Channel Tunnel Rail Link

London and Continental Railways

Oxford Wessex Archaeology Joint Venture

Iron Age settlement and an Anglo-Saxon cemetery at Cuxton, Kent

Volume 1: The site report

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ABSTRACT

As part of an extensive programme of archaeological investigation carried out in advance of the construction of the Channel Tunnel Rail Link (CTRL), the Museum of London Archaeology Service was commissioned to undertake the detailed excavation of an Anglo-Saxon cemetery at Cuxton in Kent (centre at OS NGR 572000 167350) following desk-based assessment and trial trenching. In the course of the excavation a concentration of later prehistoric archaeological features was also exposed and recorded. The excavation was carried out between July 1999 and September 1998, under the project management of Rail Link Engineering, on behalf of Union Railways (South) Limited (a subsidiary of London and Continental Railways).

Two principal phases of activity were recorded at the site: Traces of an early-middle Iron Age settlement comprised evidence for a possible hut within an enclosure and a number of large pits.

The Iron Age site was overlain by an Anglo-Saxon cemetery, in use from *c* AD 580 to *c* AD 700. The cemetery exhibited a mix of 'pagan' and Christian features. For example, the prominent position of the cemetery on a terrace overlooking the River Medway, perhaps overlooking the settlement, and the inclusion of grave goods with some of the interments, being 'pagan' characteristics. On the other hand the grave alignments, which tend towards an east-west orientation, and the inclusion of two workboxes/reliquaries with Christian symbols attest to Christian influence.

Skeletal remains of 35 individuals were identified, including one individual too poorly preserved for analysis purposes. The majority of the assemblage (77% or 27 individuals) was poorly preserved. All burials were from stratigraphically distinct graves containing a single individual, with the exception of (303) which contained an adult burial and a single intrusive juvenile tooth crown. The remains comprise 24 adults (70% of those analysed), five juveniles (15%), four infants (12%) and an immature individual of unknown age, categorised as 'infant-juvenile' (3%) between 2 and 9 years at death. Of those individuals for which it was possible to determine the sex, 18% (24% of the adults) were female, or probably female, 18% (25% of the adults) male, and the remainder unsexed 35% (51% of the adults).

There were nine weapon burials, all with spears, and four of these also had shields. Thirty knives were recovered, but only one (<82>, cxt 300) was close to the typical length of a seax. Five graves had no accompanying artefacts, though one of these (361) had been disturbed by metal detectorists prior to excavation.

The majority of the finds recovered from the graves are thought to have originated in Kent, two of the burials containing Kentish type triangular buckles. The distinctive

penannular ditches around 11 of the graves also appear to be a Kentish phenomenon, though they do occur elsewhere in southern England.

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The investigations at Cuxton were undertaken principally by staff from the Museum of London Archaeological Service, with support and overall management framework during the post-excavation phase provided by the Oxford Wessex Archaeology Joint Venture (OWA). The work was supervised by an archaeological team from Rail Link Engineering (RLE), on behalf of the Employer, London and Continental Railways.

Management of the fieldwork and post-excavation assessment was undertaken by Niall Roycroft and Gordon Malcolm. Tony Mackinder supervised the fieldwork and prepared the assessment report. Other members of the field team and specialist contributors to the assessment report are credited in the main project acknowledgements in the digital archive (ADS 2006).

The following specialists contributed to this report: Lyn Blackmore (Saxon small finds), Jane Corcoran (geoarchaeology), Paul Blinkhorn (Saxon pottery), Elaine Morris (prehistoric pottery), and Natasha Powers with James Langthorne (human bone). The figures were produced by Sophie Lamb and Kate Pollard, the artefact drawings by Rosalyn Smith. The abstract was translated by Mercedes Planas (Spanish), Gerlinde Krug (German) and Valerie Diez (French).

Julian Hill undertook preliminary editorial work on this report. The editor was Jacqueline Mckinley (cemetery team leader). Additional comments on the text were made by Andrew Fitzpatrick (later prehistoric team leader). The project senior editor was Julie Gardiner.

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1 INTRODUCTION

1.1 Project Background

The site at Cuxton, Kent (centre at OS NGR 572000 167350) was discovered and excavated as part of the extensive programme of archaeological investigation carried out in advance of the construction of the Channel Tunnel Rail Link (CTRL). The Museum of London Archaeology Service (MoLAS) was commissioned to carry out a series of investigations immediately west of the River Medway at Cuxton, Kent. This stretch of the route, termed Archaeological Zone 6, lies between CTRL chainage 49+800 and 50+400. For the purposes of this report, Zone 6 is given the site name Cuxton.

Following the discovery of significant remains during the initial evaluation, the site was subject to detailed investigation (ARC CXT98). The location of the site is shown on Figure 1 and the details of the archaeological works are given in Table 1.

Table 1 Fieldwork events covered by this report

Event name	Event code	Type	Contractor	Dates
Cuxton Anglo-Saxon cemetery	ARC CXT 98	Detailed Excavation	MoLAS	July – Sept 1998
Cuxton Anglo-Saxon cemetery	ARC 330 98	Watching brief	MoLAS	Early 1999

The site is situated on a south-facing slope on the left bank of the Medway River valley, approximately 2km to the south-west of Rochester (Fig.1). The area of archaeology was confined to a flattish terrace, at *c* 30m OD, approximately half way up the side of the valley. The underlying geology consists of the Upper Chalk of Cretaceous age. The drift geology comprises hillwash head deposits, of Pleistocene and recent age, which mainly consist of chalk fragments and light brown silt laid down by colluvial processes. In the dry valley running from north to south at the west of the site (Fig.2) these deposits are more silty in nature. The whole site was sealed by *c* 0.20 - 0.30m of topsoil.

The site commands excellent views both up and down the Medway. It also lies opposite the Nashenden Valley, on the opposite bank of the Medway, which has been a route through the North Downs since prehistoric times (and is still the route of the Pilgrims Way /North Downs Way). To the north of the site is an ancient roadway along the Medway Valley (Roadway LIN40, SMR No; TQ76 NW144, now the A228).

The landscape of the area is characterised by a series of post-medieval chalk quarry pits, one of which cut through the southern part of the site. The site is bisected by the London to Chatham railway and a second line (the Maidstone to Strood railway) runs on an

embankment to the south of the area of excavation. Immediately to the west of the site, the western approach to the M2 Medway road bridge, constructed in the 1960's, passes on a series of piers (Plate 1). There was evidence that part of the archaeological site had been stripped during the construction of the bridge. The presence of Anglo-Saxon graves was not noted, possibly due to the depth of the burials in the chalk, but it is unlikely that any burials in this area would have survived the motorway construction works. Archaeological investigations immediately east of the motorway, undertaken in 2000 in advance of the A2/M2 road-widening scheme, found no evidence for the cemetery, and concluded that the area had been severely truncated by the bridge construction works (Dennis and Roycroft 2001).

Modern land use comprises a mixture of arable cultivation, with an area of rough pasture around the disused quarry. The area to the north of the London to Chatham railway line was overgrown waste ground.

The site was identified as having possible archaeological interest from a Sites and Monuments Record entry (URL 1994) which made reference to the discovery of an Anglo-Saxon grave with weapons, during railway construction in the 19th century. It is not, however, clear which of the two railway lines adjacent to the site is the subject of the reference. A note in a local journal (note in *Arch Cant* 1889, 41) refers to a burial between Temple Farm and Strood with an angon (a Frankish type of spear), a knife and an earthenware vessel. In 1997 URL commissioned MoLAS to undertake a field evaluation which identified the main foci of archaeological interest as an area of Iron Age occupation and an Anglo-Saxon cemetery.

Following that, in 1998, a detailed open area archaeological excavation (ARC CXT 98) was undertaken on either side of the London to Chatham railway. This included an extension to incorporate the adjacent Highways Agency M2 widening works. A trench was also excavated across the dry valley. All archaeological features identified were cut into the chalk bedrock. The results of this investigation provided further evidence for Bronze Age to Iron Age activity in addition to the Anglo-Saxon cemetery.

Context numbers below 100 refer to the evaluation phase (ARC CXT 97).

2 RESULTS

2.1 Phase summary

The almost total lack of stratigraphy on the site means the sequenced phases are based almost entirely upon the dating evidence provided by ceramic and metal finds. With the exception of a few features, the fills were all of a similar nature, mainly a mix of chalk fragments and chalky silt. For this reason they are only discussed in the text when needed to explain the site sequence. The following phases were recorded on site:

- A few fragments of worked and burnt flint attest to prehistoric activity in the vicinity. There were 17 fragments of worked flint and 146 pieces of burnt, unworked flint.
- Early and Middle Iron Age (*c* 600/550–*c* 300BC): The evidence of activity for this period comprised several pits, an undated structure, and postholes forming an enclosure.
- Romano-British (AD 43–410): Apart from a few finds found redeposited in later features there was no evidence for Roman activity on the site.
- Anglo-Saxon (AD 580–700): This phase comprises an inhumation cemetery with 35 surviving burials, which can be broken down into several phases based on artefact dating and burial practices.

2.2 The Early and Middle Iron Age (600/550–300 BC)

The Early and Middle Iron Age evidence from the site came principally from pits containing pottery in fabrics which are typical, in Kent, of the period *c* 600/550-300 BC. Only one Later Iron Age form (R9) was recovered as a residual find in cemetery ditch (115). A total of 237 sherds were recovered, in eight fabric groups. Flint was the main temper used, but this was supplemented by organic material and shell. Four pits produced evidence dating them to this period but there are also a larger number of undated features, forming an enclosure, which were probably contemporary with the backfilling of the pits (Fig. 3).

Immediately to the north of the London to Chatham railway line was a large, circular storage pit (343), which contained sherds from over 50 different vessels.. The assemblage represented approximately 21 bowls/saucepans and 33 jars. Many of the vessels in the pit had been subjected to extreme heat at some point after their manufacture, which had caused them to become very hard-fired and cracked, and often bloated and twisted. This may have resulted from the pots being offered to a fire at the conclusion of a feast or other rite. Despite the large number of vessels present, no more than 10% of any particular vessel is represented in the assemblage (Morris 2006). The animal bone from this pit consisted of domestic food waste,

mostly derived from approximately two juvenile sheep/goats. Most skeletal elements are represented and an atlas vertebra displays evidence of butchery. The majority of the bone had been gnawed, suggesting that the remains were left uncovered long enough for scavengers to access them (Kitch 2006).

A second large storage pit (106), to the south of the railway, also contained Early to Middle Iron Age pottery as well as burnt flint, flint flakes and animal bone. The bone assemblage consisted of domestic butchery and food waste, including at least one juvenile sheep/goat and evidence for cattle and pig. One equid femur had been burnt.

Pits (106) and (343) both contained fragments of daub. The assemblage from the latter consists of many fragments with one smoothed surface, and clear impressions of interwoven wattle weavers on the other surface, suggesting that the daub is from the wall of a hut, or house. The daub itself is orange, with a light brown skin on the smoothed (?external) surface. It has traces of an organic temper, probably either grass or straw. The coloration is typical of material remaining when a standing wattle and daub structure has been destroyed by fire. The daub has two features of particular interest. Firstly, some of the smoothed surfaces have traces of what appears to be a thin, light brown, slightly sandy limewash or mortar, which may have been applied to improve resistance to rainwater. Secondly, two conjoining 'corner' fragments have a moulded ridge or flange on the angle (383); they also show traces of limewash. Their function is not known, but it is possible that they represent some sort of simple architectural moulding around a doorway or similar feature.

These two pits (106 and 343) are typical in terms of shape and depth to those normally interpreted as grain storage pits. In this instance their secondary function was for the disposal of domestic rubbish, after which they were back-filled.

Two further pits (101 and 108) also date to this period, along with several features identified as tree boles. All are located to the west of a series of undated postholes defining an enclosure. Domestic waste from two of the pits (101 and 343) includes 5 body sherds of briquetage from two different salt evaporation containers. These vessels were used to obtain salt through heating or boiling brine.

This pottery assemblage has an underlying inclusion represented by linear vesicles or voids, remaining from burnt out organic matter, which occur in nine out of 14 fabrics. This may well be a cultural marker for the potters and the pot users in this area. The frequent presence of this inclusion could signal the identity of the potters, who also may have been the local salt makers using organic matter to deliberately create significant porosity in their ceramic containers and other equipment for evaporating water from brine (Morris 2006).

The presence of the pits, and the assemblages of pottery, daub and animal bone indicate an Iron Age settlement such as a farmstead, in the vicinity. Although undated, one element of this settlement was almost certainly represented by six extant postholes, some of which were

stratigraphically earlier than the Anglo-Saxon cemetery. The postholes (150–5) ranged from 0.37 – 0.60m in diameter and were generally 0.40m deep. Six of them define a circular structure or hut *c* 4.0m in diameter. A seventh posthole had probably been truncated by later activity. No horizontal deposits or eaves drip gully survived but it is possible that the postholes represent the positions of inner roof supports for a structure of greater overall diameter. Although demonstrably earlier than the Anglo-Saxon cemetery, the hut was otherwise undated. It was, however, positioned close to a linear arrangement of postholes, also undated, that may have formed a larger, roughly rectangular, enclosure to the east of the hut. Generally the postholes became 'shallower' the further to the south they were found which reflects greater truncation from erosion closer to the sloping valley side. In the absence of dating evidence, it is possible that the postholes represent more than one phase of enclosure. On its eastern side, two double postholes may represent a gateway into to the enclosure. The western side of the enclosure does not appear to have survived, although two undated hollows in the chalk that were probably tree boles (not illustrated, but located south of the hut circle), with deposits of burnt flint and charcoal, probably derived from nearby activity such as cooking. There were also a number of 'satellite' posthole concentrations, such as a cluster of postholes of undefined function (329–35 and 338–40) adjacent to pit (343), and another burnt tree bole, which contained Early-Middle Iron Age pottery.

Roundhouses with roughly square enclosures have been dated previously to the Bronze Age (Richard Bradley pers comm). There are, however, no Bronze Age artefacts, either in primary contexts or as residual material. The presumption must be that the structure and enclosure are contemporary with the Early-Middle Iron Age pits to their west. It is likely that the hut was the source of the large pieces of daub recovered from pits (106) and (343). The condition of the daub suggests that the hut was destroyed by fire. This may also account for the heat distortion of much of the pottery found in pit (343) – these items may have been within the hut when it burnt down. Alternatively, as noted above, the pottery may have been deliberately burnt, and scattered, perhaps as an offering to the fire, after a feast for example. These two events may have been connected as part of a larger rite in which both the structure and its contents were sacrificed, or discontinued from the living world, with the fragmentation of the vessels being a part of that process.

2.3 Romano-British evidence to *c* AD 410

There was no evidence, other than a few sherds residual pottery, for Romano-British activity at the site. This material may represent a occasional discards associated with the routeway (now the A228), or from manuring the adjacent fields.

2.4 The Anglo-Saxon cemetery (*c* AD 580 to *c* AD 700)

2.4.1 Location and topography

The cemetery was sited at a prominent point overlooking the Medway, on a hillside terrace facing south-east. A traveller on the route of the Pilgrim's Way (now the A228) would have looked down upon it from a distance of c.100m. Many Anglo-Saxon cemeteries are located on high ground away from the associated settlement (Lucy 2000, 152), but visible from them at a distance of around 500m. This might indicate that the associated settlement lay on the eastern side of the Medway M2 road bridge. Any evidence for settlement in this position will have been destroyed by quarrying. Alternatively, and perhaps more likely, the cemetery may have been associated with a settlement at or near the present village of Cuxton, c. 800m to the south-west. Roman burials have been recorded in the present village (Kent SMR 2362 and 2363). The settlement probably existed as an estate centre by the late 9th century AD as Cuxton (*Cucolanstan*) is mentioned in a charter attributed to Aethelwulf, dated c. AD 880. The charter bounds cited in this document suggest that the eastern and southern boundary of the estate followed 'Aldan Stræt' (Watling Street) and the River Medway, encompassing a considerably larger area than the present parish of Cuxton, probably including the area of the cemetery. Rochester is about 2km distant to the east.

2.4.2 Presentation of cemetery data

A description of each grave, the human remains and the grave goods is presented in the grave catalogue (Blackmore *et al* 2006). The cemetery was rich in artefacts, with a total of 190 accessioned finds. These mostly comprise dress accessories and weaponry. Grave plans illustrating the catalogue show the location of grave goods identified by object numbers (ON), with items represented in schematic form. The catalogue figures also include scaled drawings of the objects. Specialist reports are available for all categories of artefactual and environmental evidence examined (See Table 4, the digital archive). The small finds report (Blackmore 2006) includes more detailed discussion of the finds, arranged by functional category (dress accessories, personal equipment (and tools), knives, weapons and pottery). The principal conclusions are summarised below.

Feature 310 was interpreted in the field as a pit. Examination of human remains from the feature suggest that it may have been the grave of a child or flexed adult, although no bone survived, and no grave goods were present. This feature has not been included in any totals, or in the grave catalogue.

2.4.3 Layout and development

Thirty-six Anglo-Saxon inhumation graves were excavated at the site, all to the south of the London to Chatham railway line (Fig.4). There were no obvious boundaries to the cemetery, its limits apparently being defined by the topography of the chalk terrace. Burials cease where the valley side begins to slope steeply down to the south and west, and it is likely that the rising land at the back of the terrace (where the present London to Chatham Railway is located) also formed a boundary (Fig.2). Further graves were probably present to the north and east of the excavated area prior to the construction of the railway and the motorway bridge. Within the cemetery, the burials become sparser to the east. The total cemetery area is thus defined as being a maximum of *c* 90m x *c* 35m. Within the principal area used for burials the graves are densely packed, but there is no intercutting of graves and only slight intercutting of two of the pennanular ditches (ditch 142 is earlier than ditch 144) (Fig. 4). This indicates that the location of previous graves was either still apparent when later burials were made, or that the burials took place over a sufficiently short period of time for the gravediggers to have knowledge of previous graves.

There was one example of possible reuse of a grave (303) (see section on Grave cuts below). There are examples of Anglo-Saxon graves with two or even three bodies (Polhill, Kent, Philp 2002) but in those cases the grave cut is usually a more distinctive pit-like shape, or separate cuts can be identified.

2.4.4 Orientation and spatial clustering

The 35 graves at Cuxton follow three principal orientations: 14 burials were aligned NW–SE, 14 burials were NNE–SSW and eight were NE–SW (see Figure 4 and Volume 2, the grave catalogue). A broadly E–W orientation is usual for most 5th – 7th- century cemeteries although many variations have been noted *eg* Buckland, Kent (Evison 1987). The range in variation is usually attributed to the movement of the rising sun over the course of the year. Other variations result from alignment of burials with existing landscape features, buildings or the position and orientation of earlier burials (Welch 1992, 74–5). At Cuxton it seems likely that burials were placed and aligned primarily with respect to earlier burials with visible penannular ditches, mounds or other types of marker. There is no obvious correlation between grave alignment and chronology (as derived from dateable artefacts).

The most obvious signs of spatial clustering in the cemetery were the 11 graves surrounded by penannular ditches (Fig.4). These were all located within a fairly tight central cluster except for grave 364, which was located on its own to the north-east. The two most artefact-rich graves lacked penannular ditches (306 and 283) and were located side by side, both aligned SW–NE. Two graves (291 and 294) contained pottery vessels with strikingly

similar fabric and finish, which could have been made from the same batch of clay, probably indicating that they were of similar date. Aside from these examples there is little to link grave orientation to age, sex, date, or types of grave goods.

There is only one instance of two penannular ditches inter-cutting (279 and144). Interestingly, the two graves were on different alignments, suggesting that the E–W alignment superseded the NW–SE group. The reason for this is unclear but may relate to a shift in the principal focus of the cemetery over time.

Grave markers

Grave markers included penannular ditches, which surrounded 11 of the graves. The graves surrounded by penannular ditches are likely to have had low mounds of earth or chalk, formed from the up-cast from the ditch. The latter would have been prominent features in the landscape when first raised. It is possible that burials covered only in earth or turves may have been those with post markers at the ditch openings. At least seven of these had evidence for a post at the ditch opening. Grave 316 was surrounded by post/stakeholes that suggest there was a structure around the grave or erected above it.

Although there is no direct evidence for markers at the other graves it is very likely that something was used to indicate their position for a period of time after burial, since there is no evidence for later intercutting and, with the exception of graves 283 and 306, the apparently unmarked graves are all reasonably spaced from one another. Two other graves appear to have had distinct markers: Grave 215 had a slot in the base of the grave at the foot end, that may have held some form of marker; Grave 291 had two large flints at the head end, which are probably another example of a grave marker. More ephemeral grave markers, such as stakes, posts or stones placed on the ground surface, may not have survived. Most of the graves were probably marked in some way. The use of posts may reflect a scarcity of suitable stone from the immediate vicinity. At Saltwood Tunnel, at the eastern end of the CTRL route, stones are recorded used as head stones or grave markers in nine graves, in a variety of configurations (Riddler and Trevarthen 2006).

2.4.5 Burial practices

Grave cuts

All of the recorded burials at Cuxton were contained within grave cuts with a sub-apsidal shape (Hogarth 1973, fig 6). There were slight variations such as tapering, and some of the graves, such as those of infants, were noticeably squarer. The surviving depth of the graves ranged from 1.0m (291) to 0.21m (379). The base level of the graves varied between 33.58m

OD (174) and 29.65m OD (379). Apart from one possible exception (303) each grave cut contained the remains of one individual.

The only features integral to the grave cuts noted were internal ledges in graves (176) and (382) which may have supported timber covers, such as at Empingham, Rutland (Reynolds, 1976, 140–3). See Volume 2, the Grave Catalogue (Blackmore *et al* 2006).

Burial position

There are slight variations in burial rite, but all of the burials are inhumations and, with one possible exception, were laid out in an extended supine position. One burial may have been crouched and several had slightly flexed legs, probably to fit the body within the excavated grave cut.

The single adult burial (303) described in the field as 'crouched' (Fig.4) also contained a single juvenile tooth. Inspection of the site plans suggests that the lower half of the adult burial might in fact have been disturbed, rather than lying in a crouched position. Given that the juveniles at Cuxton were represented only by teeth, the remainder of the second individual may have been missed, as the grave fill was not all sieved. The size of the grave cut suggests there were two closely inter-cutting graves, but the position within the surrounding ditch does not support this interpretation. It therefore remains unclear whether there were originally two occupants in the grave. One of the burials could have been secondary. Disturbance may also have resulted from collapsing timbers placed above the body as a roof structure such as noted by Reynolds (1976, 140–3).

Coffins and linings

A combination of evidence, comprising staining and the presence of packing materials, suggests that there were seven burials in coffins (graves 176, 279, 283, 291, 313, 316, 382). Three of the skeletons were in 'very poor', two 'poor' condition and one 'below average' condition, suggesting that the presence of a coffin or lining had no obvious effect on the preservation of the human bone. There is no evidence for nails, or other fittings, suggesting that the coffins were joined, or glued together. There is also evidence for one mature adult female (279), with no associated artefacts, being laid on a bed of charcoal, and for the individual in grave (379) having a patch of charcoal near the left leg. Grave (313), a juvenile buried with a spear, was packed around with flint cobbles.

Grave fills

Grave fills were mainly a mix of chalk fragments and chalky silt. A few graves had concentrations of flint nodules in the backfill. These may have been gathered and deliberately placed in the grave. The inclusion of flints in graves has been noted on other Anglo-Saxon

sites in the region, and has been interpreted as connected with the presence of a mound over the grave (Riseley, Berks; Horton Kirby, Kent; Park Lane, Croydon, McKinley 2003, 1–32).

External structures

Two types of external structures were recorded at the site. The most common was the penannular (or horseshoe-shaped) ditch dug around a grave, of which there are 11 examples. These appear to be mainly a Kentish phenomenon, although they occur elsewhere in southern England. They are thought to be late features in Anglo-Saxon cemeteries, generally of later 7th century date, and are not normally particularly rich in grave goods (Lucy, 2000). Certainly those at Cuxton usually only contained a knife or buckle, both fairly common grave goods. Here the mounds may have been the focus of the cemetery, with the other burials placed around them.

All of the ditches have the opening opposite the foot of the grave cut and thus reflect the orientation of the grave. The ditches range in size from (174) 2.5m to 6.0m in diameter (218), the size apparently related to the size of the grave (Fig.4). At Eastry, Kent penannular ditches ranged from 4.5m to 7.0m in diameter, whereas at Polhill, Kent they fell within a more restricted size range, from 4.3m to 5.6m in diameter (Philp and Keller 2002; Philp 1973, 30–52). At Saltwood Tunnel there were at least 19 examples, ranging from 4 – 7 m in diameter, except for one exceptionally large example, 18m in diameter (Riddler and Trevarthen 2006). The penannular ditches at Cuxton were U-shaped in profile, generally 0.40m to 0.60m wide (the maximum width was 0.80m) and 0.15m to 0.30m deep. The up-cast soil from the ditch would only have been sufficient to create a low mound, possibly comparable to those that survive today in Greenwich Park, London, which are less than a metre high and may never have been much higher.

The penannular ditch surrounding grave 364 was significantly different from the other ten examples (Fig.4). The grave was located some distance from the others, to the north–east, and the cut was noticeably ‘neater’, possibly indicating that the burial was contained within a coffin. The southern end of the ditch was truncated, but it may have been a complete ring, rather than penannular.

Seven of the penannular ditches had evidence for a post, located between the open arms of the ditch (Hogarth 1973 fig 8), although the position varies somewhat and they seem to have been grave markers rather than part of a structure (Fig.4). In the four examples where postholes were not recorded they may have been truncated. There was no evidence for any postholes actually within the ditches.

Grave 316 provided evidence for another type of external structure, in this case comprising at least eight postholes arranged around the grave (Fig.4). The postholes may have supported a fence enclosing the grave or possibly an enclosing structure such as a timber

building or canopy. The remaining graves have no external structures. There was no evidence of the four-poster structures sometimes noted in Anglo-Saxon cemeteries, which are interpreted as structures for exposing or displaying the body before burial, although the structure noted above could be a variation of this type.

2.4.6 Preservation and post-depositional disturbance

Much of the bone from the graves was in a poor condition or had entirely disappeared. Where no bone was present, surrounding structures and grave goods were used to confirm the interpretation as a grave. The chalk bedrock is alkali and is normally conducive to preservation of human bone and metalwork. However the poor preservation of bone on the chalk downs has been noted on other sites in Kent (Mays and Anderson 1995, 355–87).

The hillside location encouraged groundwater run off, which may also have affected bone preservation (Nielsen-Marsh et al 2000, 439–54). The graves were cut into chalk bedrock which had only a shallow covering of topsoil. The greater depth of soil within the graves attracted plant growth, resulting in the more shallow graves being severely disturbed by root action and animal burrows. In some cases, although bones were identified and planned in the field, roots growing in and around the bones caused them to disintegrate almost entirely when lifted. In general the deeper burials were unaffected by tree root disturbance and survived in better condition. The presence of coffins does not appear to have had any influence on bone survival.

Unauthorised metal-detectorists disturbed the torso area of one burial (361). On subsequent excavation there was no evidence left to suggest what metal grave goods had been present (Fig. 4).

2.4.7 The grave goods

By Lynn Blackmore

The following summary is based on the full specialist report (Blackmore 2006).

Thirty-two of the burials had associated grave goods (Fig. 5) comprising for the most part dress accessories, ornaments, personal equipment and weapons. Where evidence for a coffin, or container was present, grave goods were located inside the container. Grave (277) may have been an exception since the single iron knife lay outside the area of coffin staining, although this may represent decay residue from the body, rather than a container.

The majority of the finds recovered from the graves are thought to have originated in Kent with two burials containing distinctive Kentish Type triangular buckles. The absence of very early types of jewellery, such as cruciform brooches and early cloisonné jewellery, suggests a date of after AD 550 for the start of burials at the site. The glass beads and

pendants suggest that at least some of the graves date to the 7th century. A combination of both the presence and absence of types of artefactual evidence points to the late 6th to first half of 7th century AD for the usage of the cemetery (Fig. 7). The absence of swords and the lack of East Kentish brooches, puts Cuxton firmly in the Anglo-Saxon cultural tradition to the west of the Medway, rather than Jutish traditions of East Kent.

Dress accessories

A total of 61 items were classified as potential items of personal ornament, beads are the most common category with 43 out of 48 being of glass.

There was one amber bead from an infant burial (187). The amber was probably imported from the Baltic. Two large amethysts were found in a female burial (215). Amethysts were imported from the eastern Mediterranean, or possibly from India via the Mediterranean. Like amber they were probably used as amulets. A small cowrie shell bead was also found in burial 215. This was probably a local (European) import and was used when large shells could not be obtained, the source being the Red Sea or India. It may have had a symbolic meaning, as cowrie shells have been interpreted as fertility symbols. In addition a single Anglo-Saxon chalk bead was recovered in the evaluation phase from the top of an Iron Age pit.

Bracelets are not common in Anglo-Saxon burials; only one copper alloy bracelet was found at Cuxton, in a rich female burial (306) (Fig.5). Four pendants were found, three coming from the rich female burial (306). One of these is of gold and, taken with other items in this grave, may have a Christian significance. Five silver rings, one in grave 215 and four in grave 306, were from necklaces and were possibly intended as amulets.

The items of jewellery found as grave goods were mostly from adult burials, with only one from a child's. There are two main concentrations in female graves, and one small one in a male grave.

Pendants and beads are usually associated with women and children, although beads were also used, if not worn, by men. At Cuxton there are two definite occurrences with females, and one in a child burial (169). Although personal taste cannot be ruled out (Evison 1987, 65), the number and nature of the pendants and beads in adult female graves may be indicative of status. If so the female in grave 215 must have been a woman of considerable status when alive. Beads were usually worn at the throat or on chest at the front only (ie not continuing behind the neck; Evison 1987, 66). This is the case for at least two, and possibly four of the Cuxton finds. Smaller beads could also be worn as earrings (Faussett 1856, pl VII), but although the bead in grave 303 was found by the head, there was no sign of a ring.. As brooches and pins are lacking, the method of suspension is unclear. In some cases they may have been strung on a cord that continued behind the neck; in others they may simply

have been placed on the body once it was in the grave. The beads in graves 212 and 297 were found at the neck, and the same may apply to the find from 306, which would thus be associated with the silver rings and the silver bulla, if not the two gold pendants. As there were four large rings and only one small one, it is tempting to suggest that the smallest was a pendant. Beads of all sizes were also buried in bags or purses on other parts of the body (Portway, Andover graves 1, 69; Cook 1985, 81), with grave 215 being a possible example of this. The location of the amethyst beads at the waist in grave 215 is unusual, as most of the examples studied by Geake were part of necklaces (34 out of 37 examples), but other locations such as at the feet and behind the skull were also noted (Geake 1997, 42). It is not impossible that they were used as toggles for a girdle (Drinkall and Foreman 1998, 285), but they could have been in a bag and/or had an amuletic function.

The absence of very early types of jewellery, such as cruciform brooches and early cloisonné jewellery, suggests a date after AD 550 for this site. Large strings of glass and amber beads are typical of the 6th century (Evison 1987, 66). After this glass beads are rarer and smaller, and this, together with the absence of polychrome beads and the small size of the monochrome beads suggests that the Cuxton finds are of 7th-century date. This is in keeping with the pendants, which are also most typical of the 7th century. The latest finds are the amethyst beads, which occur with the pendants in grave 215. In grave 306 the nature of the pendants and other finds indicate that the deceased was a Christian buried after AD 650, and possibly after AD 675. Although the means by which the finds reached the site must remain uncertain, the jewellery from Cuxton demonstrates that the community had access to continental artefacts and styles of dress in the late 6th and 7th centuries.

Buckles are the second most common artefacts from the graves at Cuxton after knives, with 25 definite examples found in 18 burials. Approximately half the buckles were found singly, but in eight cases two or more buckles were found. In most instances the buckles were found by the waist of the burial, but a range of other locations was recorded. Most of the rectangular buckles were buried with men or adults who were probably male, but triangular buckles, which elsewhere occur in association with spears (Geake 1997, 77), are without them in the Cuxton examples. As a group the buckles finds define a Kentish ‘cultural identity’ for the burials, although three continental-type buckles are represented, demonstrating both the influence of foreign dress, and also indicating some degree of wealth.

Knives

Knives are the most common finds, with a total of 30 knives from 25 graves. They are also the most common type of single object type to be found in Anglo-Saxon burial contexts as a whole, being found in 45–50% of all 5th- to 7th-century graves (Geake 1997, 102; Härke 1989a, 144). The number of knives at Cuxton (76% of all graves) is proportionately rather

higher than this. There is no specific correlation between the presence of a knife and the sex or age at death of the burial except, perhaps, with children (see below). Two knives are definitely from a male graves, while six others are from probable or possible males graves. Two knives are from definite female graves, two are from grave 306, and two others are from possible female graves. Eight knives/knife fragments are from adult burials that could not be sexed from the skeletal remains. Six further knives are from five burials of juveniles, probably boys, while one was buried with an infant.

Härke's research into Anglo-Saxon knives found that no child was buried with more than one knife, and that even with adults, the presence of more than one knife in a grave (such as 306) is rare (Härke 1989a, 146–7). At Cuxton three graves definitely had two knives. No graves definitely contained more than two knives, but grave 306 may have had three knives, or two knives and part of a pair of shears, buried together, perhaps in a bag. Previous studies have suggested a correlation between knife blade length and sex/age at death (Härke 1989a; Drinkall and Foreman 1998, 282) with the knives from 47 cemeteries showing that men were consistently buried with larger knives than women (Härke 1989a, 146). To some extent this applies at Cuxton, where the largest knife is from grave 300, one of the oldest men identified. Six of the Cuxton graves contained no knife. However, all except one did include beads, possibly suggesting that they were females, although only one of them could be identified from the skeletal remains. Most of the knives present were worn or placed on the left side of the body, mainly near the waist, but some by the left hip (14 examples). Seven were centrally placed, while three were on the right side. At Dover Buckland some of the female burials had knives in pockets, bags or purses, and it has even been suggested that some knives may have been worn up the sleeve (Evison 1987, 115). At Cuxton there is little evidence for this, but the knives from grave 215 were in a bag.

Personal equipment (and tools)

Shears: Two complete pairs of shears were found in graves at Cuxton. On the Continent shears are uncommon but occur in both male and female Frankish graves; in England they are more common but are normally found with women and girls, especially in the 7th century (Geake 1997, 96). They are conventionally associated with weaving/cloth cutting (Evison 1987, 113), although as pointed out by Geake, other weaving equipment is fairly rare in graves of this date (not least at Cuxton), and they were probably multi-functional tools (Geake 1997, 96–7).

Keys and chatelaines: The key and chatelaine fragments from the female burials at Cuxton are all of iron and typical of the 7th century. Cuxton conforms to the standard fashion for the wearing of chatelaines on the left side.

Purse-mounts: Although purse-mounts are well known as finds, frames are extremely rare, especially with associated fittings and possible contents. The Cuxton example is thus an important find that would have been attached to a belt and worn around the waist. The small number of other examples suggests that the Cuxton purse probably dates to AD 650–700.

Work-boxes/ reliquaries: Two of the most important finds are of work boxes, or reliquaries with incised decoration including Christian symbolism. However, the most explicitly Christian motif, two crosses on one of the pieces, is so faint that it may have been known only to the owner, possibly suggesting deliberate concealment by the individual of their religious persuasion. It is generally thought that such containers were suspended from the waist, but some were worn around the neck (Wamers 1995, 148, 150–1; 1996, 1000). In England, the debate regarding their function has tended to class all containers together, regardless of their shape, and has mainly centred on the contents (where these survive) and whether the container was designed to be frequently opened or not. Hawkes suggested that the former could be considered domestic, functional objects, used for storing personal possessions or for sewing equipment, while the latter, mainly found on the Continent, could have contained pagan amulets or Christian relics (Hawkes 1973, 197; Geake 1997, 35). Meaney (1981, 181) questioned Hawkes' interpretation, and it is clear that some of the English finds, such as those from Sibertswold, Kent and Cuxton, were provided with locking mechanisms, while that from Dover started out as a workbox that could be easily opened, but was rivetted shut at the time of burial (Evison 1987, 106). Both of the Cuxton containers were empty. Whatever their function, however, both the objects themselves and their contents were considered precious, and these luxury items suggest both devotion to the Christian faith and connections with the world beyond Kent.

Weapons

Spearheads: Nine spearheads were recovered from Cuxton, they have been classified according to the typology devised by Swanton (Swanton 1973; 1974). However, as spears were not cast, but made individually, there is considerable variation, even within groups. There is also some overlap between the different types, both chronologically and in their geographic distribution, due to local and regional preferences (Swanton 1974, 3–4). In national terms, spears occur in *c* 85% of all weapon graves and *c* 40% of all adult male burials (Härke 1989b, tables 4.1, 4.2; Underwood 2001, 39). As a rule they were held in one hand, leaving the other free for the shield (Underwood 2001, 46).

Shields: The classification of the four shield bosses and their grips follows the systems devised by Dickinson and Härke (1992, Fig 3 and Table 1; Härke 1992, 82–4). Shields occur in nearly 25% of Anglo-Saxon male burials and are the second most common item of weaponry found (Underwood 2001, 77; Härke 1989b, 52; Tables 4.1, 4.2). The board was

usually flat, but can be slightly convex (ibid, 43–4, 50); it was made up of three planks between 5–13mm thick, cut to shape with a central opening wide enough to accommodate the user's hand. This was protected by a metal boss on the outside and a metal or wooden grip attached to the inside face. It is not known how the planks were secured, but they were probably glued with the slightly convex shape helping to reduce the danger of boards splitting when struck. Alder, poplar and willow were the most popular choices, but ash, birch, lime, maple and oak were also used for the board (Dickinson and Härke 1992, 46–7; Stephenson 2002, 39–40). The edge of the shield was often protected with stitched rawhide, although evidence for this rarely survives in an archaeological context. The board was often covered with leather (Stephenson 2002, 40–1) and decorated with metal fittings; the shield in grave 373 is the only evidence for this form of decoration from the site. Three of the Cuxton shields were probably laid flat in the grave and from the location of the bosses a diameter of *c* 600mm can be proposed for that in grave 247, 800mm for that in grave 316, and 6–800m for grave 373.

The dating of the finds points to the late 6th to the first half of the 7th century for the weapon burials. The absence of any swords in the graves might indicate that none of those buried at Cuxton were of a sufficiently elevated rank, although some graves, both with and without weapons, had quite impressive buckles and other desirable objects.

Anglo-Saxon society in this period was highly stratified and weapons were a mark of status with the sword being the most important. Warriors armed by a lord formed an elite group. The exact status of the other members of Anglo-Saxon society remains a debatable issue. The traditional view is that all those who were not un-free had a right and duty to carry arms, and the majority would possess a spear, often accompanied by shield for defence. However, Abels (1988) has argued that the carrying and use of weapons may have been more restricted: to the kingly and noble retinues. The other members of society would have been divided into several groups, those who were un-free, principally slaves, and those who were grouped with the free, but owed obligations and services (*gafolgeldan*). This group were protected, in theory at least, by the laws of the king but whether they owed actual military service, and thus might be expected to be buried with weapons, or merely provided support and food rents for the conduct of military expeditions, is uncertain in the period to which the Cuxton cemetery dates.

In the Cuxton area weapons have been found in a number of burial contexts both in Rochester itself (Payne 1895) and at Strood (Swanton 1973, 146). A recent survey of weapon burials from 47 Early Saxon cemeteries across the country has shown that 18% of the total inhumation burials had weapons, and that 47% of all adult males were buried with some form of weapon (Härke 1989b, 49; 1992, 217). Nine sites in Kent were included in the sample, but

only Polhill (17 weapon burials) lies to the west of the Medway. The other site closest to Cuxton is at Holborough, with four weapon burials (Härke 1989b, 60).

Taken on a site-by-site basis, there is considerable variety in the number and nature of the weapon burials in Kent. At Mill Hill, Deal, Kent, weapons occur in *c* 25% of the 106 graves (Brugmann 1997, 83–91), whereas at Dover Buckland there were 27 weapon graves out of 160 (17% of the total) (Evison 1987, tables III, LV). At a regional level between 15% and 22% of inhumation burials contained weapons with a concentration of weapons in only around a fifth of all burials (Härke 1989b, 49, 60).

It has long been accepted different weapons signify different things (Hawkes 1973, 187; Swanton 1973, 2–3; Dickinson and Härke 1992. 61–2; Underwood 2001, 39). The sword is generally taken as an indicator of higher status, although according to Stephenson (2002, 11), it was the shield, rather than the sword or spear, that was the mark of a warrior; and it may also have symbolised adult male status (Dickinson and Härke 1992, 68–9; Härke 1992; Spain 2000, 89). Seaxes seem to fall somewhere between the sword and the spear in terms of social significance (Hawkes 1973, 187). At Cuxton the proportion of burials with weapons is rather higher than either regional, or national averages at *c* 25%, but this may be partly accounted for through truncation of part of the cemetery area.

Animal bone as grave goods

In addition to the placed grave goods, a small amount of animal bone was recovered from the grave-fills of burials 306, 324 and 379. All was in very poor condition and was not identifiable to species, it is uncertain whether the bone is residual or the result of deliberate deposition.

2.4.8 The human remains

By Natasha Powers

The following summary is based on the full specialist report (Powers 2006).

There were 35 individuals from the site including one context that could not be assessed (286) (Fig. 6). The majority of the assemblage (77% or 27 individuals) was poorly preserved. All burials were from stratigraphically distinct graves containing a single individual, with the exception of (303) which contained an adult burial and a single intrusive juvenile tooth crown. The remains comprise 24 adults (70% of those analysed), five juveniles (15%), four infants (12%) and an immature individual of unknown age, categorised as 'infant-juvenile' (3%) between 2 and 9 years at death. The adult age estimation was limited by the poor skeletal preservation, leading to reliance on the use of (less accurate) dental attrition.

Of those individuals for which it was possible to determine the sex, 18% (24% of the adults) were female, or probably female, 18% (25% of the adults) male, and the remainder unsexed 35% (51% of the adults) (Fig.6).

Four of the 24 adults (17%) had evidence for trauma. Three of these were males and two of these were at least 40 years of age. Despite the presence of weapons in the graves there is no direct evidence of any trauma resulting from violence, rather the injuries identified are likely to have occurred as result of falls and similar accidents.

There is an apparent peak in deaths of 4–7 year olds in the assemblage, however, the absence of pathological lesions at Cuxton may be a result of preservation rather than a genuine reflection of health status. The clustering of deaths at Cuxton in older infanthood may reflect a late weaning time and subsequent drop in immune status.

Although a high proportion of infants were noted at Lechlade, Gloucestershire, and Wally Corner (Oxfordshire) had a subadult population of 29% of the whole assemblage (Boyle and Dodd 1995; Crawford 1993, 85) there is a reported under-representation of infants from other Saxon cemeteries. This is based on the assumption that the demographic pattern should be similar to modern pre-industrial groups (Crawford 1993, Evison 1987, Buckberry 2000). A number of authors have suggested cultural factors and preservation conditions may account for this (Buckberry 2000, Lewis 2000). The poor condition of subadult remains at Cuxton appears to support this view. Preservation alone does not account for the absence of neonates in the assemblage. The subadult demographic peak at Cuxton may reflect a high status group, with low infant mortality, however, this conclusion is based on a small sample size.

The human remains have not provided much evidence for metric or non-metric data preventing the formulation of any worthwhile conclusions regarding kinship within the group. There is little evidence from the human remains to suggest that the burials formed an ‘elite’, or ‘high status’ group within society. Higher status individuals would be expected to have access to better food and consequently to be more resistant to illness and infection. The survival of one individual with osteomyelitis and two with severe trauma perhaps support this. Undernourished children will become shorter adults (Larsen 1997) but there is insufficient stature data from this assemblage to draw any conclusions, however the absence of enamel hypoplasia provides no evidence for periods of dietary stress.

2.5 Paganism and Christianity at Cuxton

The hilltop location of the site suggests that this was initially a ‘pagan’ cemetery. The funerary practices, however, combine predominantly ‘pagan’ elements, such as the inclusion of grave goods, with some Christian burial traits: The graves are distributed around the ideal

E–W alignment. The most compelling evidence comes from two workboxes/reliquaries with Christian symbols, both found in SW–NE aligned graves. Following Augustine's visit to Britain in AD 597, Christianity became established in Kent in the course of the 7th century, with the founding of dioceses centred on Canterbury and Rochester (Chadwick Hawkes 1982). However, it was not until the early 8th century that Christianity achieved dominance. At that time grave goods ceased entirely to be included within Anglo-Saxon burials, although the quantity, and quality, of jewellery buried in graves had been in decline from the end of the 6th century. Barrows and other structures became an alternative, and more visible, method of indicating status (Chadwick Hawkes 1982, 284–5). The Cuxton cemetery dates from the transitional period in which pagan and Christian practices co-existed together.

3 GUIDE TO THE ARCHIVE

The following tables include details of the archive components (Tables 2-4).

The site has been analysed and published as part of the Channel Tunnel Rail Link Section 1 Post-excavation Project. This Integrated Site Report is one of 20 publication level site reports available to download from the Archaeology Data Service website: **http://ads.ahds.ac.uk/catalogue/projArch/ctrl/index.cfm**. These present synthesised data from key site sequences at an interpretative level that can be assimilated into complementary studies. The ADS site also includes five schemewide specialist reports, which provide synthetic overviews of the specialist data from CTRL Section 1 in its regional context. Underpinning the site reports and overviews, is a comprehensive archive of individual specialist reports and databases, which are also available to download. The CTRL reports and data can be accessed through the 'Project Archives' section of the ADS website.

Hard copy publication of the CTRL Section 1 results comprises a single volume synthetic overview of the excavated results in their regional context, which includes a complete site gazetteer and guide to the digital archive (Booth et al 2007).

Table 2 below details all available digital data for the Cuxton site. The Post-excavation assessment report is included in the digital archive, but assessment databases have only been included for categories of material which were not subsequently subject to full analysis. All reports and accompanying figures are presented as downloadable, print-ready Adobe Acrobat files (.pdf). ADS also maintain archive versions of report text (.rtf) and image pages (.tiff). Databases are available as text files (.csv). The digitised site plan is available as an Arcview shapefile (.shp) and in drawing exchange format (.dxf).

Table 2: Digital archive

Description	Filename root	Principal authors and organisation
Integrated site report		
Integrated site report	CXT_ISR	Mackinder T (MoLAS)
Integrated site report figures	CXT_ISR	Mackinder T (MoLAS)
Grave catalogue	CXT_ISR_cat	Mackinder T (MoLAS)
Grave catalogue figures	CXT_ISR_cat	Mackinder T (MoLAS)
Site research database		
Site database	CXT	Mackinder T (MoLAS)
CAD/ GIS drawings		
CAD drawing	CXT_CAD	
ESRI ArcMAP GIS project	CXT_GIS	
GIS limit of excavation shapefile	CXT_GIS	
GIS feature plan	CXT_GIS	
Specialist research reports		
Ceramics (later prehistoric)	CER_LPR_CXT	Morris EL (Southampton)
Ceramics (post-Roman)	CER_SAX_CXT	Blinkhorn P (Freelance)
Small finds	SFS_CXT	Blackmore L (MoLSS)
Faunal remains	ENV_Fauna_CXT	Kitch J (OWA JV)
Geoarchaeology	ENV_Geoarch_CXT	Corcoran J (MoLAS)
Charred plant remains	ENV_Charredplants_CXT	Davies A (MoLSS)
Human remains	HUM_CXT	Powers N (MoLSS)
Radiocarbon dating	DAT_CXT	Allen MJ (OWA JV), Morris EL (Southampton) and Mackinder T (MoLAS)
Specialist datasets		
Ceramics (later prehistoric)	CER_LPR_CXT	Morris EL (Southampton)
Ceramics (post-Roman)	CER_SAX_CXT	Blinkhorn P (Freelance)
Small finds	SFS_CXT	Blackmore L (MoLSS)
Faunal remains	ENV_Fauna_CXT	Kitch J (OWA JV)
Charred plant remains	ENV_Charredplants_CXT	Davies A (MoLSS)
Human remains	HUM_CXT	Powers N (MoLSS)
Post-excavation assessment		
Post-excavation Assessment	CXT_PXA	MoLAS

Table 3 Artefactual and environmental archive index (ARC CXT 98)

Item	Number Of Items or boxes or other	No of Fragments or litres or weight
Context records	282	
A1 plans	-	
A4 plans	110	
A1 sections	-	
A4 sections	3	
Films (monochrome) S=slide; PR=print	5 PR	
Films (Colour) S=slide; PR=print	5 S, 2 PR (+ second set)	
Small finds	(190) See below	
Stone (boxes)	Registered finds boxed together: 3 size 1; 6 size 3; 3 size 4; 1 size 5; 1 size 6	5
Metalwork (boxes)		140
Glass (boxes)		43
Bone and shell (boxes)		2
Lithics (boxes)	2 boxes size 1	17
Burnt flint (boxes)	See lithics	9.32kg
Pottery (boxes)	4 size 1; 2 size 2	267
Fired clay (boxes)	1 size 1	4.79kg
CBM (boxes)	1 size 1	0.30kg
Human Bone (boxes)	7 size 1; 7 size 2	35 individuals
Animal Bone (boxes)	1 size 1	230
Molluscs	1 size 1	639
Flora	See animal bone	
Flots	1 size 1	
Misc.	1 size 1	
Soil Samples (10 lit. buckets)	14	
Soil Samples (no. of contexts)	13	
Soil Samples (Monolith/kubiena tin)	2	

Table 4 Quantification of finds by volume (ARC CXT 98)

Description	**Capacity**	**No.**	**Total Volume**
Shoe box (size 1)	0.0108m^3	22	0.2376 m^3
Skeleton box (size 2)	0.0311m^3	9	0.2799 m^3
Large Stewart box (size 3)	0.0154m^3	6	0.0924 m^3
Medium Stewart box (size 4)	0.00773m^3	4	0.03092 m^3
Small Stewart box (a) (size 5)	0.00226m^3	1	0.00226 m^3
Small Stewart box (b) (size 6)	0.00367m^3	1	0.00367 m^3
Total			0.64675 m^3

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