of the stripped natural ground or in section. This has been a characteristic of all of the archaeological work that has been carried out during the course of the development on this Site. It can be seen that ditches 150 and 152 were not noted in the smaller stripped areas at the evaluation trench stage.
- 7.1.2 The relatively sterile fills of the features in the main stripped area suggest low level activity associated with farm land that has no habitation in the immediate vicinity.

#### Late Bronze Age

7.1.3 Bronze Age ditch **152** was a field or property boundary that approximately followed the 67.5m aOD contour across the gentle slope of the Site. The ditch was traced in a machine slot ten metres north of the main stripped area. If it is assumed that it may have turned towards the north-east, a ditch of similar description was identified in evaluation **Trench 28**. Although difficult to discern, the cross-section of the ditch in slots **129** and **163** was deeper on the eastern side, perhaps evidence of a recut which might in turn suggest that originally there was a bank on the western side. One would expect a recut to be made from the side with the flat ground. There were, in addition, faint traces of a parallel ditch **153** running five metres (centre to centre) to the east. Together they could have formed a trackway/droveway with a width of approximately 3.5 metres at ground level.

#### Roman

- 7.1.4 Contemporary ditches **150** and **151** were dated to the Roman period on the basis of just a few pieces of pottery. Although small and abraded, the pottery was found in two places, slots **109** and **118**. Surprisingly, although Roman pottery is characteristically more durable than either prehistoric or Saxon and survives better in the ground there was none recovered from colluvium **101**. This suggests minimal farming activity was the regime, rather than more intensive practices such as manuring the fields and may point to the fields being used for animal grazing rather than as arable land.
- 7.1.5 It was considered possible by the KCC monitor, that Roman ditches **150** and **151** formed part of a hexagonal boundary respecting and re-using the parallel Bronze Age ditches and might have had a non-agricultural usage. However since the ditches extended beyond the area of investigation it was not possible to trace their alignment and extent any further.
- 7.1.6 It should be noted however that there was no sign of features or central structure within the enclosure which might have suggested an alternative

- usage and the ditches themselves were clearly almost totally devoid of finds, which would appear to suggest that they represent no more than standard field/enclosure boundaries.
- 7.1.7 The original setting out of ditch **150** may have been dictated by the location of pre-existing trees, later identifiable by their tree throws **107** and **172**.
- 7.1.8 The eastern end of ditch **150** could not be discerned. It was already very hard to see so it is possible that it did continue unseen further eastwards but on the other hand it may have used a still extant bank on the west of Late Bronze Age ditch **152** as a boundary running off to the south-east.
- 7.1.9 The only fragment of brick or tile recovered was from ditch **150**, which had a dog's paw print on its upper surface (see **Plate 1**). Its solitary nature (i.e. the absence of other pieces of tile recovered from the ditch) might suggest that it had been curated before its deposition.

#### Saxon

- 7.1.10 The steep-sided Saxon ditch **155** in the north-west corner of the Site contained a large dump of shellfish. The dump was several metres long, included mussels, oysters and whelks and had been thrown into the ditch from the northern side. This suggests either that there was a settlement north of the ditch or there had been feasting on the hillside. This maybe reminiscent of a recent excavation on the hillside overlooking the sea at Cliffs End Farm near Ramsgate (Wessex Archaeology 2005b) where 69 Saxon pits, often containing large numbers of shellfish, were found. There was no Saxon settlement in the immediate vicinity at Cliffs End and the shellfish seemed to be the remains of feasting on the hillside. It was noticeable at Cliffs End that the pits were only dug in an area from which the sea could be seen. The sea is also visible from this part of the Site at Kingsborough Manor.
- 7.1.11 There was more Saxon material recovered from the two tree throws 107 and 174 and also from the colluvium 101 than Roman material recovered from the ditches 150 and 151. The piece of iron smithing slag in tree throw 107 is intrinsically undateable but if it were also to be of Saxon date it might indicate that the immediate vicinity was being exploited for more than just animal grazing during this period.
- 7.1.12 The fragments of Niedermendig lava quernstone found in ditch **151**, although possibly Saxon, were also imported into Britain during the Roman period and so cannot be used as evidence for the later use of an originally Roman feature.

#### The colluvium

7.1.13 The colluvium contained mainly pottery from the Late Bronze Age but with also a significant proportion originating from the Saxon period. It is possible that soil movement may have taken place at several times in the past although it would appear that the major episode occurred during the Late Bronze Age or just there after. A further episode of topsoil erosion may have taken place during the Saxon period, but the smaller amount of pottery dating to this period might suggest that these finds are purely intrusive.

7.1.14 A series of excavations were undertaken at nearby Shrubsoles Hill by Thames Valley Archaeological Services Ltd in 1999 to 2001. Shrubsoles Hill lies approximately 500 metres to the south-west of the Kingsborough Manor site and is on the other side of the hill on land sloping southwards down to the Swale. Interestingly it showed a similar pattern of activity in the Bronze Age and then another peak in the Saxon period with little apparently happening in the intervening years. The Early Bronze Age saw the digging of a penannular ditch and the Later Bronze Age features included two phases of land use, the first marked by a single ditch and the second by ditches that marked three sides of a large enclosure. The ditches were of similar sizes to that of Late Bronze Age ditch 152. There followed almost no activity that left archaeological traces until the Saxon period when several ditches respecting the earlier penannular ditch, at least two probable sunken featured buildings and several smaller pits were dug. Little later material was found.

#### 8 REFERENCES

- Greig J., 1991 The British Isles, in W. van Zeist, K. Wasylikowa, K-E. Behre (eds) *Progress in Old World Palaeoethnobotany*, Rotterdam, 229-334
- Stace, C., 1997. *New flora of the British Isles*. 2<sup>nd</sup> Edition. Cambridge: Cambridge University Press
- Wessex Archaeology, Excavations on a Late Bronze Age, Anglo-Saxon and Medieval Settlement Site at Manston Road, Ramsgate1995-7. Unpubl client report ref 39171.
- 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. Cliffs End Farm, Ramsgate, Kent Archaeological Assessment Report. Unpubl client report Ref. 56950.04.

#### PROPOSALS FOR POST-EXCAVATION ANALYSES AND PUBLICATION

#### 9 STATEMENT OF POTENTIAL

#### 9.1 Strategraphic Assessment

- 9.1.1 Ordnance Survey National Grid-compliant digital site plans have been finalised and group numbers assigned where necessary to link multiple interventions through ditches.
- 9.1.2 In light of the poor dating evidence and the low number of feature interrelationships, no further detailed stratigraphic assessment is proposed. For the same reasons it is not proposed to create a site-wide context database.

#### 9.2 Potential and further recommendations for finds

9.2.1 The small pottery assemblage is unlikely to refine further the site chronology significantly, since much of the late prehistoric material is undiagnostic and occurs in long-lived fabric types, but should at least be recorded to minimum archive level (fabric and form).

#### 9.3 Palaeo-environmental Potential

#### Charred Plant Remains

9.3.1 No further analytical work is recommended, but the results of this assessment should be incorporated into any publication as and if required.

#### Fish

11.3.2 If fill **146** from ditch **155** can be confirmed as Saxon, then the residues should be scanned and the fish remains identified and reported upon.

#### 10 PUBLICATION AND ARCHIVING PROPOSAL

#### 10.1 Publication

10.1.1 It is currently proposed to submit a final report for publication in *Archaeologia Cantiana*. A synopsis for this paper is presented below (Section 11, para. 11.1). The focus of the paper will be land exploitation during the Bronze Age, Roman and Anglo-Saxon periods.

#### 10.2 Archiving

10.2.1 The project archive, including finds and ecofacts, written, drawn and photographic records, *etc.* is currently held by Wessex Archaeology at its Salisbury office, under the project code **62620**. 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.

- 10.2.2 The archive comprises:
  - One ringbinder containing paperwork and drawings
  - A collection of digital photographs
  - A collection of 35mm colour transparencies and 35mm monochrome film
  - One box of finds
  - A digital survey.
- 10.2.3 The final destination of the project archive is uncertain as no appropriate repository has been identified. Final deposition of the finds with any museum or other repository will only be carried out with the full agreement of the landowner.

#### 11 OBJECTIVES OF ANALYSES AND PUBLICATION

- 11.1.1 The **Phase 3** excavation at Kingsborough Manor, has clarified the nature and extent of land exploitation and division on the western side of the dry valley which separates the clearly agricultural activities on that side of the valley from the evidentially prehistoric ceremonial activities of the eastern hilltops.
- 11.1.2 In addition the results of the excavation clearly indicate that more concentrated Anglo-Saxon settlement might be concentrated towards the north-west of the Site in the direction of The Mount.

#### 12 ETHOD STATEMENT FOR FINDS

- 12.1.1 Only the fish bone from context **146** will require any further analysis (see 11.3.2).
- 12.1.2 The small multi-period pottery assemblage will be subjected to fabric and form analysis, following nationally recommended guidelines (PCRG 1997). A short report will be prepared, briefly describing the range of types present, and setting the assemblage within its local and regional context, with basic data tabulated. It is unlikely that any illustrations will be required.

#### 13 PROPOSED PUBLICATION SYNOPSIS

13.1 It is currently proposed to submit a final report (c. 5 pages) for publication in the *Archaeologia Cantiana*. The proposed format of the report is outlined below. Precise details of word lengths and illustration titles have not been attempted since additional and unforeseen information may necessitate some revision to the content and layout of the final report, including extra figures.

Section Heading	Pages	Figures	Tables
	(c. 800		
	words/ page)		
Summary	0.25		-
Introduction			
Project background (site location,	0.5	1	

topography, geology, methodology)			
Archaeological and Historical	0.5		
background			
Site description			
Introduction	0.25	1	
Bronze Age	0.5	1	
Romano-British	0.5		
Saxon	0.5		
Finds Reports			
Pottery	0.5		1
Other finds	0.5		
<b>Environmental Reports</b>			
General overview	0.5		1
Discussion	0.5		
Acknowledgements	0.25		
Bibliography	1		
Totals	6.25	3	2

## 14 TASK LIST, PERSONNEL AND PROGRAMME

#### 14.1 Task List

14.1.1 The following table lists the main tasks involved in achieving the project objectives and states the personnel required in order to achieve each task. Proposed personnel and their qualifications are listed in **Section 11.2** and a programme indicating the proposed sequence of tasks required to complete the project is presented in **Section 11.3**.

Task	Personnel	Days
Structural report preparation		
Introductory section	Project Officer	0.25
Archaeological background	Project Officer	0.25
Documentary research	Project Officer	0.5
Site description	Project Officer	0.5
Discussion and synthesis, acknowledgements and bibliography	Project Officer	1
Finds reports		
Prehistoric Pottery and other finds	Lorraine Mepham	1
Fish bone	Project Officer (Finds)	1
Illustrations	Illustrator	1
Internal editing, final revisions, proof	Reports Manager	0.5
reading and publication	Project Manager	0.5
	Finds Manager	0.25
	Project Officer	0.5
Archive preparation and deposition		
Final archive preparation	Archives Manager	1
	Microfilming	
Archive deposition	Supervisor	0.5
	Transport	

Management					
Project management,	liaison	and	project	Project Manager	1
meetings				Archaeo-botanist SPO	0.125
				Finds Manager	0.125

#### 14.2 **Personnel**

14.2.1 The following Wessex Archaeology staff and nominated specialists are currently proposed to undertake the post-excavation analysis, report production and archive deposition.

Nominated Wessex Archaeology Personnel

Project Manager Richard Greatorex BA Finds Manager Lorraine Mepham BA, MIFA Finds Specialist Lorraine Mepham BA MIFA Archaeo-botanist Dr. Chris Stevens BSc, Phd, MIFA Jessica Grimm MA, AIFA Animal Bone Specialist Reports Manager Julie Gardiner BA, PhD, FSA, MIFA **Project Officer** Dave Godden BA, AIFA

Illustrator Linda Coleman

#### 14.3 **Programme**

14.3.1 The chart below summarises the overall timetable proposed to complete the excavation publication and analysis as outlined in this document. Tasks do not necessarily extend across a full month.

	Month						
Tasks	1	2	3	4			
Documentary							
Finds							
Fish Bone							
Site report							
Illustrations							
Editing							
Archive prep.							
Deposition							

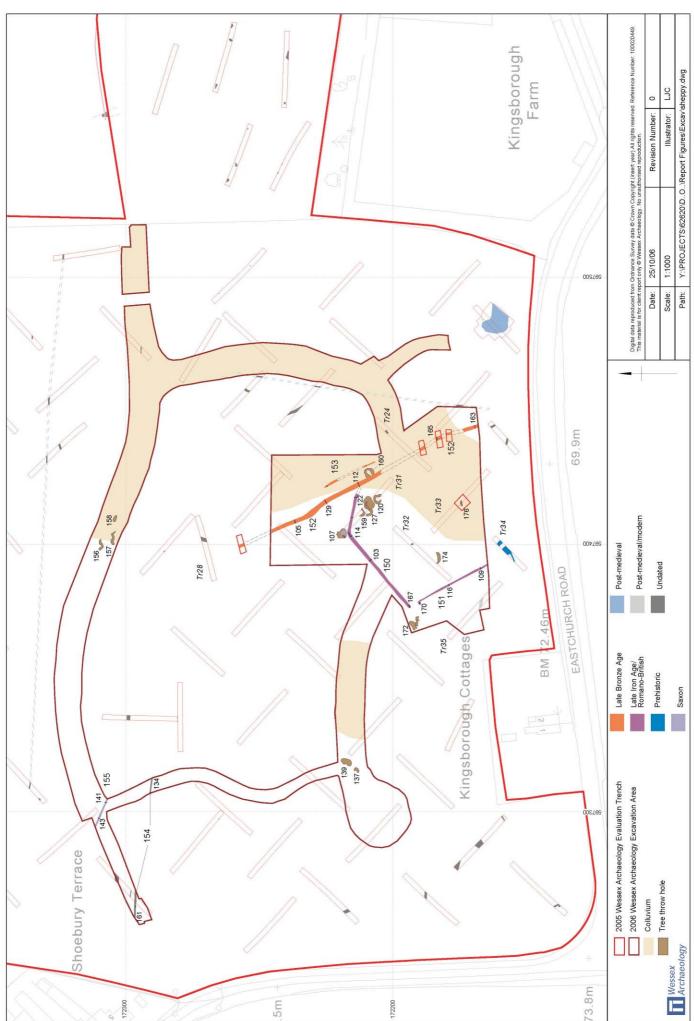
## 1 APPENDIX

## **List of Features**

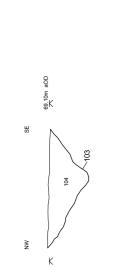
Group	Cut/Slot	Fill	Description
		100	Ploughsoil. 0.3m deep.
		101	Hillwash. Mid orangey brown silty clay containing occasional pebbles, worked flint and prehistoric pot. Mostly on lower E part of site where it is up to 0.5m deep.
		102	Natural. Mid orangey brown silty clay containing very occasional flint pebbles. Natural variations included patches containing very frequent pebbles and other patches of smoother, paler clay containing only very occasional pebbles.
	107	108	Saxon tree hole. Irregular. 3.6 by 3.6 by 0.20m deep. Contained occasional pottery and slag.
	120	121	Prehistoric? tree hole. Irregular ring but not fully exposed. 3.6 by 2.8+ by 0.14m deep.
	122	123	Prehistoric? tree hole. Irregular ring. 4.8 by 4.2 by 0.12m deep.
	127	128	Prehistoric? tree hole. Irregular. 5.5 by 2.6 by 0.25m deep.
	137	138	Prehistoric? tree hole. Irregular. 2.2 by 1.8 by 0.10m deep.
	139	140	Prehistoric? tree hole. Irregular. 4.2 by 2.6 by 0.12m deep.
150	103	104	Roman ditch. Two parts with a dogleg by tree hole 107, W part
	112	113	aligned SW-NE and E part aligned E-W. Total length 51+m. W
	114	115	end exposed, E end uncertain, possibly continuing above the
	118	119	hillwash that was removed from E of this point. The W part was
	167	168, 169	1.1m wide and 0.40m deep with a moderate-sloping V-shaped profile whereas the E part was 0.8m wide and 0.20m
			deep with a shallow-sloping V-shaped profile. The E part
			may have been more truncated.
151	109	110, 111	Roman ditch. Aligned NW-SE. 30m+ long, NW end exposed,
	116	117	SE end not exposed. 0.9m wide and 0.48m deep with moderate-
	170	171	sloping concave sides and a concave base. The NW end has a 1.5m long by 0.7m wide return to the SW.
152	105	106	Late Bronze Age ditch. Aligned NW-SE. 100m+ long, neither
102	129	130, 133	end exposed. 1.4m wide and 0.55m deep with an asymmetric
	163	164	profile. The W side had moderate-sloping concave sides, a
	165	166	concave base and was 0.25m deep. The E side had steep-sloping
			concave sides, a concave base and was 0.55m deep. The shape
			was probably due to a deepening recut on the E side, the outline
			of which could not now be made out. The S continuation was hidden beneath the unstripped hillwash before re-emerging
			in the SE corner of the stripped area. The N continuation
			could be seen in an additional machine slot and was possibly
			seen in evaluation Trench 28 where it faded from view
			before it could be investigated. It may just possibly also be
			seen even further N in evaluation Trench 79 as cut 7905. The
153	124	125 126	whole feature was hard to see.  Late Bronze Age ditch. Aligned NW-SE. 21m+ long, neither end
133	124	125, 126 132, 136	exposed. A middle section could not be made out due to slight
	131	152, 150	disturbance. 0.6m wide and 0.30m deep with steep-sloping

			concave sides and a concave base. Parallel to and 5m NE of ditch
			152. The whole feature was hard to see.
154	134	135	Pre-modern ditch. Aligned E-W. 55m+ long, neither end
	161	162	exposed. 0.5m wide and 0.15m deep with moderate-sloping
			concave sides and a concave base.
155	141	142	Saxon ditch. Aligned WNW-ESE. 12m+ long, neither end
	143	144,	exposed. 0.6m wide and 0.60m deep with a steep-sloping V-
		145,	shaped profile. Contained an extensive shellfish dump, thrown in
		146, 147	from the N side of the ditch.
	156	-	Tree hole. Irregular. 4.2 by 1.7m. Unexcavated. Darker colour of
			fill suggests a more recent date.
	157	-	Tree hole. Irregular. 5.2 by 1.6m. Unexcavated. Darker colour of
			fill suggests a more recent date.
	158	-	Tree hole. Irregular. 2.6 by 1.3m. Unexcavated. Darker colour of
			fill suggests a more recent date.
	159	-	Prehistoric? tree hole. Irregular. 3.0 by 2.2m. Unexcavated.
	160	-	Prehistoric tree hole. Irregular ring. 3.8 by 3.8m. SW side cut by
			ditch 152.
	172	173	Pre-modern tree hole. Irregular. 6 by 4m. 6m west of 150/151
			opening and possibly contemporary. Unexcavated.
	174	175	Saxon tree hole. Crescent. 4 by 2m. Unexcavated.
	176	177	Prehistoric tree hole. Irregular. 2.1 by 0.70m. Steep, concave
			sides and a flattish base. Lies under hillwash 101.

Site location plan showing all phases of previous work



Site layout showing areas stripped and features revealed





67.57m aOD -129 133

Wessex Archaeology

Intervention 103 in ditch 150

Intervention 109 in ditch 151 69.48m aOD 101

Κ

NE 71.05m aOD SW

Intervention 143 in ditch 155





E 67.25m aOD 7 ≺ Intervention 124 in ditch 153

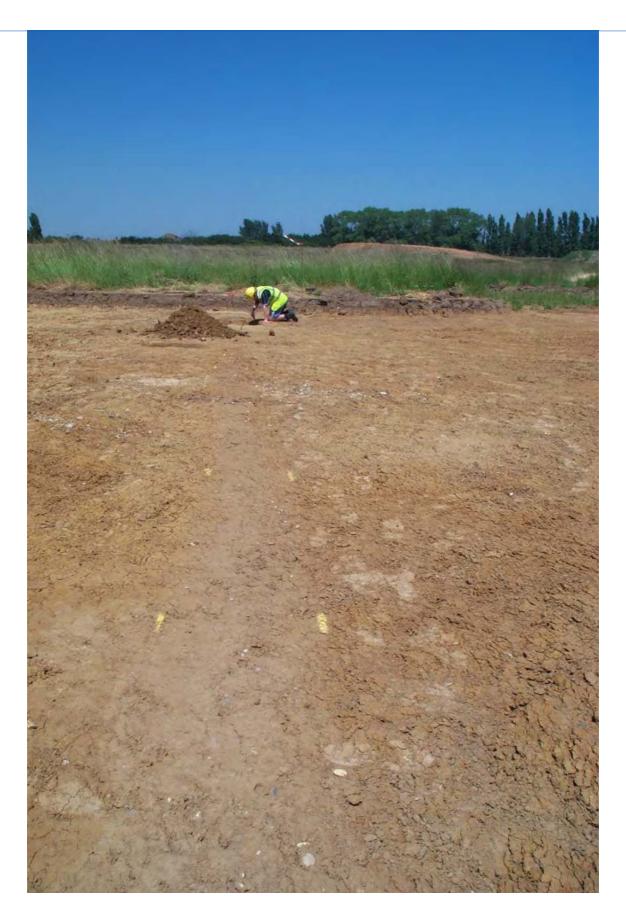
Intervention 161 in ditch 154

Instruction of the product of the pr	I his material is for client report only © Wessex Archaeology. No unauthorised reproduction.	0	MN/LJC	26/10/06	1:25	Y:\PROJECTS\62620\D.O.	Report Figures\Excav\sections.dwg
	This material is for client report No unauthorised reproduction.	Revision Number:	Illustrator:	Date:	Scale:	Path:	\Rep



Plate 1- Roman tile with dog paw print

Wessex Archaeology	Date:	22/08/06	Illustrator:	MN
	Path:	Y:\PROJECTS\62620\Drawing Office\Report Figures\Excav		







WESSEX ARCHAEOLOGY LIMITED.
Head Office: Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB.
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk
London Office: Unit 113, The Chandlery, 50 Westminster Bridge Road, London SE1 7QY.
Tel: 020 7953 7494 Fax: 020 7953 7499 london-info@wessexarch.co.uk www.wessexarch.co.uk

