Suffolk County Council

## POST-EXCAVATION ASSESSMENT REPORT

**SCCAS REPORT No. 2009/297**

# Household Waste and Recycling Centre, South Lowestoft Industrial Estate, Hadenham Road, Gisleham, Suffolk

# CAC 035

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**www.suffolkcc.gov.uk/e-and-t/archaeology**

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## HER information

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| **Planning Application No:** | **not known** |
| **Date of Fieldwork:** | **03–07 November 2005 (evaluation)**<br>**13 February – 21 March 2006 (excavation)** |
| **Grid Reference:** | **TM 5275 8944** |
| **Commissioning Body:** | **Suffolk County Council Waste Management** |
| **Curatorial Officer:** | **Jess Tipper** |
| **Project Officers:** | **Clare McLannahan (fieldwork)**<br>**Kieron Heard (reporting)** |
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## Summary

This post-excavation assessment report presents the evidence from an archaeological evaluation and subsequent excavation at the Household Waste and Recycling Centre, South Lowestoft Industrial Estate, Hadenham Road, Gisleham, Suffolk. It provides a quantification and assessment of the site archive and considers the potential of that archive to answer specific research questions. The significance of the data is assessed and recommendations for dissemination of the results of the fieldwork are made.

The drift geology of the site is Lowestoft Till overlying glaciofluvial sand. There was no evidence to indicate that the site was occupied in the Neolithic period and the only find that is potentially of that date is a single sherd of Beaker pottery (Later Neolithic / Earlier Bronze Age) from a small pit or posthole.

Earlier Bronze Age activity is represented by a pit that contains an important finds assemblage (including part of a collared urn, a flint knife, and a jet ornament of national significance) but which is not sufficient to indicate permanent occupation of the site.

An increase in pit digging in the Middle Bronze Age suggests that the site was used more intensively at that time, although no buildings or structures of that date have been identified. The site was certainly occupied by the Later Bronze Age / Earlier Iron Age, as indicated by a roundhouse inside a ditched enclosure, two linear ditches, one or more external hearths and widespread pits.

The site seems to have been abandoned by the Later Iron Age and was not obviously used during the Roman period, although a large quarry pit might have been dug at that time. The site was re-occupied in the Early Anglo-Saxon period, although the evidence for this is confined to a localised area within the (partially backfilled) quarry pit mentioned above. There is no evidence to indicate medieval occupation, and in the post-medieval period it is

likely that the site was in agricultural use and was exploited for clay extraction for the brick-making industry.

It is recommended that a detailed account of the nationally important jet object and associated finds from an Earlier Bronze Age pit should be published in the Proceedings of the Prehistoric Society. A more general account of the prehistoric activity on the site should be published in the Proceedings of the Suffolk Institute of Archaeology and History.

This post-excavation assessment will be disseminated *via* the OASIS archaeological database as a ‘grey literature’ report.

# 1 Introduction

## 1.1 Site location

An archaeological evaluation and excavation took place at the Household Waste and Recycling Centre, South Lowestoft Industrial Estate, Hadenham Road, Gisleham, described hereafter as 'the site'. The site is centred at Ordnance Survey National Grid Reference TM 5275 8944 (Fig. 1) and encompasses an area of approximately 10,000m$^2$. It is bounded by Hadenham Road to the north, industrial premises to the west and east and agricultural land to the south.

The site is located in the modern parish of Gisleham, but historically it was within the neighbouring parish of Carlton Colville; this is why it has the Historic Environment Record number CAC 035.

## 1.2 The scope of the project

This report was commissioned by Suffolk County Council Waste Management and produced by the Suffolk County Council Archaeological Service (SCCAS). It has been prepared in accordance with the relevant Brief and Specification documents (Tipper, 2005a; Tipper, 2005b, Appendix 1) and is consistent with the principles of Management of Archaeological Projects 2 (MAP2), notably Appendices 4 and 5 (English Heritage, 1991). The principal aims of the project are as follows:

- Summarise the results of the archaeological fieldwork
- Quantify the site archive and review the post-excavation work that has been undertaken to date
- Assess the potential of the site archive to answer research aims defined in the Brief and Specification documents

- Assess the potential of the site archive to answer new research aims defined in this report

- Assess the significance of the data in relation to the relevant Regional Research Framework (Brown & Glazebrook, 1997; Glazebrook, 2000) and with reference to the Revised Research Framework for the Eastern Region (Medlycott & Brown, 2008).

- Make recommendations for further analysis and publication of the results of the fieldwork

### 1.3 Circumstances and dates of fieldwork

The fieldwork was carried out by SCCAS Field Team in response to a planning application for the relocation to this site of the Household Waste and Recycling Centre. Prior to the archaeological fieldwork the site was in agricultural use.

The fieldwork was carried out in two phases (as described below), and was conducted in accordance with Brief and Specification documents issued by SCCAS Conservation Team (Tipper, 2005a; Tipper, 2005b, Appendix 1).

An archaeological evaluation was conducted during 03–07 November 2005 and comprised four evaluation trenches (Fig. 2) covering an area of 414m$^2$ and representing approximately 2.5% of the total area of the site. The results of this phase of evaluation are described in SCCAS Report Number 2005/192 (McLannahan, 2005) and are discussed further in this report.

Due to the positive archaeological results of the evaluation a second phase of fieldwork was carried out from 13 February to 21 March 2006. This consisted of an open-area excavation of the entire site, covering an area of 99,540m$^2$ (Fig. 2).

In all phases of fieldwork mechanical excavators were used to remove topsoil and underlying subsoil or colluvium in order to expose the surface of the natural stratum, this being the level at which all archaeological features were identified.

The features were excavated and recorded in accordance with the SCCAS Manual (SCCAS, 2002). They were planned at a scale of 1:50 and drawn in section at 1:10 or 1:20, as appropriate. Additional planning (primarily used to record trench edges and the site grid) was by Total Station Theodolite (TST).

Written descriptions of archaeological features and deposits were made on *pro-forma* context sheets and a photographic record was made consisting of high-resolution digital images and monochrome prints. Aerial photographs were taken, and these can be found, with all other records, in the site archive located at SCCAS, St Edmund House, Rope Walk, Ipswich.

A number of soil deposits were sampled for environmental analysis.

Metal detectors were used routinely on all mechanically excavated and hand-dug soils.

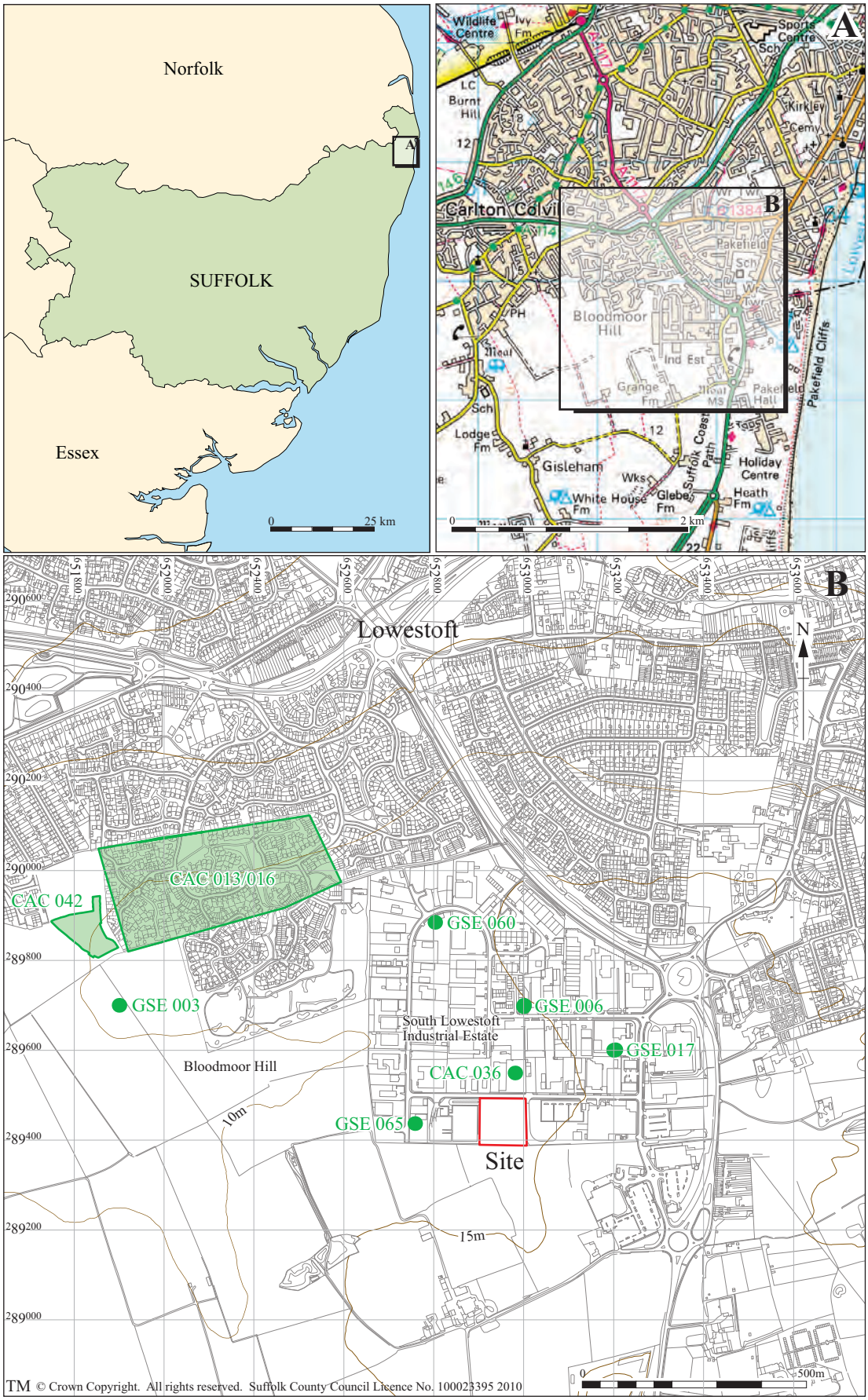


Figure 1. Site location (red) with Historic Environment Record entries mentioned in the text (green)

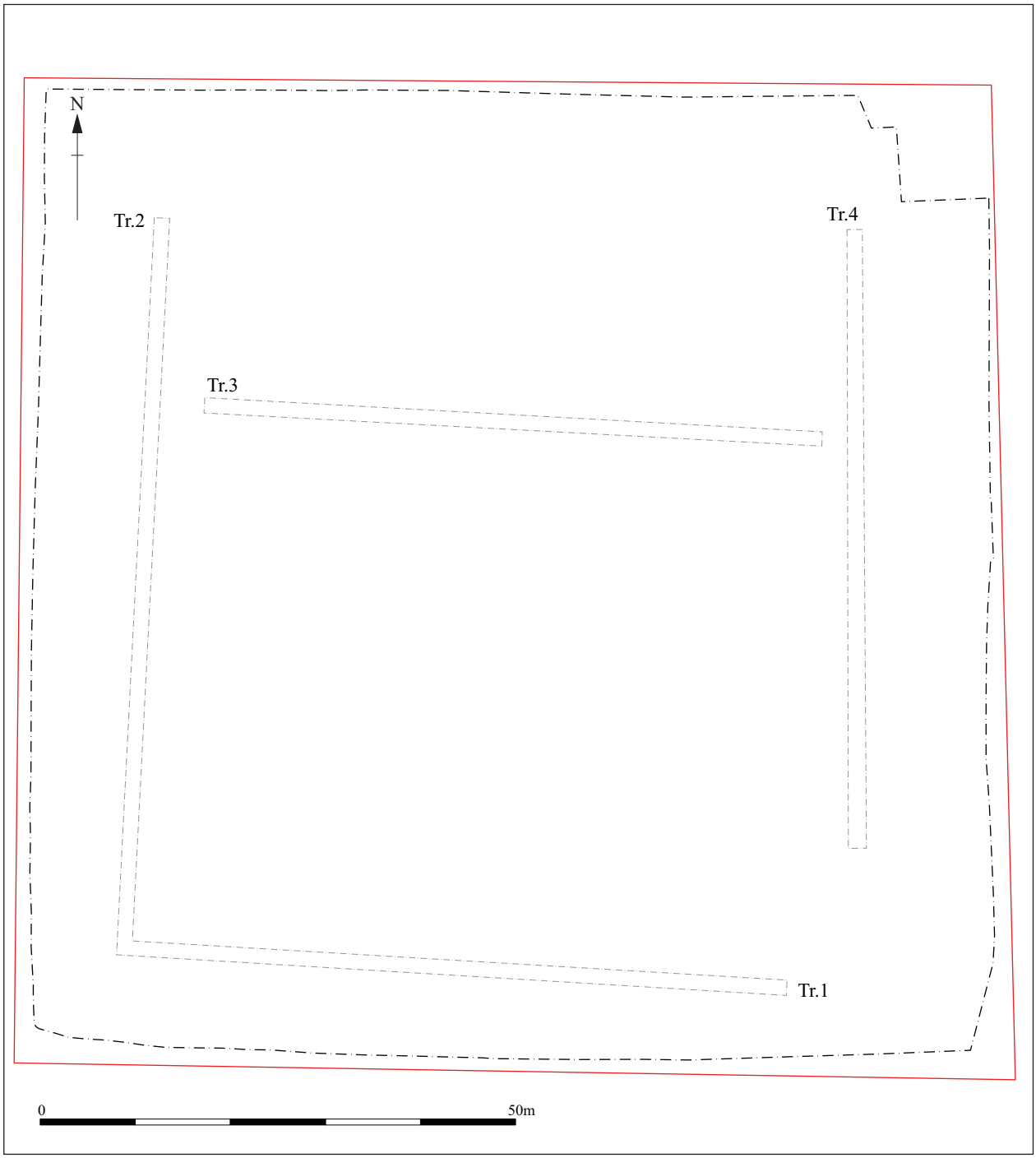


Figure 2. Location of evaluation trenches and excavation area

# 2 Geological, topographic and archaeological background

## 2.1 Geology and topography

The published Quaternary geology on the site is Lowestoft Till, although Glacial Sand and Gravel occurs also in the immediate area (British Geological Survey, East Anglia, Sheet 52N 00, Quaternary). Deep, well-drained sandy and coarse loamy soils of the Newport series (3) overlie these deposits.

The site was located on fairly level ground at an average height of 13.7m OD. Ground level within the area of investigation sloped from a maximum height of 14.5m OD at the south-eastern corner of the site to 13.0m OD at its north-western corner.

The site is located in an area of Rolling Valley Farmlands and Furze, as defined in Suffolk County Council's *Suffolk Landscape Character Assessment* (www.suffolklandscape.org.uk). The key characteristics of this landscape type are as follows:

- Valleys with prominent river terraces of sandy soil
- Small areas of gorse heath-land in a clay-land setting
- Straight boundaries associated with late enclosure
- Co- axial field systems
- Mixed hedgerows of hawthorn, dogwood and blackthorn with oak, ash and field maple
- Fragmentary cover of woodland
- Sand and gravel extraction
- Golf Courses

## 2.2 Archaeology

The site lies in an area of high archaeological importance, as defined in the County Historic Environment Record (Fig. 1). It is located just to the east of Bloodmoor Hill, where fieldwork in recent years has revealed an extensive archaeological landscape. For example, an excavation on land adjacent to Ullswater Drive (CAC 042) identified a Late Bronze Age settlement with at least two roundhouses, several four-post buildings and associated features, on a site that had been occupied from the Neolithic period and continued to be used in the Roman period. Investigation of a 40 hectare site elsewhere on Bloodmoor Hill (CAC 013 / CAC 016) also revealed evidence for prehistoric and Roman activity, and an Anglo-Saxon settlement and cemetery of national significance. A rich Early Anglo-Saxon barrow burial (GSE 003) is recorded on Bloodmoor Hill, although its precise location is unknown. Additionally there are numerous records of prehistoric, Roman and Anglo-Saxon finds by metal detectorists in the same area.

Closer to the site, there have been some significant archaeological finds on the South Lowestoft Industrial Estate in the course of metal detecting or during formal excavations. A Neolithic, polished flint axe (GSE 006) was found approximately 300m north of the site and a Bronze Age socketed axe (GSE 017) was found a similar distance to the northeast. At 1 Pinbush Lane, 40m north of the site, an evaluation revealed a buried soil horizon containing prehistoric flint implements, and a burnt area associated with Iron Age pottery (CAC 036). An evaluation at 61 Pinbush Lane, 130m west of the site, uncovered Neolithic or Bronze Age pottery and associated features (GSE 065). Metal-detected finds of Roman and medieval date have been made approximately 400m north of the site (GSE 060).

# 3 Original research aims

The original research aims of the project were defined in the Brief and Specification for the archaeological evaluation (Tipper, 2005a). The research aims were as follows:

**OR1:** *Establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation in situ [at the discretion of the developer].*

**OR2:** *Identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.*

**OR3:** *Evaluate the likely impact of past land uses and the possible presence of masking colluvial/alluvial deposits.*

**OR4:** *Establish whether waterlogged organic deposits are likely to be present in the proposal area.*

In response to the positive results from the evaluation a Brief and Specification for an archaeological excavation was produced (Tipper, 2005b). It contained the following site-specific research aim:

**OR5:** *The academic objective will centre upon the high potential for this site to produce evidence for prehistoric occupation, particularly from the Neolithic, Bronze Age and Iron Age periods.*

# 4 Site sequence: results of the fieldwork

## 4.1 Introduction

The following is a chronological summary of the results of the fieldwork. For the purposes of this post-excavation assessment the archaeological deposits and features have been assigned to *groups* of contexts that are related spatially or stratigraphically (numbered G5001–G5072), and the most significant groups are described below. A complete list and brief descriptions of the groups are presented in Appendix 2. The general distribution of the archaeological features is shown on Figure 3. The prehistoric features are shown on Figure 4, while the Early Anglo-Saxon, modern and undated features are shown on Figure 5.

## 4.2 Natural strata

Glacio-fluvial sand was recorded in localised, deeper areas of excavation at a maximum height of approximately 11.8m OD. It was sealed by Lowestoft Till (G5001), which extended site-wide and varied from light yellowish brown sandy clay with moderate flint fragments to light greenish brown or yellowish brown, plastic clay with frequent chalk and flint fragments. The surface of the till sloped gradually down from east to west. It was recorded at a maximum height of 13.92m OD in the north-eastern corner of the site, and a minimum height of 12.71m OD in the western central part of the site.

## 4.3 Later Neolithic / Earlier Bronze Age (Beaker): 2600–1800 BC

A single sherd of Beaker pottery occurred in small pit or posthole G5047, close to the centre of the site. The feature was adjacent to other pits that were of Later Bronze Age / Earlier Iron Age date, suggesting that the Beaker pottery might have been residual. There were no others finds or features that can be dated to this period.

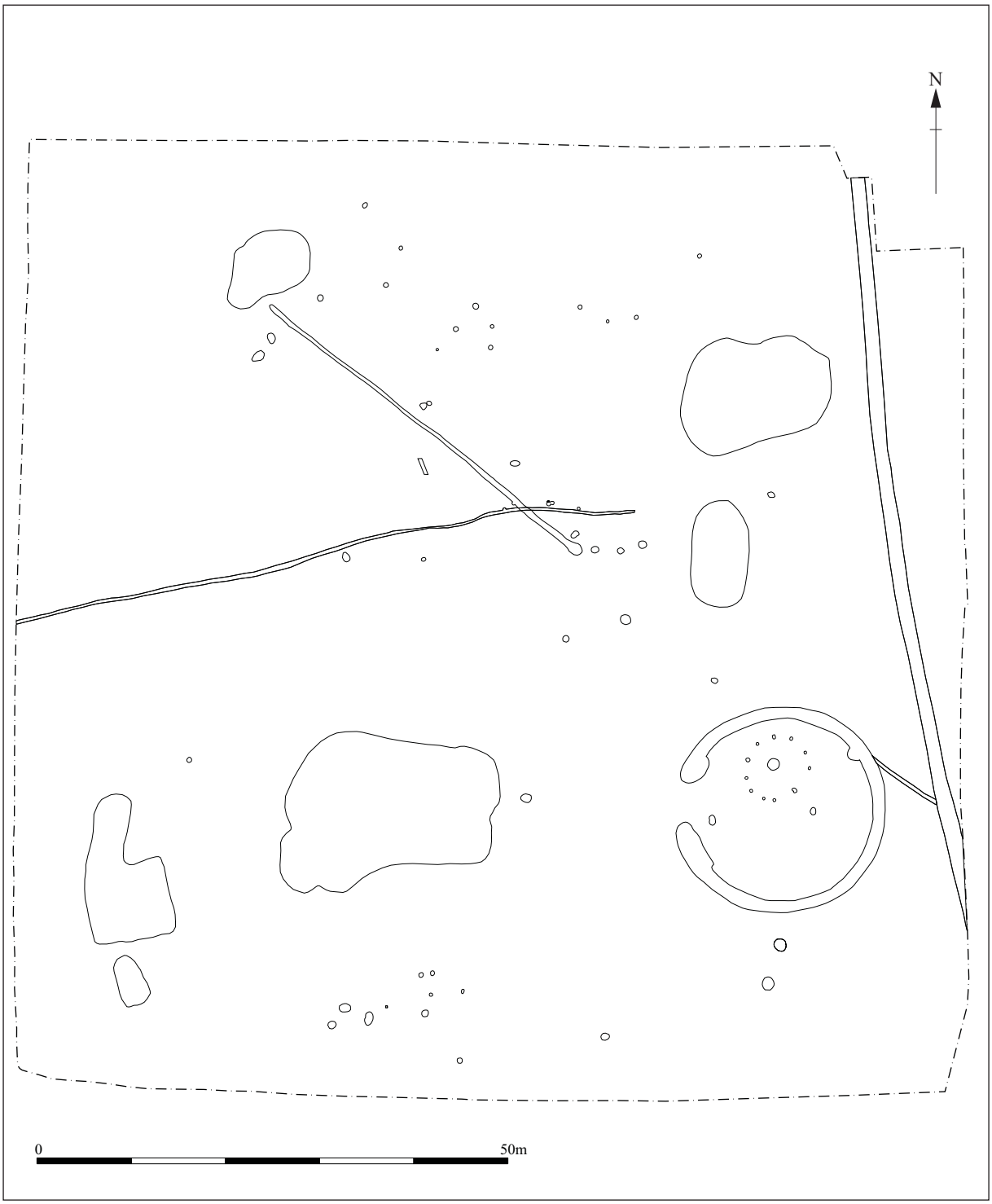


Figure 3. General plan of archaeological features

### 4.4 Earlier Bronze Age: 2300–1700 BC

A pit (G5002) in the south-eastern corner of the site can be dated with some certainty to the Earlier Bronze Age period and contained an important finds assemblage. The pit was oval, measuring 1.35m x 1.25m x 0.34m deep, with steep sides and a flat base. Its fill was loose, dark brownish grey clayey silt with small to large fragments of charcoal throughout; the charcoal becoming more frequent towards the base of the cut. The sides and base of the pit were scorched in places, indicating some burning *in situ*.

It contained the incomplete remains of a collared urn; pieces from the collar, body and base of the vessel were present but do not join to make a complete profile.

The finds assemblage consisted of a lozenge-shaped jet ornament with incised, geometric decoration (SF 1004; Plate 3), a backed flint knife (SF 1005; Fig. 7), several flint flakes and the incomplete remains of an early type of collared urn. The lozenge-shaped object is made from Whitby jet and has a domed front and flat back. It is pierced by a pair of small holes at each corner of its short axis; concentrations of copper at these points suggest that the plaque may have been fixed to a backing, such as a leather garment, using copper or copper alloy pins or rivets. It is significant that the jet object and the flint artefacts have not been burnt or heat-altered, despite the evidence for *in situ* burning within the pit; clearly they were deposited after the associated charcoal had cooled.

Apart from the charcoal fragments (some of which are flaked, indicating combustion at very high temperatures), the only plant macrofossils found in environmental samples from the pit fill are very rare fragments of charred roots or stems. Occasional minute fragments of burnt bone were present also, but there is insufficient evidence to indicate that this was a cremation burial and the function of the pit remains uncertain.

No other features can be dated firmly to the Earlier Bronze Age period. A shallow pit (G5016) of broadly prehistoric date was located close to pit G5002; it contained frequent charcoal, some fired clay and a single worked flint, probably part of a scraper.

### 4.5 Middle Bronze Age: 1700–1150 BC

Middle Bronze Age activity was represented by several pits (one containing cremated bone), spread over a wide area in the northern, central and eastern parts of the site. These represented the earliest clear evidence for settled occupation of the site, although no buildings or structures of this period have been identified. The pottery from the Middle Bronze Age pits is in the Deverel-Rimbury style, characterised by barrel-shaped urns in grog-tempered fabrics.

The cremation burial (G5010) was located in the centre of the site. It was within a small, oval pit measuring 0.46m x 0.38m x 0.14m deep, with a bowl-shaped profile. The fill was black (charcoal-rich) clay containing frequent flecks and small fragments of burnt bone (representing the partial remains of at least two individuals - one young adult and one juvenile) and the incomplete remains of a small, plain, barrel-shaped vessel. The bone and pottery fragments were dispersed widely throughout the fill, demonstrating that the vessel was broken before being deposited in the pit and that the cremation was probably redeposited.

Two widely separated pits G5012 and G5013 contained the incomplete remains of the same large, decorated urn:

Pit G5012, in the north-western part of the site, was sub-circular and measured 0.57m wide x 0.18m deep, with steep sides and a rounded base. Its fill was dark grey (charcoal-rich) silty clay containing frequent fragments of pottery. Environmental analysis has revealed the presence of fragments of charred roots or stems but no evidence to indicate the function of the pit.

Pit G5013 was located 58m to the southeast of pit G5012. It was oval, measuring 0.96m x 0.40m x 0.14m deep, with moderately steep sides and a concave base. Its fill was mid greyish green silty clay with occasional angular flint pebbles and charcoal flecks. It contained frequent sherds of pottery (some quite large), placed at the east end of the pit. Neither of these pits contained fragments from other vessels.

Two other pits, G5011 and G5014, contained small amounts of Middle Bronze Age pottery; these quantities are insufficient to provide a firm date for the features in which they were found. Small and abraded fragments of Middle Bronze Age pottery occurred residually in Later Bronze Age / Early Iron Age ditches G5005 and G5008.

### 4.6 Later Bronze Age / Earlier Iron Age: 1150–600 BC

Activity on the site seems to have increased in the Later Bronze Age / Earlier Iron Age, and was represented by a roundhouse within a penannular enclosure ditch (both clearly visible on Plate 1, in the southeast corner of the site), two intercutting linear ditches and scattered pits that included at least one probable external hearth/cooking pit. These features have been dated by the presence of characteristic flint-tempered pottery, chiefly small to medium-sized shouldered jars with fingertip impressions on the rim.

**Roundhouse and enclosure ditch**

The roundhouse (G5003) was represented by eleven postholes arranged in a circle with a diameter of approximately 7m. They were spaced irregularly, generally at an average of 1.8m apart. Two of the postholes were more widely spaced (at 2.85m) and are thought to indicate the position of an entrance on the south-eastern side of the roundhouse.

The postholes were sub-circular or oval, with an average width of 0.34m and a maximum surviving depth of only 0.18m. They had steep or vertical sides and (mostly) rounded bases. Only one posthole displayed an obvious post pipe. They were filled with deposits of grey or brown clayey silt or sandy clay

containing flecks of charcoal and pebbles but few artefacts; one of them contained three fragments of Later Bronze Age / Earlier Iron Age pottery and another contained a flint flake.

The posthole 0138 on the southwest side of the postulated entrance appeared to cut an earlier posthole 0140, suggesting that the structure was repaired at this point.

The only evidence for activity within the roundhouse was a hearth (G5004), located slightly north of the centre of the building. It was represented by a sub-circular pit measuring 1.40m wide x 0.30m deep and containing a sequence of three clayey fills; these included varying amounts of charcoal, scorched clay and fire-cracked flint, a cow tooth and two possible struck flints. Other than charcoal and charred roots/stems, occasional carbonised rye grains were the only environmental indicators found in the hearth. A fragment of Middle Saxon pottery from the upper fill of the hearth is obviously intrusive.

Roundhouse G5003 was located in the northern half of a circular enclosure defined by penannular ditch G5005. The enclosure had an internal diameter of 19.50m. The entrance was on the west side and was approximately 4.2m wide. The ditch was generally from 1.2m to 1.5m wide and up to 0.64m deep with steep (though sometimes irregular) sides and a rounded base. On either side of the entrance the ditch widened to approximately 2.5m and had a stepped profile on its eastern (interior) edge.

On the northeast side of the enclosure there was an apparent area of erosion on the western (interior) edge of the ditch. At this point the primary fill, lying against the western side and in the base of the ditch, seemed to have been trampled into the underlying natural.

The ditch was investigated at twelve locations, each revealing a sequence of between two and four fills. The fills were mostly grey or brown sandy clay/silts, containing varying amounts of charcoal, from discrete fragments to concentrated lenses. Some fills contained also lens or pockets of scorched

clay and sand. The disposition of the fills provided no clear evidence for the location of an associated bank; however, because of the position of roundhouse G5003 close to the ditch it seems unlikely that any bank was internal.

The finds assemblage from the ditch consists mainly of Later Bronze Age / Earlier Iron Age pottery, accounting for approximately 65% of all pottery of this date from the site. At least thirteen vessels are represented, principally coarse jars with fingertip-impressed rims. A small, localised group of residual Middle Bronze Age pottery fragments came from an upper fill on the eastern side of the ditch, and occasional post-prehistoric artefacts are clearly intrusive. The greatest concentrations of pottery were in the ditch termini on either side of the entrance to enclosure G5005.

Apart from roundhouse G5003 there was little evidence for activity within enclosure G5005. Pit G5006, located just inside the entrance, contained a small amount of Later Bronze Age / Earlier Iron Age pottery, occasional fired clay and frequent charcoal flecks. The function of the pit is unknown; environmental analysis of its fill has revealed only a single specimen of redshank seed and some charred roots/stems. A second pit (G5007) could not be dated but is assumed to have belonged to this period of activity. It was located 3m southeast of the postulated entrance to roundhouse G5003. It contained frequent charcoal flecks but no cultural material, and no other environmental evidence to suggest its function.

**Linear ditches**

Two shallow, linear ditches (G5008 and G5009) are dated tentatively to the Later Bronze Age / Earlier Iron Age, due to the presence of small quantities of pottery of that period. It is possible that this material was residual and that the ditches were later in date.

Ditch G5008 was oriented northwest–southeast. It was 41.8m long x up to 0.60m wide x up to 0.30m deep, with a rounded terminus at each end. Generally it had steep sides and a concave base. The ditch had a single,

sandy clay fill containing small quantities of pottery and struck/worked flints. The pottery is mostly of Middle Bronze Age date (these fragments being small and abraded) but two sherds of Later Bronze Age / Earlier Iron Age pottery were found also.

Ditch G5009 was oriented west southwest–east northeast and cut earlier ditch G5008. It was approximately 66m long x up to 0.46m wide x up to 0.22m deep, with moderately steep sides and a concave base. The ditch ran beyond the limit of excavation to the west and petered out to the east. It had a single fill containing occasional fragments of Later Bronze Age / Earlier Iron Age pottery and/or struck flints.

**Pits**

A cluster of pits at the south end of the site included an external hearth / cooking pit G5019. This was a large, irregularly-shaped pit or depression (possibly two intercutting features) measuring 2.0m x 0.85m x 0.26m deep with gently-sloping sides and an undulating base. It was filled with mottled, light greyish brown and orangey brown clay containing frequent charcoal flecks, twenty sherds of Later Bronze Age / Earlier Iron Age pottery and some lenses of fire-cracked flints with occasional sandstone fragments.

Pit G5027, located close to external hearth G5019, contained the largest assemblage of Later Bronze Age / Earlier Iron Age pottery on the site, outside of enclosure ditch G5005. The pit was circular, measuring 0.80m wide x 0.44m deep with vertical sides and a concave base. It contained two fills – the primary fill was dark brownish grey silty sandy clay with frequent charcoal flecks and fragments, occasional scorched clay lumps and three fragments of pottery. The upper fill was mottled, mid brown and orangey brown silty sandy clay containing forty-six sherds of pottery from at least four vessels, including two small, fine jars, an open bowl, and a small, closed cup. These small, fine vessels are in marked contrast to the larger, coarser jars found in enclosure ditch G5005.

Two small pits (G5023 and G5024) in the same cluster had charcoal-rich fills containing small amounts of Later Bronze Age / Earlier Iron Age pottery, while other pits in this area were undated or could only be dated imprecisely to the prehistoric period (see section 4.7).

A large posthole (G5015) was located approximately 15m west of the entrance to enclosure G5005. It measured 1.10m x 0.85m and was generally only 0.12m deep, but at its southeast end there was a deeper area with vertical edges and a flat base measuring 0.34m wide x 0.44m deep; this is interpreted as the socket for a large, timber post. There was a single fill of light to mid brown silty sandy clay with pockets of olive brown clay and patches of charcoal, containing ten sherds of Later Bronze Age / Earlier Iron Age pottery.

The remaining features of Later Bronze Age / Earlier Iron Age date were scattered, small pits and a posthole located in the central and northern parts of the site. They contained small amounts of pottery, some struck/worked flints, charcoal, fragments of fired clay and fire-cracked flints.

Generally animal bone preservation was poor, being confined mainly to teeth and burnt bone. Similarly, plant macrofossils were sparse with one notable exception – small pit G5045, in the centre of the site, contained a high density of flax seeds, along with hazel nutshell fragments and a piece of sloe-type fruit stone. This material was almost certainly the residue from a meal.

### 4.7 Unspecified Prehistoric: 2600–600 BC

There were several pits that contained small amounts of un-diagnostic prehistoric pottery or struck/worked flints; these are likely to have been of Bronze Age or Early Iron Age date. Other pits contained no datable material but their locations close to dated features and the presence within them of fire-cracked flint suggests strongly that they were of prehistoric date. Most of these features were small and obviously truncated, and are therefore difficult to interpret. However, three of them (G5017, G5028 and G5055) have been identified as probable cooking pits or external hearths, on the grounds that

they contained relatively large amounts of charcoal and fire-cracked flint, and another (G5066, which is larger than the rest), is interpreted as a possible clay extraction pit.

G5017 was a probable cooking pit located close to Later Bronze Age / Earlier Iron Age features G5019 and G5027, at the south end of the site. It was 0.60m wide x 0.26m deep with steep sides and a flat base. Its fill was light greyish brown silty sandy clay with occasional patches of scorched clay, frequent charcoal throughout and a concentration of fire-cracked flints at the base. It contained a single sherd of un-diagnostic prehistoric pottery.

G5028 was an isolated pit or depression in the south-western part of the site. It was 0.52m wide x 70mm deep, with a saucer-shaped profile. Its fill was dark grey silty clay with moderate flecks of charcoal and frequent fragments of fire-cracked flint, but no cultural material. It has been interpreted as an external hearth or the base of a truncated cooking pit. The fill contained no environmental evidence (other than charcoal) and there was no indication of the precise use of this feature.

G5055 was a shallow pit or depression in the centre of the site. It was 0.66m wide x 0.10m deep, with a saucer-shaped profile. Its fill was mid orangey brown sandy clayey silt with frequent fire-cracked flint, occasional fired clay fragments and one sherd of prehistoric pottery. It is interpreted likewise as an external hearth or the base of a truncated cooking pit. The fill contained no environmental evidence (other than charcoal) and there was no indication of the precise use of this feature.

G5066 was an oval pit measuring 5.5m x 3.0m x 0.80m deep, with vertical sides and a flat base. It was filled with highly compacted, mid orangey brown sandy clay with frequent charcoal flecks, a fragment of un-diagnostic prehistoric pottery, a struck flint and three fragments of fire-cracked flint. The function of the pit is uncertain, but given its size it is likely to have been a clay extraction pit.

### 4.8 Roman: AD 1–410

There were no features that could be dated with certainty to the Roman period. Three abraded sherds of Roman pottery and a fragment of (probably Roman) brick or tile occurred residually in later features or deposits. One of these (G5061), a large quarry pit containing evidence for Early Saxon activity (see below), *might* have been dug in the Roman period.

### 4.9 Early Anglo-Saxon: AD 400–720

In the Early Anglo-Saxon period activity seems to have been confined to a hollow area in the north-eastern part of the site. The hollow was within a large, irregular and partially backfilled pit (G5061) measuring 15.8m x 11.6m x 1.6m deep. The sides of the pit varied from gently-sloping to steep and irregular, and the base was slightly concave. It was dug through the Lowestoft Till (G5001) and slightly into the underlying natural sand, and is interpreted as a quarry for clay extraction. There is insufficient evidence to date this activity; the quarrying could have taken place in the prehistoric, Roman or Early Anglo-Saxon periods.

The primary fill of quarry pit G5061 was homogeneous, mid orangey brown silty sand with occasional pebbles, up to 1m thick. It contained occasional Later Bronze Age / Earlier Iron Age pottery, some struck flints and patches of charcoal. It is suggested that this deposit resulted from the accumulation of wind-blown soils after the quarry had been abandoned (see 5.5). The surface of the deposit had a dished profile that reflected the contours of the underlying pit.

Above this wind-blown fill was a relatively thin deposit (up to 70mm) of mid greyish brown charcoal-rich silty clay, covering an area of at least 8m x 4m; this can be seen as a dark layer in section on Plate 2. It contained sixteen sherds of Early Anglo-Saxon pottery (representing at least four vessels), a single sherd of residual Roman pottery, 13 fragments of lava quern (probably from the same object, and likely to be of Roman date), a fragment of an Anglo-Saxon ring-shaped, ceramic loom weight (SF 1010), two, un-diagnostic

fragments of iron-working slag, some struck flints, fire-cracked flint and fired clay. This is interpreted as an occupation deposit, although there was no associated evidence for buildings or structures.

The occupation layer was sealed by a deposit of homogeneous, mid greyish brown silty clay, up to 0.90m thick and filling the upper part of the former quarry pit. It contained occasional pebbles and charcoal flecks, a sherd of Roman pottery and two sherds of un-diagnostic prehistoric pottery; the ceramics are obviously residual. This deposit is assumed to have been wind-blown material that accumulated gradually subsequent to the use and abandonment of the hollow in the Early Anglo-Saxon period.

### 4.10 Middle Saxon: AD 720–850

The only evidence for activity in the Middle Saxon period was a single sherd of intrusive pottery found in the upper fill of hearth G5004 in Later Bronze Age / Earlier Iron Age roundhouse G5003.

### 4.11 Medieval: 1066–1500

There is little evidence for occupation of the site in the medieval period. A single, non-diagnostic pottery sherd was recovered as a surface find from the top of an otherwise undated quarry pit G5062, and three sherds of Hollesley-type ware dated to the 13th–14th century were surface finds from another undated quarry pit G5065. A sherd of similar date was a residual find from the surface of post-medieval ditch G5029.

### 4.12 Post-medieval: 1500–1900

There are no features that can be dated with certainty to this period and the only artefactual evidence came from ditch G5029, which is assumed to have been relatively modern (see 4.13).

A subsoil layer (G5070), interpreted as a former ploughsoil, existed below the current topsoil (G5072) but generally it was not recorded archaeologically,

having been removed mechanically with the topsoil. It is assumed to have extended site-wide and seems to have been approximately 0.30m thick. A localised deposit of mid brown silty soil with occasional charcoal flecks and some residual prehistoric pottery was noted in the northern part of the site but was not planned. This is assumed to have been a remnant of the former ploughsoil filling a slight hollow in the underlying natural stratum (G5001).

In the absence of artefactual evidence from the ploughsoil it is assumed to be of post-medieval date, when intensive agricultural use of this land seems most likely.

### 4.13 Modern: 1900–present

A north–south ditch (G5029) ran along the eastern edge of the site and extended beyond the limits of excavation in both directions. It was >90m long x up to 1.8m wide x 0.72m deep, with steep (slightly irregular) sides and a narrow, flat base.

Four sections of the ditch were investigated, each revealing sequences of two or three fills; these were mostly brown sandy/silty clays, some of which contained occasional fragments of clay tobacco pipe (dated 1580–1910), late medieval/post-medieval peg tiles and a fragment of post-medieval brick. Two sherds of late post-medieval flower pot (18th–20th centuries) were found on the surface of the ditch.

This feature did not coincide with any of the field boundaries shown on late 19th-century Ordnance Survey maps and is unlikely therefore to have been of post-medieval date. Also, it does not appear on an aerial photograph of the site taken in 1945. However, it was very close to the existing site boundary, which has existed only since the Second World War. The ditch is assumed therefore to have been of relatively recent date.

The topsoil (G5072) was mid to dark brown clayey loam with occasional pebbles. It extended site-wide and was about 0.25m thick.

### 4.14 Undated

Apart from a quarry pit described above (G5061; see 4.9), which was backfilled partially by the Early Anglo-Saxon period, and another quarry pit that is assumed to have been of prehistoric date (G5066; see 4.7), there were several large pits that are assumed also to have been for clay extraction. Unfortunately there was little or no dating evidence associated with these features.

G5060 was a large, pear-shaped pit measuring 10.5m x 6.5m x 0.8m deep. Its sides varied from shallow to moderately steep and it had a slightly concave base. It was filled with deposits of homogeneous, orangey brown or greyish brown sandy clay that were probably derived from wind-blown soils. No cultural material was recovered from the fills of this pit.

G5062 was a large, oval pit measuring 11.3m long x 6.0m wide x 2.1m deep, with very steep (but irregular) sides breaking gradually into a concave base. It contained a sequence of fills – the lower fills were mostly greenish brown or brown clays (apparently derived from the natural till deposits) with some pockets of yellowish brown clayey sand. Its upper fills were deposits of yellowish brown clayey sand that are thought to reflect the local, naturally-occurring Brown Sands and might have represented wind-blown accumulation (see 5.5). The fills contained varying amounts of fragmented flint and pebbles and some contained charcoal flecks, but no cultural material. A sherd of medieval pottery was recovered from the surface of the uppermost fill, but is insufficient to date the feature.

G5065 was a very large pit, or area of intercutting pits, measuring 23m x 15m x up to 1.9m deep. The edges (where seen) were generally steep and the base was extremely undulating. Generally the pit was dug through the Lowestoft Till and slightly into the underlying glacio-fluvial sand. A localised, deeper area (G5063/G5064) at the south end of pit extended into the sand to an additional depth of about 1m, and is interpreted as a possible sump.

The pit (or pits) contained a complicated sequence of dumped fills, mostly clayey soils with chalk and flint inclusions (redeposited Lowestoft Till) but including sandier deposits that are thought to have derived from the local Brown Sands. The fills produced a very small amount of cultural material – a single sherd of un-diagnostic prehistoric pottery came from one of the lower fills, and three sherds of medieval pottery were retrieved from the surface of the feature following topsoil stripping.

G5067 was a large, irregular cut with maximum dimensions of 15.5m x 8.5m x at least 1.5m deep. It had vertical sides and a flat base. Its fill was highly compacted, mid orangey brown sandy clay with frequent charcoal flecks but no cultural material; this was indistinguishable from the fill of nearby quarry pit G5066, which was probably of prehistoric date.

It is noted that two brickworks and associated quarry pits are shown on the Ordnance Survey maps of *c.* 1890 and 1920, just to the northeast of the site. These seem to have been fairly short-lived, since they do not appear on the *c.* 1880 Ordnance Survey map, and both are labelled as disused by *c.*1920. It is possible therefore that one or more of the quarry pits on the site (including G5066, despite the presence of some prehistoric material) dated to the late 19th century. Only G5061, which was backfilled partially by the Early Anglo-Saxon period, was undoubtedly of some antiquity.

An extensive deposit (G5071) in the southwest corner of the site was interpreted originally as natural colluvium. It was homogenous, yellowish brown silty clay with occasional stones, and (where recorded against the western limit of excavation) was about 0.85m thick, overlying the Lowestoft Till G5001. In retrospect, given that this deposit was so similar to the upper fill of nearby quarry pit G5065, it is considered more likely to have been a redeposited soil horizon of relatively recent date. It sealed earlier pits G5067 and G5066.

An undated linear feature G5030 was located to the east of enclosure ditch G5005. It measured >8.0m long x 0.37m wide x 0.10m deep, and had a U-

shaped profile. To the southeast it was cut by post-medieval ditch G5029, and to the northwest it had an uncertain relationship with enclosure ditch G5003.

Two sections of the feature were investigated, each revealing a single fill of greyish brown silty sandy clay with patches of orange brown sandy clay containing varying amounts of charcoal, some scorched clay, fragments of chalk and three small fragments of undatable flint-working waste.

The function of this feature is unknown, although it is noted that it is on the same orientation and alignment as Later Bronze Age / Earlier Iron Age ditch G5008.

Plate 1. Aerial view of the site (north is up). The Later Bronze Age / Earlier Iron Age enclosure and roundhouse are clearly visible

Plate 2. General view of quarry pit G5061, looking northwest

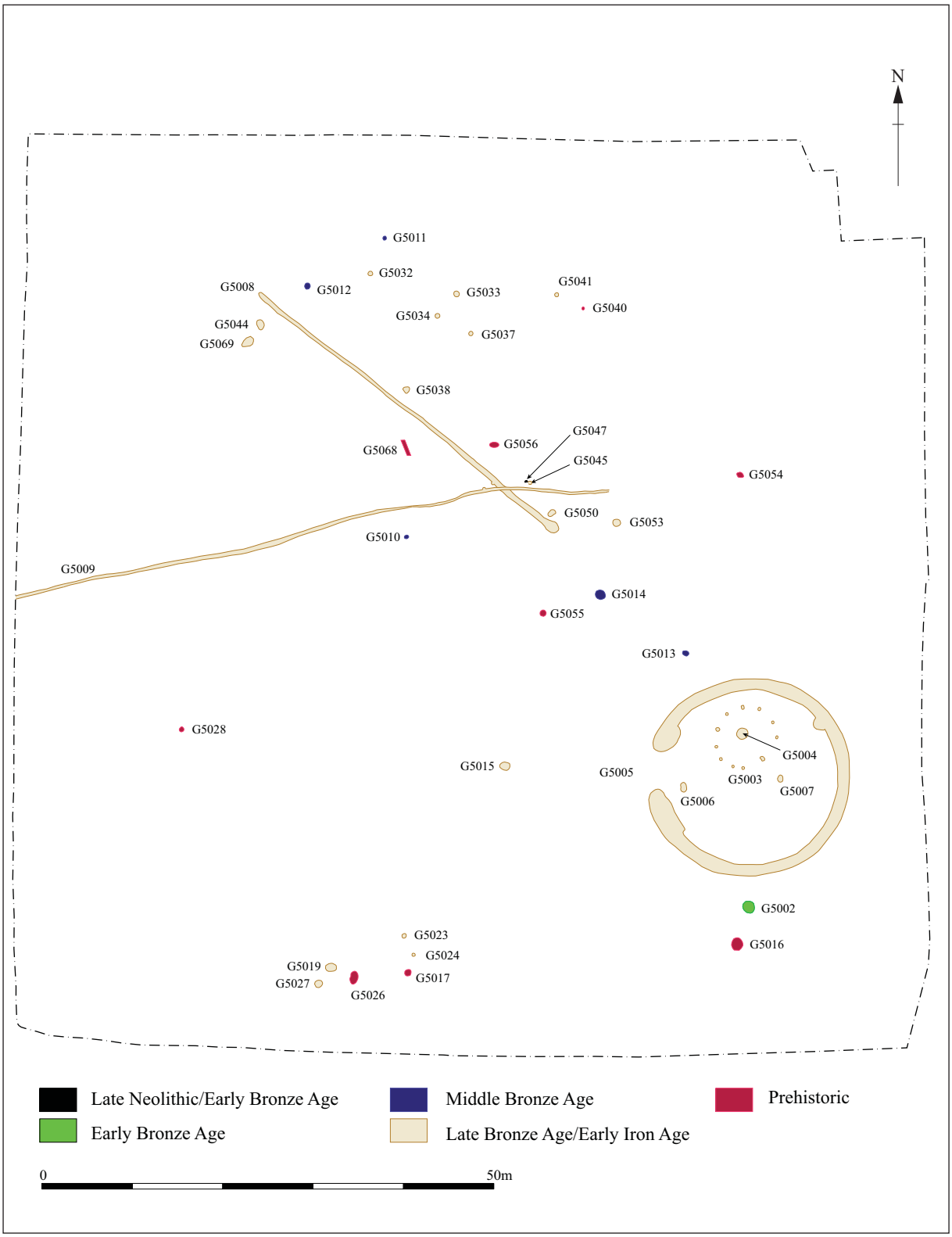


Figure 4. Plan of prehistoric features

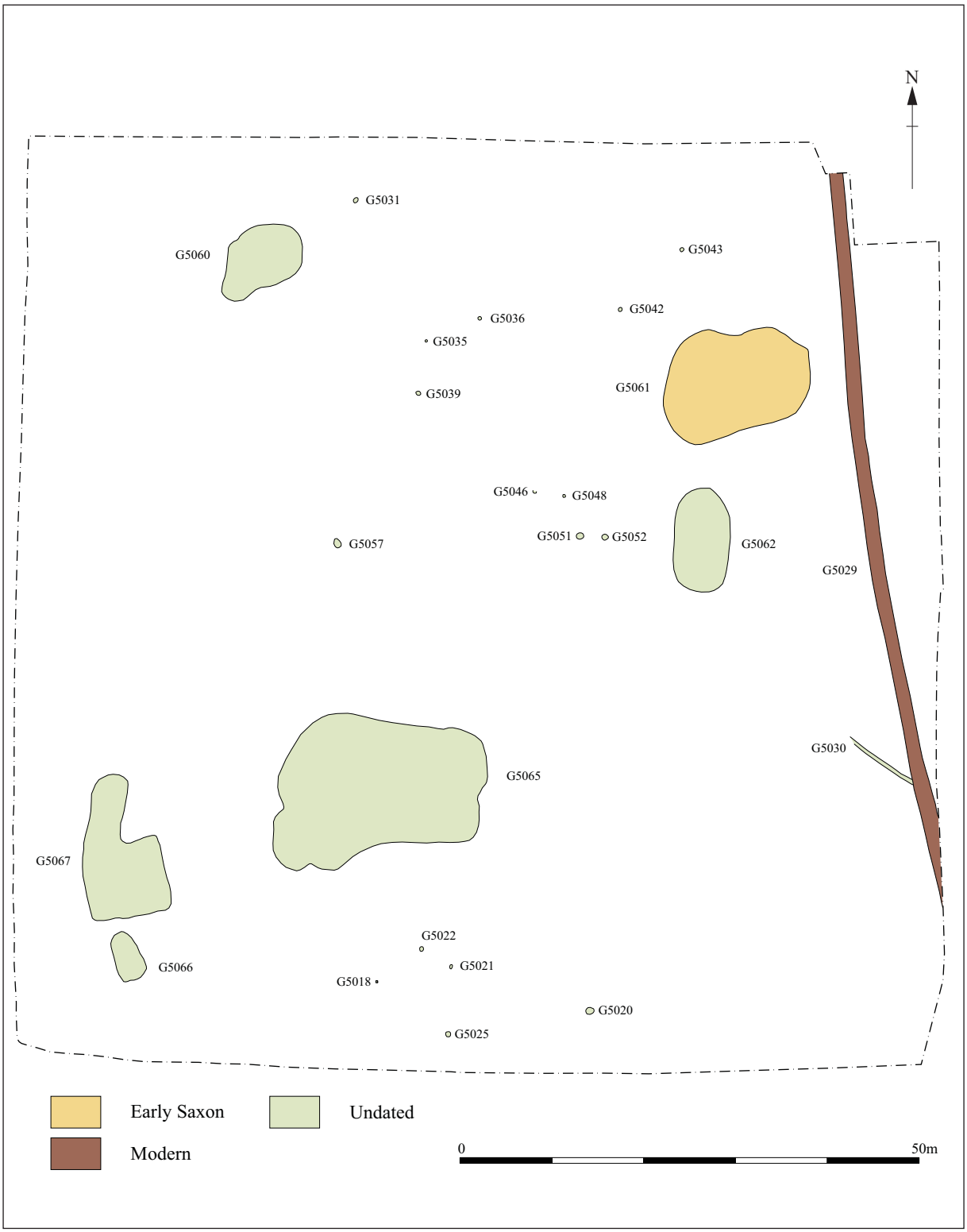


Figure 5. Plan of Early Anglo-Saxon, modern and undated features

# 5 Quantification and assessment

## 5.1 Post-excavation review

The following post-excavation tasks have been completed for the stratigraphic, finds and environmental archives:

Task 01: Completion and checking of the primary (paper and digital) archive

Task 02: Microsoft Access database of the stratigraphic archive

Task 03: Microsoft Access database of the finds archive

Task 04: Microsoft Access database of the environmental archive

Task 05: Catalogue and archiving of digital colour images

Task 06: Catalogue and archiving of monochrome print images

Task 07: Section drawings inked

Task 08: Contexts allocated to Groups

Task 09: Group description/discussion text

Task 10: Survey data uploaded and converted to MapInfo format

Task 11: Plans digitised and integrated with survey data

Task 12: X-radiography of iron finds

Task 13: Processing, dating and assessment of finds

Task 14: Processing and assessment of environmental samples

Task 15: Evaluation of soil micromorphological samples

## 5.2 Quantification of the stratigraphic archive

The stratigraphic archive is quantified in Table 1:

| Type | Quantity | Format |
|---|---|---|
| Context register sheets | 9 | A4 paper |
| Context recording sheets | 53+ | A4 paper |
| Enviro sample register sheets (site version) | 2 | A4 paper |
| Enviro sample register sheets (post exc version) | 3 | A4 paper |
| Environmental sample sheets | 60 | A4 paper |
| Small find register sheets | 1 | A4 paper |
| Section drawing sheets (1:20, excavation) | 5 | A1 film |
| Section drawing sheets (1:20, excavation; inked) | 3 | A1 film |
| Plan drawing sheets (1:50, excavation) | 15 | A1 film |
| Plan / section drawing sheets (evaluation) | 1 | A1 film |
| Plan / section drawing sheets (evaluation, inked) | 1 | A1 film |
| Plan drawing sheet (inked sketch, 1:340) | 1 | A1 film |
| Photographic register sheets | 6 | A4 paper |
| Digital images (FXD 1-96; FXE 1-50) | 146 | 2048 x 1536 pixel .jpg |
| B/W images (FXA 1-37; FXB 1-37; FXC 1-37) | 111 | Negatives and contact sheets |
| Aerial photographs | 16 | 10 x 8 inch colour prints |
| Aerial photographs | 16 | 4064 x 2704 pixel .jpg |
| Evaluation Report (SCCAS report no. 2005/192 | 1 | A4 comb-bound |
| This PXA Report (SCCAS report no. 2009/297) | 1 | A4 wire-bound |

Table 1. Quantification of the stratigraphic archive

## 5.3 Quantification and assessment of the finds archive

*Cathy Tester (with Sue Anderson, Sarah Bates, Richenda Goffin, Sarah Percival & Alison Sheridan)*

### *5.3.1 Introduction*

The finds have been quantified and catalogued fully. Table 2 shows the quantities of all finds categories from both phases of fieldwork. A full quantification by context can be found in the site archive.

| Find type | No. | Wt/g |
|---|---|---|
| Pottery | 1177 | 7361 |
| Ceramic Building material | 7 | 245 |
| Fired clay | 217 | 2255 |
| Clay tobacco pipe | 2 | 3 |
| Lava quern | 20 | 122 |
| Worked flint (including small finds) | 447 | 6824 |
| Heat-altered stone | 241 | 12543 |
| Slag | 33 | 399 |
| Animal bone | 30 | 127 |
| Shell | 2 | |

Table 2. Finds quantities

### *5.3.2 Pottery*

The excavation produced a total of 1177 sherds of pottery weighing 7361g. These were recovered from 87 contexts. The majority of the pottery is prehistoric, but small amounts of later pottery ranging in date from Roman to post-medieval were found also. The quantities by period are summarised in Table 3 and the full catalogue by context can be found in the site archive.

| Period | No. | Wt/g | % Wt |
|---|---|---|---|
| Prehistoric | 1145 | 6916 | 94.0 |
| Roman | 3 | 182 | 2.5 |
| Early Saxon | 16 | 148 | 2.0 |
| Middle Saxon | 1 | 29 | 0.4 |
| Medieval | 10 | 75 | 1.0 |
| Post-medieval | 2 | 11 | 0.1 |
| Total | 1177 | 7361 | 100.0 |

Table 3. Pottery quantities by period

**Prehistoric pottery**

*Sarah Percival*

***Introduction and methodology***

A heterogeneous assemblage of Later Neolithic to Later Bronze Age / Earlier Iron Age pottery was recovered. The majority of the pottery is of Later Bronze Age / Earlier Iron Age date and is associated with a roundhouse (G5003) within a penannular enclosure ditch (G5005). Small quantities of Earlier Bronze Age and Middle Bronze Age pottery were recovered, including an incomplete collared urn found with a flint knife and decorated jet object (G5002) and two incomplete Deverel-Rimbury style urns (G5010, G5012/5013). The pottery is in variable condition and includes no complete vessels. Just less than 5% of the assemblage is not closely datable.

The assemblage has been analysed in accordance with the Prehistoric Ceramic Research Group's General Policies and Guidelines for Analysis and Publication (PCRG, 1997). The total assemblage has been studied and a full catalogue prepared. The sherds were examined using a binocular microscope (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types present. Fabric codes were prefixed by a letter code representing the main inclusion: 'F' representing flint, 'G' grog and 'Q' quartz.

Vessel form and form element were recorded and the pottery was quantified by count and weight. The quantities by period are summarised in Table 4 and the full catalogue by context can be found in the site archive.

| Date | No. | Wt./g | % Wt |
|---|---|---|---|
| Later Neolithic to Earlier Bronze Age | 1 | 20 | 0.3 |
| Bronze Age | 12 | 103 | 1.5 |
| Earlier Bronze Age | 24 | 173 | 2.5 |
| Middle Bronze Age | 405 | 2250 | 32.5 |
| Later Bronze Age / Earlier Iron Age | 657 | 4042 | 58.4 |
| Not closely datable (NCD) | 46 | 328 | 4.7 |
| Total | 1145 | 6916 | 100.0 |

Table 4. Prehistoric pottery quantities by period

### *Later Neolithic to Earlier Bronze Age*

A single sherd of possible Beaker pottery weighing 20g was found in posthole G5047. The sherd is made of a coarse flint-tempered fabric and has deep fingertip-impressed decoration all over. Beaker was in use in the Later Neolithic to Earlier Bronze Age, between approximately 2600 and 1800BC (Kinnes *et al.,* 1991).

| Fabric | Description | No | Wt./g |
|---|---|---|---|
| F1 | Abundant angular calcined flint; moderate, sub-rounded quartz sand. Interior: smoothed, dark to buff orange brown, core: dark grey to black, exterior: buff orange to brown Laminated fracture. Hard. | 1 | 20 |
| Total | | 1 | 20 |

Table 5. Later Neolithic to Earlier Bronze Age (Beaker) fabric

### *Bronze Age*

12 sherds of grog-tempered pottery of probable Bronze Age date were recovered from the fill of linear ditch G5009 and ring ditch G5005. The sherds are undecorated and are in poor condition indicating that they are almost certainly residual.

| Fabric | Description | No | Wt/g |
|---|---|---|---|
| G1 | Moderate, rounded grog; moderate, sub-angular quartz sand. Interior smoothed mid brown; core: dark brown inner, orange to buff outer; exterior: orange buff. Vesicular surface and matrix. Soft. | 1 | 1 |
| G2 | Moderate, rounded grog; moderate, sub-angular quartz sand, moderate angular calcined flint. Interior smoothed mid brown; core: dark brown inner, orange to buff outer; exterior: orange buff. Vesicular surface and matrix. Soft. | 11 | 102 |
| Total | | 12 | 103 |

Table 6. Bronze Age fabric quantities

### *Earlier Bronze Age*

A small assemblage representing the incomplete remains of a collared urn was found in the fill of pit G5002 (context 0088; Fig. 6, No.1). Pieces from the collar, body and base of the vessel are present but do not join to make a complete profile. The sherds are extremely abraded but retain the remains of what may be cord-impressed decoration forming a herringbone motif on the interior and exterior of the collar extending down onto the body of the vessel. The collar is small suggesting that the vessel is of Burgess's early type (Burgess, 1986). Collared urn was current for around a millennia between approximately 2200 and 1200BC (Gibson 2002, 97). The urn fragments were found with a 'backed' flint knife and a decorated jet object (see 5.3.10).

| Fabric | Description | No | Wt./g |
|---|---|---|---|
| G10 | Abundant medium to large sub-rounded grog. Sparse quartz sand, occasional large fresh sub-angular flint pieces. Buff pink throughout. | 24 | 173 |
| **Total** | | **24** | **173** |

Table 7. Earlier Bronze Age fabric

### *Middle Bronze Age*

Pottery of the Middle Bronze Age Deverel-Rimbury style was recovered from seven features, including a cremation pit G5010.

*Fabric*

405 sherds weighing 2250g were found in four grog-tempered fabrics (Table 8). Grog tempering is particularly associated with Middle Bronze Age assemblages such as the large collection of urns excavated at Ardleigh in Essex (Brown 1999, 78).

| Fabric | Description | No | Wt./g |
|---|---|---|---|
| G21 | Moderate, rounded medium grog; moderate, sub-angular quartz sand. Interior smoothed mid brown; core: dark brown inner, orange to buff outer; exterior: orange buff. Vesicular surface and matrix. Soft. | 15 | 94 |
| G22 | Moderate, rounded medium grog; moderate, sub-angular quartz sand, moderate angular calcined flint. Interior smoothed mid brown; core: dark brown inner, orange to buff outer; exterior: orange buff. Vesicular surface and matrix. Soft. | 19 | 107 |
| G23 | Common small to medium grog, common small rounded quartz sand, Interior smoothed buff; core: dark brown inner, orange to buff outer; exterior: orange buff. Vesicular surface and matrix | 335 | 1701 |
| G24 | Common fine grog, common small rounded quartz sand, Interior smoothed buff; core: dark brown inner, orange to buff outer; exterior: orange buff. Vesicular surface and matrix | 36 | 348 |
| **Total** | | **405** | **2250** |

Table 8. Middle Bronze Age fabric quantities

*Form and decoration*

The assemblage contains rim, body and base sherds from two pots. One, a large decorated urn, is semi-complete and was spread between the fills of pits 0113 (G5013) and 0246 (G5012). The barrel-shaped vessel has a flattened rim with diagonal slashes along the rim top. Below the rim is a row of small perforations made before the pot was fired and an applied cordon decorated with fingertip impressions (context 0112; Fig. 6, No. 2). Perforations below the rim are generally believed to have been means for attaching a leather or fabric cover (Brown, 1995). An almost exact parallel for the semi-complete vessel was found at Ardleigh, Essex (Brown 1999, fig. 62, 74) though this example lacks the slashed decoration to the rim top. Similar slashed decoration is, however, present elsewhere within the Ardleigh assemblage (Brown 1999, fig. 65, 90). Perforations, slashes to the rim top and applied cordons are also common within the assemblage from Grimes Graves, Norfolk (Longworth *et al*. 1988, fig.28, 146).

A small, plain, barrel-shaped vessel (context 0152; Fig. 6, No. 3) with in-turned rounded rim was found associated with cremated bone in pit 0150 (G5010). Again, the vessel has parallels within the urn assemblage from the Ardleigh cremation cemetery (Brown 1999, fig. 66, 103).

A simple base with smoothed surfaces was found in posthole 0200 (G5011). The remainder of the assemblage comprises undecorated body sherds.

*Distribution*

Middle Bronze Age pottery was found in seven features (Table 9). 18 sherds weighing 83g came from the fills of enclosure ditch G5005. The sherds are in extremely poor condition and appear to have been burnt. The average sherd weight (ASW) for the sherds is less than 4g suggesting that they are probably residual. The sherds from linear ditch 0164 (G5008) are also highly abraded and have a small ASW of 4.9g, suggesting again that they are residual.

| Feature type | Feature | No | Wt./g |
|---|---|---|---|
| Ditch | 0041 | 18 | 83 |
| | 0164 | 11 | 54 |
| Pit | 0240 | 1 | 8 |
| | 0246 | 162 | 502 |
| | 0113 | 173 | 1199 |
| Posthole | 0200 | 4 | 56 |
| Cremation | 0150 | 36 | 348 |
| **Total** | | **405** | **2250** |

Table 9. Middle Bronze Age pottery by feature

Three pits contained Middle Bronze Age pottery. Substantial assemblages came from pit 0113 (G5013) and pit 0246 (G5012) which although 58m apart contained sherds from the same vessel, within dark, charcoal-rich fills. Neither pit produced any other pottery. Pit 0240 (G5014) contained a single highly abraded sherd. A base sherd and three undecorated body sherds were recovered from posthole 0200 (G5011). 36 sherds from a small plain vessel were found in cremation pit 0150 (G5010). The vessel is not complete and appeared to have been broken before it was placed in the pit.

*Discussion*

The Middle Bronze Age assemblage is of the Deverel-Rimbury tradition and is very similar to urns found at Ardleigh, Essex (Brown 1995, 1999) and to the pots from the 'Black Hole' at Grimes Graves (Longworth *et al.* 1988). Ardleigh urns have a wide date range spanning the mid second millennium to the beginning of the first millennium BC. However, the vessels from the CAC 035 site are most similar to the urns from Ring III at Ardleigh that date to the later

half of this broad currency and to those from Grimes Graves, which have an associated radiocarbon date of 1375–845 cal. BC (Longworth *et al*., 1988, 48). Brown, writing of the Deverel-Rimbury pottery of Essex, suggests that some of this later material may span the Middle Bronze Age to Later Bronze Age period (Brown 1995, 130) and it is possible that the barrel-shaped vessels from the CAC 035 site are of similar date.

### *Later Bronze Age / Earlier Iron Age*

*Introduction*

The Later Bronze Age / Earlier Iron Age pottery is distinguished from the earlier assemblages by the presence of flint tempering in the fabric. Vessel form is chiefly small to medium shouldered jars, some with fingertip impressions on the rim. Flint tempering and fingertip impressed rims are found within the Middle Bronze Age assemblage at Grimes Graves, and it is possible that some of the sherds are contemporary with this assemblage. However the CAC 035 assemblage lacks the barrel-shaped vessels that characterise the pottery from Grimes Graves and has therefore been given a broadly Later Bronze Age / Earlier Iron Age date.

*Fabric*

Seven fabrics were identified in two fabric groups (Table 10). The majority of the sherds (69%, weighing 2796g) contain varying quantities and sizes of crushed flint pieces. The remainder of the assemblage is quartz sand tempered. The most common sand fabric also contains sparse pieces of flint, though these are un-burnt, perhaps suggesting that they are not deliberately added but occur naturally within the clay source. Fabric Q33 contains elongated voids indicative of organic temper.

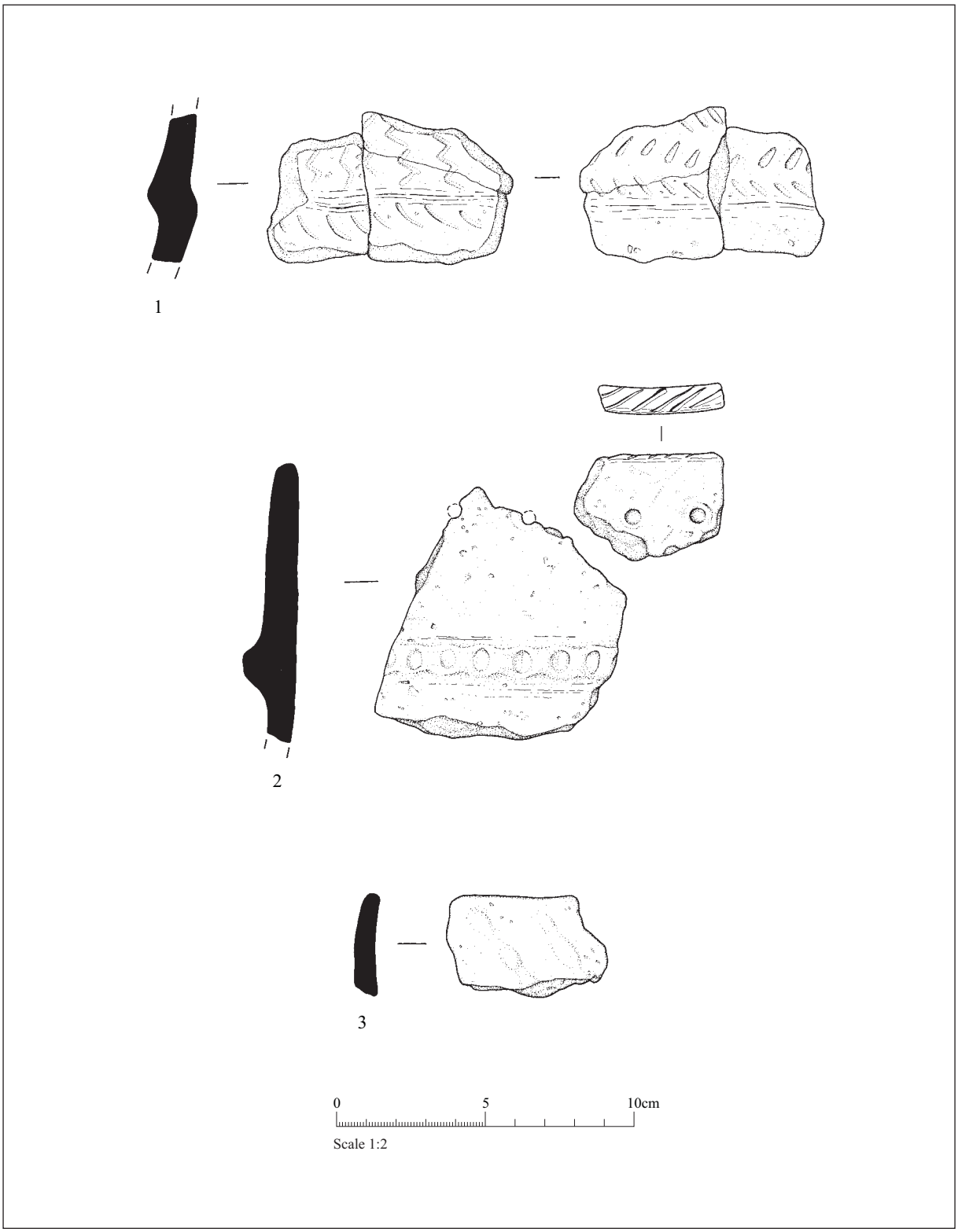


Figure 6. Earlier Bronze Age and Middle Bronze Age pottery

| Fabric | Description | No | Wt./g |
|---|---|---|---|
| F31 | Common small angular flint; moderate, medium rounded clear quartz sand. Interior and exterior dark grey to buff core dark grey. | 15 | 111 |
| F32 | Common medium angular flint; moderate, medium rounded clear quartz sand. Interior and exterior dark grey to buff core dark grey. | 317 | 1867 |
| F33 | Common coarse angular flint; moderate, medium rounded clear quartz sand. Interior and exterior dark grey to buff core dark grey. | 84 | 806 |
| F34 | Sparse large sub-rounded flint. Interior and exterior dark grey to buff core dark grey. | 1 | 12 |
| Q31 | Common small to medium mixed size and colour quartz sand. Smoothed surface. Hard fired. Ext. buff to dark grey brown, int. buff brown, core brown. | 43 | 212 |
| Q32 | Common coarse mixed size and colour quartz sand, sparse fresh flint. Hard fired, Ext. buff to dark grey brown, int. buff brown, core brown. | 188 | 975 |
| Q33 | Common colour quartz sand, sparse elongated voids. Smoothed surface. Coarse Hard fired medium. Ext. buff to dark grey brown, int. buff brown, core brown | 8 | 57 |
| U | Undiagnostic | 1 | 2 |
| **Total** | | **657** | **4042** |

Table 10. Later Bronze Age / Earlier Iron Age fabric quantities

*Form*

Based on rim count, a minimum of 27 vessels that can be classified within the typology developed by Barrett (1980) are represented within the Later Bronze Age / Earlier Iron Age assemblage. A limited range of vessel types are present, including small, round-shouldered jars with short out-turned necks and smoothed or burnished surfaces (Barrett Class IV; Brown 1988, fig.14, 17), coarse tripartite jars with flared rims with flattened or 'T' shaped rim terminals sometimes decorated with fingertip impressions along the top and side of the rim (Barrett Class I; Brown 1988, fig.17, 73 and 79; Martin 1993, fig. 21, 55) and small, fine Class V cups (Barrett 1980, fig. 5, 3). The vessels are broadly paralleled within the Later Bronze Age assemblages from Lofts Farm, Essex (Brown, 1988) and Barham, Suffolk (Martin, 1993).

*Distribution*

The largest single assemblage of pottery is from the fills of enclosure ditch G5005, which produced 2642g of pottery representing approximately 65% of the total assemblage from the site. It includes 18 rim sherds from 13 vessels, principally coarse jars with fingertip impressed rims. It is likely that the pottery found in the enclosure ditch represents domestic rubbish associated with the occupation of roundhouse G5003. The distribution of Later Bronze Age / Earlier Iron Age pottery by feature type is shown in Table 11.

| Feature type | Feature | No | Wt./g |
|---|---|---|---|
| Ditch | 0021 | 22 | 113 |
| | 0041 | 461 | 2642 |
| | 0164 | 2 | 20 |
| | 0206 | 11 | 55 |
| Pit | 0162 | 16 | 78 |
| | 0007 | 20 | 124 |
| | 0095 | 12 | 72 |
| | 0122 | 1 | 1 |
| | 0130 | 49 | 630 |
| | 0146 | 10 | 33 |
| | 0223 | 4 | 16 |
| | 0231 | 6 | 64 |
| | 0242 | 3 | 17 |
| | 0253 | 2 | 14 |
| | 0274 | 2 | 6 |
| | 0276 | 1 | 12 |
| | 0294 | 2 | 4 |
| Posthole | 0116 | 3 | 4 |
| | 0124 | 2 | 33 |
| | 0158 | 3 | 4 |
| | 0217 | 1 | 1 |
| | 0227 | 1 | 3 |
| | 0266 | 1 | 5 |
| Quarry | 0044 | 5 | 17 |
| Hillwash | 0085 | 7 | 21 |
| Surface finds | 0216 | 2 | 2 |
| | 0041 | 8 | 51 |
| **Total** | | **657** | **4042** |

Table 11. Later Bronze Age / Earlier Iron Age pottery by feature

A little less than 25% of the pottery (993g) was recovered from the fills of 13 pits. The distribution of pottery throughout the features is uneven; the largest assemblage came from pit 0130 (G5027) that contained five rims sherds from four vessels, including two small fine jars, an open bowl, and a small fine closed cup. The small, fine vessels found in pit G5027 contrast markedly with the larger more coarse jars found in enclosure ditch G5005, perhaps suggesting some functional or depositional zoning. Pit 0007 (G5019), located close to pit G5027, also produced a moderately large assemblage of 20 sherds (124g) including the rim from a coarse, round-shouldered jar. The remaining pits produced unremarkable assemblages.

One posthole from roundhouse G5003 produced pottery but the assemblage was small, comprising only three sherds weighing 4g, and was in poor condition. No noteworthy pottery was found in the remaining postholes.

*Discussion*

The assemblage finds broad parallels within the Later Bronze Age assemblages from Lofts Farm, Essex which dates to the 8th to 7th centuries BC (Brown, 1988) and Barham, Suffolk dated to the 9th to 5th centuries BC (Martin, 1993). The vessels are probably domestic and may be associated with the use of roundhouse G5003. No deliberate or structured deposition was observed.

It should be noted that this pottery has been examined by Matt Brudenell, who favours a Later Bronze Age date (Colin Pendleton, *pers comm*).

**Roman pottery**

Three, very abraded sherds of Roman pottery (182g) were found in three contexts. None are closely datable, but all are in features containing post-Roman finds. A dark reddish brown colour-coated (UCC) body sherd was recovered from a fill of modern ditch G5029. A storage jar body sherd (STOR) came from the upper fill (context 0045) of quarry pit G5061 and an amphora sherd (AA) of probable South Spanish origin was recovered from the lower fill (context 0063) of the same quarry pit G5061.

**Post-Roman pottery**

*Richenda Goffin*

***Early Anglo-Saxon***

Sixteen sherds of hand-made Early Anglo-Saxon pottery weighing 127g were identified in one context - fill 0063 of quarry pit G5061. Two organic tempered fabrics were distinguished on the basis of major inclusions, as described below:

ESO1: Heavily grass tempered with few other inclusions
ESO2: Grass tempered with more sand than ESO1

A minimum of four vessels are represented. 10 body sherds (62g) most of them joining, are from a single vessel - probably a globular jar in grass-

tempered fabric ESO1. The surface is smoothed externally and partially oxidised. One large sherd (26g) from a possible globular jar with a rounded, everted rim (approximately 110mm diameter, 13% present) has smoothed dark grey/black surfaces and core. A foot ring base (27g) in fabric ESO1 has orange-brown surfaces and a reduced core. Four sherds (33g) from the same vessel in a grass and sand-tempered fabric (ESO2) are flaked and abraded. The surface is partially oxidised and there is organic residue on the interior surface. None of the sherds are decorated.

As the quantity of Early Anglo-Saxon pottery recovered from the quarry pit is so small, few observations are possible. In general, fabrics with organic tempering in East Anglian assemblages are thought to date probably to the latter part of the Early Saxon period (S Anderson, *pers. comm*). The assemblage from the nearby Anglo-Saxon settlement site at Bloodmoor Hill, Carlton Colville (CAC 016) was dominated by quartz-tempered fabrics (41% of the total by weight), with organic-tempering being less well represented, making up 26% of the total by weight (Tipper, 2009).

***Middle Saxon***

A sherd of Middle Saxon Gritty Ipswich ware (GIPS), a West (1963) type 1E jar rim, was present in the upper fill of hearth G5004 in roundhouse G5003 and is obviously intrusive.

***Medieval and post-medieval***

Six sherds (39g) of medieval coarseware (MCW) were retrieved, mostly as surface finds from quarry pit G5062, quarry pit G5065 and modern ditch G5029. One of the sherds was unstratified. They are all un-diagnostic greyware body sherds and most of them are small.

A gritty medieval coarseware (MCWG) rim from a cooking pot or jar was a surface find from ditch G5029. Three sherds of Hollesley-type wares (HOLL), including two joining rim sherds from a cooking pot or jar, were surface finds from quarry pit G5065. These all date probably to the 13th- or 14th century. A non-diagnostic body sherd was a surface find from quarry pit G5062.

Two sherds of a late post-medieval earthenware (LPME) plant pot of 18th–20th century date were surface finds from enclosure ditch G5005.

### *5.3.3 Ceramic Building Material*

*Richenda Goffin*

Seven fragments of ceramic building material (245g) were collected from six contexts in four features - three ditches and a pit.

The earliest piece is possibly Roman, a fragment of brick or tile made in a hard, dark red fabric with a reduced core found in the upper fill of enclosure ditch G5005; it is obviously intrusive.

Three fragments of late medieval/post-medieval roofing tiles in medium and fine sandy fabrics were surface finds in modern ditch G5029 and enclosure ditch G5005. Two small abraded fragments of late medieval/post-medieval tile were found in pit G5037 and linear ditch G5009.

A fragment of post-medieval brick (170g) in a medium sandy fabric with flint was recovered from ditch G5029.

### *5.3.4 Fired clay*

*Richenda Goffin*

**Introduction and methodology**

A total of 217 fragments of fired clay weighing 2255g was recovered from 24 contexts in 11 features or as surface finds. The overall condition of the fired clay was poor, with most fragments being small and extremely worn. The assemblage was counted, weighed and recorded by fabric type. Other significant features such as the presence of structural impressions were recorded. The fired clay is quantified on an Access database that can be found in the site archive.

**Fabrics**

The range of fabrics identified was wide, but could be broadly divided into four main types:

1. Fine and medium sandy fragments with few other inclusions (fs, ms)
2. Similar to 1 but with the addition of small flint inclusions (fsf, msf)
3. Silty fabrics with mixed clay bands and the addition of red clay pellets or grog (fsg, msg)
4. Fabrics with organic inclusions (fso)

**Distribution and description**

***Fired clay from Later Bronze Age / Earlier Iron Age enclosure ditch G5005***

By far the largest quantity of fired clay was recovered from eight fills of the enclosure ditch G5005 (146 fragments, 1623g, making up 71.9% by weight of the overall assemblage). Several fabric types are represented, but overall the group is dominated by fine to medium sandy fabrics containing inclusions of sparse red clay pellets. Some fragments also have circular voids up to 8mm in diameter. A particularly well preserved fragment in context 0068 had a large ovoid void *c*. 31mm in width, with other smaller circular voids. Many fragments are mid orange-buff in appearance, some of which have dark grey patches.

Six fragments show the remains of concave impressions similar to rods used for wattle frameworks. Two of these from context 0060 have diameters of 15mm, whilst a third has a larger diameter of 20mm. The three impressions from two fragments in context 0068 have diameters of *c*.10mm, 14mm and 15mm. The largest fragment in context 0068 shows two parallel shallow impressions set back *c*. 25mm from what might have been an external face.

In addition, other fired clay fragments recovered from the enclosure ditch were made of fine and medium sandy fabrics, and four fragments from context 0062 are sandy with moderate organic voids and occasional flint. Two additional fragments from this fill are uniformly grey and semi-vitrified.

It is clear that many of the fragments of fired clay recovered from the enclosure ditch are very abraded and broken up, indicating that they could have been redeposited several times before eventually ending up in the ditch.

***Fired clay from Later Bronze Age / Earlier Iron Age pits***

A smaller quantity of fired clay was collected from the fills of several pits containing Later Bronze Age / Earlier Iron Age pottery (31 fragments, 125g, 5.5% by weight of the overall assemblage). Most of the fragments were made in silty fabrics with mixed clay bands, but the three fragments from fill 0243 of pit G5050 are more distinctive, being uniformly oxidised a brick red and having a fine fabric with occasional very small circular voids. They are much more similar in appearance to the fragments recovered from deposit 0063 in quarry pit G5061, which contains pottery dating to the Early Saxon period.

***Fired clay from external hearth G5055***

Two fragments of fired clay (75g) were recovered from hearth 0148 (fill 0149). The larger fragment has a mixed clay matrix with occasional flint inclusions. It is convex in shape and has a well-preserved linear impression 11mm in diameter. Although it bears some resemblance to a loom weight fragment, the internal diameter is small and it is much more likely that it is a fragment of structural daub.

***Fired clay from quarry pit G5061***

22 fragments of fired clay weighing 16g were recovered from deposit 0063, which also produced some Early Saxon pottery. The fragments of fired clay are uniformly orange in colour, and are made in a fine sandy fabric with occasional small circular voids. None of the fragments show evidence of any structural remains.

**Conclusions**

The majority of the fired clay was recovered from Later Bronze Age / Earlier Iron Age enclosure ditch G5005. Most fragments were small and few had any structural remains to provide some indication of usage. The fired clay from deposit 0063 in quarry pit G5061 has a different fabric and overall

appearance, which may suggest that it is not of the same date as most of the fired clay assemblage. The context also contained fragments of Early Saxon pottery and other less closely datable finds types.

As most of the fired clay fragments are very small and abraded, and no fragments have anything more than simple linear impressions from wooden rods, no illustration is recommended, and no further work is required on this assemblage.

### *5.3.5 Clay tobacco pipes*

Two post-medieval clay tobacco pipe stems were recovered from two contexts. One is from the upper fill of enclosure ditch G5005 and is obviously intrusive. The other was in the primary fill of boundary ditch G5029.

### *5.3.6 Lava querns*

20 fragments of lava stone weighing 122g were recovered from three contexts. The stone is grey and vesicular, almost certainly of Rhenish origin although its exact source cannot be confirmed. The pieces are too fragmentary to have any distinguishing features which would provide data for discussion about their size, type and date but they are presumed to come from hand-operated rotary querns which could be Roman, Middle Saxon or later.

13 fragments (104g), probably all part of one larger piece, were found in Early Saxon deposit 0063 in quarry pit G5061. Several of these fragments have a full thickness of 30mm but no other recordable features. A further six small, deteriorated fragments (15g) were present in quarry pit G5065 and one small fragment (3g) was probably intrusive in the upper fill of enclosure ditch G5005.

### *5.3.7 Worked flint*

*Sarah Bates*

**Introduction and methodology**

A total of 447 pieces of struck or shattered flint was recovered. The flint is mostly mid to dark grey but there are also a few paler-coloured pieces including whitish grey and slightly gingery brown. Various types of cortex are present including cream and off-white medium thickness cortex from nodules, abraded grey-coloured cortex from pebbles and, quite commonly, a smooth, white patinated cortex that demonstrates the use of already weathered material. Other, more slightly patinated surfaces also occur on several pieces.

Each piece of flint has been recorded by context in a Microsoft Access database, which can be found in the site archive. The material was classified by category and type. The numbers of pieces and numbers of complete, corticated and patinated pieces were recorded, and the condition of the flint was commented on. Additional description was added as necessary.

| Type | No. |
|---|---|
| multi platform flake core | 3 |
| single platform flake core | 1 |
| core on flake | 1 |
| tested piece | 11 |
| struck fragment | 20 |
| shatter | 31 |
| flake | 247 |
| blade-like flake | 29 |
| blade | 7 |
| spall | 54 |
| chip | 8 |
| scraper | 7 |
| end scraper | 2 |
| side scraper | 1 |
| combination tool | 1 |
| backed knife | 1 |
| knife | 1 |
| piercer | 1 |
| serrated blade | 2 |
| hammerstone | 1 |
| retouched flake | 11 |
| retouched fragment | 1 |
| utilised flake | 5 |
| utilised blade | 1 |
| **Total** | **447** |

Table 12. Summary of the worked flint

**The assemblage**

There are five flake cores. One is on a primary flake that has had flakes removed from its ventral face (0090) and there is a small cortical fragment with flakes struck from a platform at one end (0075). The other three cores are multi platform; one large and chunky (0063), one, an angular fragment (0245) and the other quite small and neat (0074).

11 pieces have been classified as 'tested' for use as cores. They are mostly irregular cortical fragments with a few flakes struck from one or another surface. 20 other miscellaneous struck fragments are present also.

More than half the assemblage (by number) consists of unmodified flakes. These are predominantly quite small and irregular in nature. Cortical platforms are relatively common and pieces are often quite thick and have been struck by hard hammer. As mentioned above, there are various types of cortex present, often within a single context assemblage, and many flakes have been struck from already patinated cores. There are a small number of neater, thinner flakes, possibly struck by soft hammer. Some quite thin and curving pieces may be thinning flakes (0058, 0075 and 0088) and one flake has an abraded platform (0208).

Although little time has been spent looking for refits, two flakes from context 0058 refit to each other. Two flakes from another context (0243) are very similar to each other and may also be from a common core. A small number of flakes are a slightly reddish or pinkish-tinged dark greyish brown in colour (0062, 0090 and 0088). It is possible that these may be slightly heat altered.

29 flakes are recorded as 'blade-like'. Many of these are quite small. A small number are quite neat and one has an abraded platform but most are slightly irregular, some quite thick and a few have cortex on their platforms showing that they were probably struck without much careful preparation of the cores.

54 spalls and eight chips, mostly very small, are present also.

31 pieces of shattered flint are present. Many of these are probably debris from knapping. They vary in size, but most are quite jagged in nature. Various types of cortex and degrees of patination occur. In one instance, from context 0110, two pieces are very similar in nature (colour, type of flint and cortex) and may have come from the same parent lump.

One flint piece is classified as a combination tool (SF 1002; Fig 7). It is on a roughly sub-circular flake that has cortex around its platform. It has minimal retouch around its distal part forming a thin scraper-like edge. On its right side a slight spur and adjacent notch have been formed.

10 scrapers are present. Two pieces are classified as end scrapers. One is a small, neat sub-circular flake, quite thick at its platform, with steep retouch forming a straight edge at its left distal edge and semi abrupt reverse retouch of its right edge (0001). The other, (SF 1003; Fig 7), is on a thin horseshoe-shaped flake and has quite minimal retouch of its distal end and even more slight retouch of its left edge. Part of its right edge is quite smooth and rounded, possibly worn by use. A quite long flake, its proximal end missing, has its steep right side retouched to form a side scraper (0318). The other scrapers are more irregular or more crudely worked.

A backed knife (SF 1005; Fig 7) is present. It has steep retouch along its left side to a dorsal ridge and some shallow scale flaking and edge damage on its right edge. Its distal tip appears to have snapped off and the very edge of this broken end has been finely retouched – perhaps for use as a thin, narrow scraper-like edge. A flaw in the flint has resulted in an unusual concavity in the dorsal surface.

The proximal end of another probable knife is present (SF 1007; Fig 7). It has bifacial flaking around its left proximal edge. Its surviving right edge is quite sharp and is unmodified.

A very small flake has its distal point utilised as a piercer (0318).

A cortical flint nodule with one face used as hammer stone has a few flakes removed, exposing very poor quality flint (0109).

18 miscellaneous retouched or utilised pieces are present, mainly retouched flakes. There are also two small blades with possible serrated edges (both unstratified, 0001).

**Flint by context**

***Earlier Bronze Age***

Six flints came from pit 0087 (G5002). They are a tested piece, a struck fragment, two flakes, a retouched flake and a backed knife (SF 1005; Fig 7). One flake is thin and slightly curving and may be a soft hammer-struck 'thinning' type piece. The other is a small, hard hammer-struck primary flake. The knife is on a blade that has steep 'backing' retouch of its left edge and slight shallow retouch of its right edge. Its distal edge is broken and has very slight abrupt retouch; it has been used for some kind of cutting or scraping purpose. The knife was found alongside pieces of collared urn of Earlier Bronze Age date and a decorated jet object.

***Middle Bronze Age***

Five flakes, generally thick and squat, and a thick hard hammer-struck flake with its distal end crudely retouched to form a scraper, came from pit 0240 (G5014) along with a single sherd of Middle Bronze Age pottery.

***Later Bronze Age / Earlier Iron Age***

A total of 272 flints came from deposits associated with enclosure ditch G5005. These include three flake cores and four tested pieces. The cores include a core on a flake, a small cortical fragment and a neat patinated piece.

There are 163 flakes from the enclosure ditch; these are almost all described as 'various' or 'small and irregular' in the catalogue demonstrating the use of different raw material and suggesting their relatively haphazard nature. They also include two refitting flakes from one context (0058). From the same

context there is a possible trimming flake, patinated white. There are several pieces with cortical platforms and three pieces have a slightly reddish tinge as if slightly burnt. The majority of the flakes have some degree of edge damage but there are also a few contexts where the material is quite sharp.

15 pieces are classified as blade-like. Most of these are small and several are thick. Most have some degree of edge damage. There are also three blades, either small or slightly irregular.

There are also 11 struck fragments, 18 shatter pieces, 35 spalls and six chips.

Retouched pieces from the enclosure ditch include the thin, horseshoe-shaped end scraper SF 1003, the bi-facial fragment of a probable knife SF 1007 and a combination tool SF 1002 (all shown on Figure 7), two irregular possible scrapers (context 0298), and a retouched flake. There are also two utilised flakes and one utilised blade.

Three flakes, one of them retouched, were found in an eroded area (context 0102) on the inner face of the ditch. The pieces have patinated cortex of various types (pebble and ‘chalky’ white).

Five flints were associated with roundhouse G5003, located within the enclosure. A small irregular blade-like flake came from post-hole fill 0084 and two small jagged fragments and two possibly struck fragments were found in the central hearth G5004.

A broad flake and a shatter piece, both jagged, came from pit G5006 located just inside the entrance to the enclosure.

40 flints were found in linear ditch G5008. They were mostly flakes and spalls, of various types and raw material. A core and two tested pieces, a side scraper, a small piercer and an utilised flake are present also. Most of the flakes are sharp or quite sharp although some of the other material has some degree of edge damage. It is probable that the flint is of Bronze Age or Iron

Age date; contemporary with activity in the vicinity but is noted that pottery of Bronze Age date, also recovered from the ditch, is considered likely to be residual.

11 flints came from linear ditch G5009, which post-dates ditch G5008. The material is mostly quite irregular. There is a scraper on a thick cortical flake and a retouched flake from a pebble. Most of the material is edge damaged to some degree although one or two pieces are sharp. It seems quite likely that the material could be residual.

A shatter piece and five flakes, one of them blade-like and one utilised, came from pit 0130 (G5027). Smooth white cortex and pebble type cortex are both present in the feature assemblage. About half the pieces are slightly edge damaged. Significant amounts of Later Bronze Age / Earlier Iron Age pottery also came from the pit and the flint is likely to be contemporary with it.

A spall and a tiny blade-like flake came from post-hole 0217 (G5053).

A shatter piece and a blade-like flake with cortical platform came from pit 0162 (G5033), which also produced 16 sherds of Later Bronze Age / Earlier Iron Age pottery. Two flakes and a spall were found in pit 0242 (G5050) along with three sherds of Later Bronze Age / Earlier Iron Age pottery. One patinated flake, which might be of thermal origin, was found with a sherd of LBA/EIA pottery in pit 0122. Two spalls were found with ten sherds of Later Bronze Age / Earlier Iron Age pottery in pit 0146 (G5015). A retouched flake was found with six sherds of Later Bronze Age / Earlier Iron Age pottery in pit 0231 (G5034). A small thick flake was found with two sherds of Later Bronze Age / Earlier Iron Age pottery in pit 0274 (G5044).

***Uncertain / undated***

Three flakes, one of them retouched, were surface finds from quarry pit G5062.

31 flints came from fills of quarry pit G5061. They include a core and a tested piece, a patinated blade, a scraper on a sub-square fragment, a retouched flake and a retouched fragment. The flint is almost certainly residual as pottery of Later Bronze Age / Earlier Iron Age and Early Saxon date came from this feature.

Four flakes were found residually in modern ditch G5029. A flake and a blade-like flake, both small and one with a patinated white cortex on its platform, came from undated pit 0038 (G5054).

Three small pieces (spalls and a chip) came from undated gully 0053 (G5030).

Eight flakes, two of them blade-like and possibly from the same core but mostly quite small and squat, came from pit 0128 (G5026).

A small blade and a small flake came from undated post-hole 0300 (G5048).

The distal part of a minimally retouched probable scraper came from undated pit 0097 (G5016).

Two scrapers, two possible serrated blades and a tested piece came from unstratified context 0001.

Five pieces, including two flakes which are possibly retouched, came from hillwash deposit 0085 (G5071).

**Discussion**

The nature of the flint suggests that it dates to the later prehistoric period. It consists mainly of small flakes and other debitage. There are a few flaked cores and a relatively small number of retouched tools.

A backed knife (SF 1005) was found alongside Earlier Bronze Age pottery and a decorated jet object (SF1004) in pit G5002. It is likely to be contemporary with these other finds and this enhances its significance.

A few thick flakes and a crude scraper were found in pit G5014 along with pottery of Later Bronze Age / Earlier Iron Age date. The flint is consistent with this date.

The largest amount of flint from dated deposits was from deposits associated with enclosure ditch G5005. The material consists mainly of small irregular pieces and various types of raw material have been utilised, including already patinated or weathered flint. All these criteria are consistent with those noted by various authors as indicative of probable Later Bronze Age or Iron Age flint-working (Robins 1996; Young and Humphrey, 1999). Two re-fitting flakes from the enclosure ditch provide good evidence for the contemporaneity of at least some of the material with the excavated features.

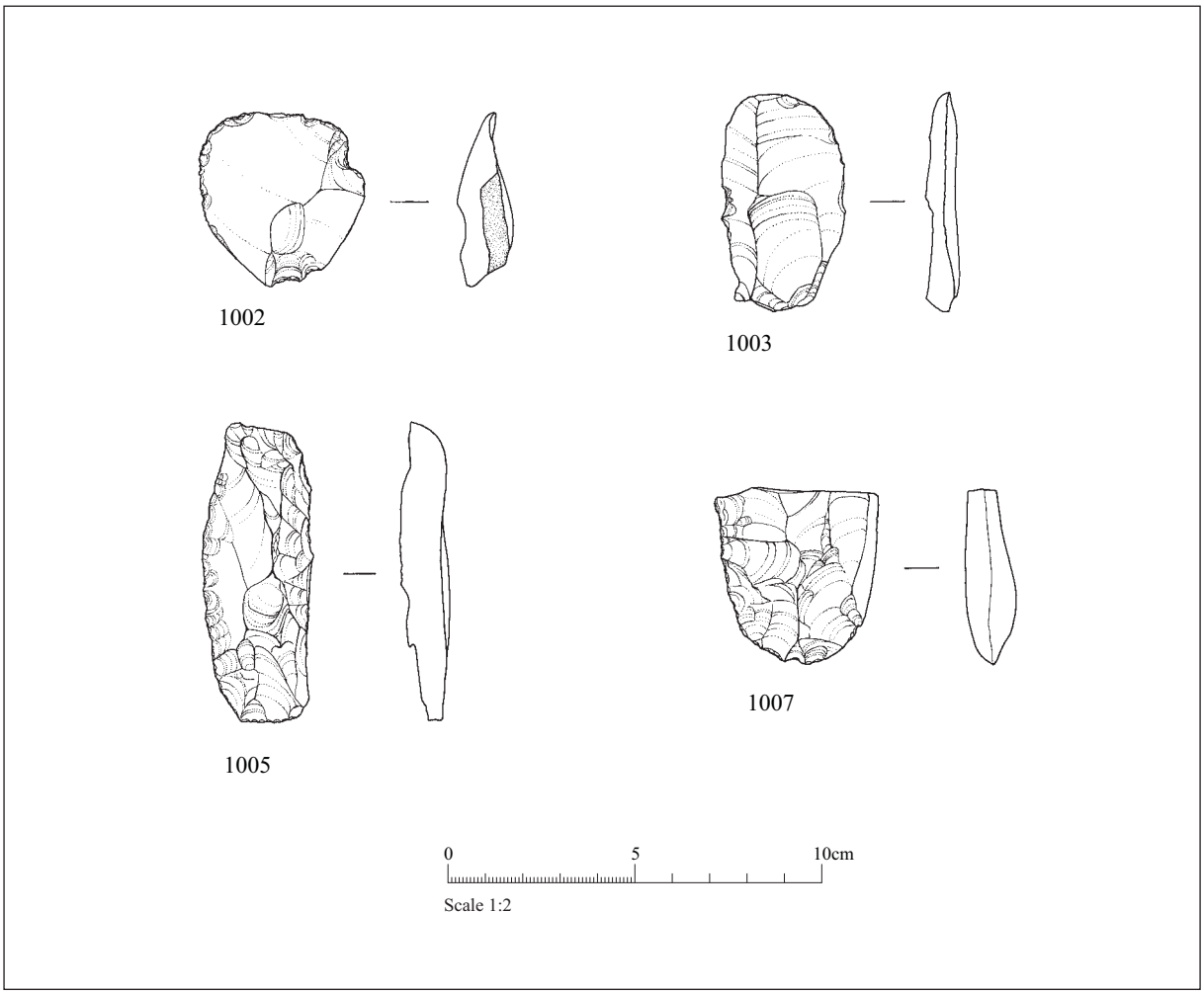


Figure 7. Prehistoric worked flints

### *5.3.8 Heat-altered stone*

Two hundred and forty-one fragments of heat-altered flint and stone weighing 12543g were collected from 42 contexts and their quantities by context are listed in the Bulk Finds catalogue in the site archive. It is likely that this material represents a hand-collected sample with a bias towards the larger pieces that have an average weight of 52g.

The material includes fragments of heat-altered flint pot-boiler and other heat-altered stone pebbles/cobbles used for the same purpose, as well as other heat-altered stones. There are no large groups or concentrations, although cumulatively, the fills of eight excavated segments of enclosure ditch G5005 account for a significant proportion of the assemblage. However these are dispersed over a large area of the feature and no single fill contained more than 500g.

### *5.3.9 Slag*

Thirty-three fragments of slag weighing 399g were collected from eight contexts, six of which were from upper fills of enclosure ditch G5005.

30 fragments (335g) of non-metallurgical fuel ash slag came mainly from the upper fills of five excavated segments of enclosure ditch G5005. Although dispersed, the material is very uniform suggesting that it is the product of a single process.

A very small fragment (1g) of porous, cokey material from pit 0294 (G5038) is probably the result of the combustion of organic material at very high temperatures.

Two fragments (63g) of non- diagnostic iron-working slag were collected from quarry pit G5061.

### *5.3.10 Small finds and metalwork*

#### Introduction

10 items were recorded as small finds. These are listed by small find number in Table 13, with fuller details presented in the small finds database in the site archive. The small finds are discussed below, by period.

| Small Find No | Context | Period | Material | Object Name | No of frags |
|---|---|---|---|---|---|
| 1001 | 0050 | Post-Medieval | Iron | Patten | 7 |
| 1002 | 0058 | Prehistoric | Flint | Combination tool | 1 |
| 1003 | 0060 | Prehistoric | Flint | End scraper | 1 |
| 1004 | 0088 | Prehistoric | Jet | Ornament | 1 |
| 1005 | 0088 | Prehistoric | Flint | Knife | 1 |
| 1006 | 0105 | Undated | Iron | Fragment | 1 |
| 1007 | 0076 | Prehistoric | Flint | Knife | 1 |
| 1008 | 0251 | Undated | Iron | Fragment | 1 |
| 1009 | 0251 | Undated | Lead | Sheet | 1 |
| 1010 | 0063 | Saxon | Ceramic | Loom weight | 2 |

Table 13. Small finds

#### Prehistoric

##### *Jet ornament (SF 1004; Plate 3)*

*Dr Alison Sheridan*

*Description*

A remarkable, decorated lozenge-shaped jet object (Plate 3) was recovered from the fill of pit G5002. This truncated pit also contained a considerable amount of charcoal (including large lumps), sherds from a small Collared Urn, a backed flint knife (SF 1005) and five other pieces of flint. Despite the outward appearance that pit G5002 had been a grave for an in-urned deposit of cremated human remains, only occasional, minute fragments of unidentified burnt bone were found. Also it is not clear, from the distribution of the artefacts, if the jet object, flints and (some or all of the) charcoal had originally been buried inside the urn. Neither the jet objects nor the worked flints showed any sign of heat damage, so they must have been added to the charcoal when it was already cold.

The lozenge measures 65mm in length, 50mm in width and 10mm in maximum thickness (to the nearest complete millimetre); it weighs 19g in its

current, wet condition. It has a flat, undecorated back and a gently domed front (upper) surface; the side facets (whose upper edges are rounded) are also decorated. The perforations range in diameter between 0.7mm and 1.7mm, and are choked with pale-coloured sediment.

The upper surface and edges had been polished to a fairly high sheen prior to being decorated. The decoration has been scribed freehand (according to Hal Redvers-Jones, an experienced Whitby jet worker), using a very narrow tool; all the straight and curving lines have been made by creating a 'rocker' design. The decorative scheme on the domed surface consists of an outer and an inner lozenge towards the outer edge, following the shape of the object and encompassing the perforations, with four short stretches of straight lines between them in each of the arms of the lozenge. Touching the innermost lozenge, on its inner side, is a set of arcs. In the centre is a very short line, surrounded by two concentric circles together with a third, discontinuous outermost circle formed by four stretches of slightly curving lines. The side facets are also decorated, each with four short stretches of lines.

The material has been identified macro- and microscopically as Whitby jet of the soft variety, this being demonstrated by the tendency for criss-cross cracks to appear as soon as the object starts to dry. It is black, with black-brown areas, and the woody texture of the jet – which is the semi-fossilised remains of a tree of the *Araucaria* species, as seen in monkey puzzle trees – is clearly visible on the back. Small, oval and circular natural hollows on two adjacent sides also serve to confirm the identification as jet, and may indicate that these edges are close to the original edge of the parent block. A block of this size would have been prized, and is arguably much more likely to have been found in the cliffs around Whitby than as a water-rolled fragment on the beach. Even though jet has occasionally been found washed up along the East Anglian coast (Sheridan & Davis, 1994), it is most unlikely that the jet had been obtained in this way, given its size and condition.

The object is intact and undamaged save for a small area on one side of the front where the surface has spalled away in antiquity. However, its unstable condition means that its survival in the ground has been very remarkable indeed. The tendency to crack was noticed as soon as the object was excavated. Since its discovery it has been kept wet and refrigerated.

Sediment from inside one of the perforations has been analysed by electron microprobe, by Lore Troalen of National Museums Scotland (NMS), and found to be rich in copper. This suggests that the object had formerly been attached to a garment or dress accessory by means of thin copper pins or rivets, of which no physical trace survives (unless preserved in the sediment, which seems unlikely). By analogy with similar objects in gold (see below), this may have been a breast-piece ornament and would probably have constituted a precious symbol of power. The excavators' initial belief that this had been a spacer plate from a spacer plate necklace is incorrect.

*Parallels and significance*

The object has obvious and close affinities with the Earlier Bronze Age gold lozenge-shaped ornaments found at Bush Barrow, Wiltshire and Clandon, Dorset – themselves part of a gold-working tradition discussed at length by Stuart Needham (for example, in Needham & Woodward, 2008). Despite minor differences in the decorative scheme, the CAC 035 lozenge can be regarded as a skeuomorph of these Wessex objects, just as a cannel coal object found on The Law, Dundee, may well be a skeuomorph of the Bush Barrow belt hook.

The lozenge can also be linked with two jet spacer plate necklaces from East Anglia that have been decorated in the same manner (and, arguably, may well have been made by the same person). Since the technique and style of decoration on all three objects is alien to that which characterises the Earlier Bronze Age jet workers of the Whitby area, the suspicion is that these objects were made by a very skilled craft worker based in East Anglia, with access to jet imported from the Whitby area. An analogy can be drawn with the person (or, more likely, people) responsible for creating the Wessex-style grave

goods from the rich grave at Little Cressingham, Norfolk. The small number of rich Earlier Bronze Age graves in East Anglia, with their obvious connections to different parts of Wessex, lends weight to Needham's argument for the existence of strong maritime links between the south, east and northeast coasts of England (and indeed Scotland) during the early centuries of the second millennium, in which the elite in different areas used symbols of power drawn from a common vocabulary of prestige (Needham 2009, Fig. 19). His term 'maritory' (*ibid.*) to describe this network of maritime-linked communities is apt.

Colin Pendleton discusses jet artefacts from northwest Suffolk, such as at the Icklingham settlement and from a burial site at Flempton, and suggests that a significant number of high-status Earlier Bronze Age jet objects from East Anglia have been found in settlement, rather than funerary, contexts (Pendleton 1999, 36).

It is likely that the object dates to the 19th century BC, although C14 dating of associated charcoal might help to revise this.

*Potential for further work on the jet object*

The jet ornament is of national significance and there has already been considerable interest in the object following its early publication in *British Archaeology* (94, May/June 2007, 6). Due to its importance it requires further analysis, conservation, a full archive report and publication. Replication of the object would also be desirable. A clear sequence of recommended work is defined below (9.2).


Plate 3. The jet ornament

*Recommendation about the future curation of the jet object*

As the object is of national importance but is a delicate find, requiring regular checking for deterioration, it is important that it ends up in a museum that can provide the appropriate controlled environmental conditions for its display/storage, and with long term access to the relevant conservation expertise to ensure that its condition can be monitored regularly, and any remedial conservation work undertaken quickly as required. While the decision as to its final housing is not for the specialist to make, candidate institutions are the British Museum, the Castle Museum, Norwich, and (through its links with Colchester Museum) Ipswich Museum.

***Flint implements (SF 1002, SF 1003, SF 1005 & SF 1007)***

Four flint artefacts were assigned individual small find numbers, including the backed flint knife SF1005, of probable Earlier Bronze Age date, which was found in association with jet object SF 1004 in pit G5002. Three flint tools of probable Middle Bronze Age date came from three excavated segments of enclosure ditch G5005: a combination tool (context 0058, SF 1002), an end scraper (context 0060, SF 1003) and a probable knife (context 0076, SF 1007). These small finds are described and discussed more fully in the worked flint report (5.3.7).

**Anglo-Saxon**

An abraded fragment of a bun-shaped Anglo-Saxon ceramic loom weight (SF 1010) was recovered from occupation deposit 0063 in quarry pit G5061. It is made in a fine, silty sandy fabric and has an estimated diameter of 100mm, with a height of 33mm. Hand-made Early Anglo-Saxon pottery was also found in this feature, together with fragments of one or more lava querns and iron-working slag.

**Post-medieval**

The circular iron stand from a patten (SF 1001), a clog-like shoe worn to elevate the foot above the mud and dirt by people in outdoor occupations, was found in modern ditch G5029. The piece includes nearly all of the circular part that would touch the ground, both upright bars and half of one plate with

one surviving nail for attachment to a wooden sole. This style of patten was most common from the 17th- to 19th centuries.

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**Undated**

Two undatable iron objects are both encrusted heavily and radiography has not aided in their identification. SF 1006 is triangular, measuring 46mm long and approximately 10mm thick, and was a surface find from quarry pit G5065. SF 1008, measuring 60mm long x 24 mm wide x 10mm thick and roughly rectangular, was a surface find from quarry pit G5062.

A fragment of folded lead sheet (SF 1009) measuring 25mm wide x 46mm long is undatable but likely to be post-medieval. It was another surface find from quarry pit G5062.

Fragments of an iron nail (12g) from linear ditch G5009 are undatable.

### *5.3.11 Biological evidence*

**The cremated bone**

*Sue Anderson*

***Introduction***

This report examines the cremated bone collected from cremation burial G5010. The burial is dated to the Middle Bronze Age.

***Methodology***

Context 0151, the single fill of the pit, was collected as a bulk sample and sieved, the entire residue being retained as a single group. In addition to the cremated bone, the sample contained pea grit, burnt flint, pottery, charcoal fragments and small lumps of soil. Although the group was not sieved into fractions, larger pieces of bone were hand separated from this residue for weighing, and large non-osseous pieces were removed from the remainder. The smaller fragments were scanned for identifiable pieces and the unidentifiable remainder was weighed; *c*.15–20% of the weight of this fraction

was made up of material other than bone. Identification was impeded to some extent by the concreted soil which adhered to many fragments.

The bone was sorted into six categories: skull, axial, upper limb, lower limb, unidentified long bone, and unidentified. All fragments were weighed to the nearest tenth of a gram. Measurements of maximum skull and long bone fragment sizes were also recorded. Observations were made, where possible, concerning bone colour, age, sex, dental remains and pathology. Identifiable fragments were noted. Methods used follow the Workshop of European Anthropologists (WEA, 1980) and McKinley (1994 and 2004).

***Quantification and description***

Table 14 shows the bone weights and percentages of identified bone from the burial, and the proportions of bone identified from the four areas of the skeleton (skull, axial, upper limb, lower limb). In addition there were two small fragments (0.3g) which appeared to be non-human. Expected proportions are provided based on McKinley (1994, 6).

| Area | Total wt/g | % identified | % expected |
|---|---|---|---|
| Skull | 59.2 | 32.6 | 18.2 |
| Axial | 14.2 | 7.8 | 20.6 |
| Upper limb | 31.4 | 17.3 | 23.1 |
| Lower limb | 76.9 | 42.3 | 38.1 |
| Unidentified larger fragments | 122.2 | | |
| Unidentified including pea grit | 581.5 | | |
| **Total** | **885.4** | | |

Table 14. Percentages of identified fragments out of total identified to area of skeleton

This shows that skull and lower limb fragments are over-represented amongst the identifiable material, and that other areas of the skeleton are under-represented. It has been suggested that 'it should be possible to recognise any bias in the collection of certain areas of the body after cremation' (McKinley 1994, 6). However there is also some bias inherent in the identification of elements. McKinley notes the ease with which even tiny fragments of skull can be recognised, and conversely the difficulty of identifying long bone fragments. These figures can therefore provide only a rough guide to what was originally collected.

Identifiable pieces in this group include cranial vault, zygoma, tooth root and crown fragments, pieces of vertebral arch, ribs, humerus, ulna, finger phalanges, femur, tibia, fibula and metatarsal.

The total weight is less than suggested due to the presence of pea grit in the residue, and may be *c.*100g lower than stated in Table 14. Mays (1998, Table 11.2) notes that the combusted weight of an adult skeleton has a mean of around 1500g for females and 2300g for males. The quantity of bone in this assemblage therefore represents only a small proportion of the combusted weight of an average adult skeleton.

Despite the low weight, there was evidence to suggest that the bone from this burial represented at least two individuals. Fragments of cranial vault included pieces which were clearly adult, together with thinner fragments which appeared to be juvenile. Fragments of juvenile long bone also seemed to be present, although these may be confused with the short bones of the adult skeleton when fragmented. However, corroboration was provided by the presence of fragments of two permanent tooth crowns (these generally only survive when un-erupted) and a tiny distal finger phalanx. The child could not be aged closely, but one of the un-erupted teeth was a lower premolar suggesting an age in the range 5–10 years. The adult was unsexed but a fragment of spinous process from a cervical vertebra which appeared to be of adult size was possibly recently fused. This suggests that the individual was young.

The degree of fragmentation was very high, resulting in a low identification rate of only 20.5%. The largest fragment of skull was 17mm long and the largest piece of long bone 30mm long. A few fragments had a chalky texture and showed signs of abrasion.

The majority of bone in this group was fully oxidised and cream to white in colour. The presence of a high proportion of white bone indicates firing temperatures in excess of *c*. 600°C (McKinley 2004, 11). Mays (1999, 159)

noted that the uniformity of colour in the surviving bone at Ardleigh in Essex may be due to poor survival of less well cremated bone.

***Summary and discussion***

The burial contained the fragmented remains of at least two individuals, one young adult and one juvenile. The total weight of bone indicates that neither of the skeletons was complete. This may be due to poor collection following the cremation ritual, poor preservation of incompletely cremated material following burial, or truncation.

It is relatively unusual for an urned cremation burial of Bronze Age date to be so heavily fragmented. The preservation of many large fragments in such burials is usually attributed to careful collection and burial within a vessel. Fragmentation can be the result of deliberate crushing prior to burial, but this practice does not seem to have been widespread in the period. However, Middle Bronze Age burials at St Osyth's in Essex (Anderson, 2007) were found to be more fragmented and incomplete than those of Earlier Bronze Age date from the same site. In the case of the CAC 035 cremation, given the degree of breakage of the pot, it is possible that the burial was either redeposited or heavily plough damaged. If deliberate re-deposition occurred, there is a possibility that the two individuals were not originally interred together.

The cremated bone has been documented fully and no further work is required.

**Animal bone**

Animal bone preservation is poor; only the most durable elements such as teeth or pieces that were burnt have survived. 30 fragments weighing 127g were collected from six contexts (three from enclosure ditch G5005 and one from hearth G5004 inside roundhouse G5003.

Cow teeth were identified from quarry pit G5061 (in association with Early Saxon pottery), Later Bronze Age / Earlier Iron Age enclosure ditch G5005

and hearth G5004 inside roundhouse G5003. A cow mandible and teeth was found in pit G5069. Unidentified burnt bone fragments were recovered from enclosure ditch G5005.

**Snail**

Four terrestrial snail shells (10g) were collected from the fill of modern ditch G5029 and two species identified: *Cepaea nemoralis* and *Helix aspersa.*

## 5.4 Quantification and assessment of the environmental archive

*Val Fryer*

### *5.4.1 Introduction and method statement*

Samples for the retrieval of the plant macrofossil assemblages were taken from across the site and 40 were submitted for assessment. An additional sample from the fill of pit G5002 was analysed later and this information is presented separately below.

The samples were processed by manual water flotation/washover, and the flots were collected in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x16 and a complete catalogue of the plant macrofossils and other remains was compiled; this can be found in the site archive. Nomenclature within the table follows Stace (1997). All plant remains were charred. Modern contaminants, including fibrous roots, seeds and arthropod remains, were present throughout.

20 of the samples, which contained only charcoal and other materials, are listed separately in Table 15.

### *5.4.2 Results*

Cereal grains, seeds and tree/shrub macrofossils were recorded, although mostly as single specimens within an assemblage. Preservation was generally poor, with a high density of the material being severely puffed and distorted,

probably as a result of combustion at very high temperatures. Macrofossils (including charcoal fragments) within a number of assemblages were also heavily abraded, possibly indicating that the material was either exposed to the elements for a considerable period prior to burial or subjected to post-depositional disturbance.

Oat (*Avena* sp.), barley (*Hordeum* sp.), rye (*Secale cereale*) and/or wheat (*Triticum* sp.) grains were recorded from eight of the assemblages studied, with barley occurring marginally more frequently. Of the wheat grains, most were of an elongated 'drop-form' shape typical of emmer (*T. dicoccum*) or spelt (*T. spelta*). Sample 49, from a small pit or posthole (G5045) in the centre of the site contained a high density of flax (*Linum usitatissimum*) seeds. Weed seeds were particularly scarce, comprising single specimens of redshank (*Persicaria maculosa/lapathifolia*), grass (Poaceae) and vetch/vetchling (*Vicia/Lathyrus* sp.). Tree/shrub macrofossils were also scarce, although a small number of hazel *(Corylus avellana*) nutshell fragments were recorded along with a single piece of sloe type (*Prunus* sp.) fruit stone. Charcoal/charred wood fragments were present throughout, although rarely at a high density. Other plant macrofossils were extremely scarce although fill 0151 in cremation pit G5010 contained an indeterminate bud and sample 36 (hearth G5004), sample 49 (pit G5045) and sample 65 (undated quarry pit G5062) contained possible heather (*Ericaceae*) stem fragments.

Fragments of black, porous and tarry material were recorded within a number of the assemblages. Although some were probable residues of the combustion of organic remains (including cereal grains) at very high temperatures, others were light in colour and extremely hard and had the appearance of modern light industrial slags or coke. Coal fragments and globules of vitrified material were also recorded within a number of assemblages. Other remains were scarce, although sample 35, from cremation burial G5010, did contain a moderate density of burnt bone fragments.

The twenty samples that contained only charcoal and other materials are listed in Table 15.

| Sample No. | Context | Feature No. | Contents |
|---|---|---|---|
| 1 | 0039 | 0038 | CH;BPC;COAL |
| 11 | 0078 | 0077 | CH;BTM;COAL;MSC |
| 13 | 0082 | 0081 | CH;BPC;BTM |
| 14 | O115 | 0114 | CH;BPC;B/FC;MSC;VIT.MAT |
| 17 | 0089 | 0041 | CH;BPC;BTM;B.STONE;COAL;VIT.MAT |
| 23 | 0091 | 0092 | CH;BTM;MSC;COAL |
| 24 | 0059 | 0041 | CH;BPC;BTM;B;COAL |
| 26 | 0099 | 0092 | CH;CR/ST;BTM;B/FC;COAL;VIT.MAT |
| 27 | 0098 | 0097 | CH;BTM;MSC;B/FC;COAL |
| 33 | 0107 | 0106 | CH;BPC;BTM;B.STONE;COAL |
| 34 | 0148 | 0148 | CH;BPC;BTM;COAL |
| 37 | 0163 | 0162 | CH;BPC;BTM;B/FC;COAL |
| 39 | 0212 | 0211 | CH |
| 41 | 0220 | 0219 | CH |
| 46 | 0243 | 0242 | CH;BPC;B/FC;B;COAL;VIT.MAT |
| 47 | 0247 | 0246 | CH;CR/ST;B/FC |
| 48 | 0245 | 0164 | CH;BPC;B;COAL |
| 51 | 0286 | 0170 0104 | CH |
| 52 | 0283 | 0284 0104 | CH;CR/ST |
| 56 | 0235 | 0233 | CH;B;B/FC;COAL |

Table 15. Samples with no content other than charcoal and 'other materials'

**Key to Table 15**
CH = charcoal; BPC = black porous 'cokey' material; BTM = black tarry material; B = bone
MSC = mineralised soil concretions; B/FC = burnt/fired clay; VIT.MAT = vitrified material;
CR/S = charred root/stem

### *5.4.3 Discussion*

With rare exceptions, the assemblages are very small (considerably <0.1 litres in volume) and are characterised by extremely low densities of plant remains. There is very little evidence for the primary deposition of material, and this may well indicate that the assemblages are derived largely from scattered or wind-blown refuse, much of which was accidentally incorporated within the feature fills. However, there are some possible exceptions to this model:

Sample 35 from pit G5010 contains a small cremation deposit of Middle Bronze Age date. The high density of charcoal within the assemblage possibly indicates that wood was the preferred fuel for the pyre although other plant remains, including brushwood and grassland herbs, may have been used as kindling. Sample 32 (pit G5027), sample 45 (pit G5031) and sample 62 (quarry pit G5061) all contain high densities of charcoal and small pellets of

burnt or fired clay, and may just conceivably be derived from hearth waste, although it is not possible to verify this suggestion. The one exceptional assemblage amongst all those studied is from Sample 49 (pit G5045), which contains a high density of flax seeds along with hazel nutshell fragments and a piece of sloe-type fruit stone. This material is almost certainly the residue from a snack or meal as, although flax seeds contain high levels of toxins, their palatability and suitability for consumption is greatly increased by careful roasting. Similar assemblages have been recorded from waterlogged fills within Later Bronze Age wells (Martin and Murphy, 1988).

### *5.4.4 Conclusions*

In summary, evidence for any specific on-site activities is extremely limited, being confined to a single deposit of possible dietary waste. With the exception of the small quantities of wind-blown refuse, the site appears to have been kept relatively clean, with even enclosure ditch G5005 (samples 3, 6, 17, 24, 58 and 59) being virtually devoid of material. Cereals were presumably being consumed on or near the site, although there is insufficient material to indicate whether the grain was being produced and processed locally or imported as batches of semi-cleaned prime grain.

### *5.4.5 Macrofossils samples and other material from pit G5002*

**Introduction and method statement**

A single sample (16) for the retrieval of the plant macrofossil assemblage was taken from Earlier Bronze Age pit 0087 (G5002), which contained an important finds assemblage including a jet ornament, flint implements and the remains of a possible disturbed cremation deposit.

The sample was processed by manual water flotation/washover and the flot was collected in a 300 micron mesh sieve. The dried flot was scanned under a binocular microscope at magnifications up to x16 and the plant macrofossils and other remains noted are listed in Table 16. All tabulated plant remains were charred. Modern contaminants, including fibrous roots and seeds, were present, but at a very low density.

## Results

The flot is moderately large (approximately 0.3 litres in volume) and is composed almost entirely of comminuted and abraded charcoal/charred wood fragments. Some of the latter have a distinct flaked appearance, which may be indicative of combustion at a very high temperature. Other remains are exceedingly scarce, but do include rare pieces of charred root/stem, minute fragments of burnt/calcined bone and black tar-like residues. The latter are almost certainly derived from the high temperature combustion of organic remains, and in this instance are possible residues of the cremation process. Small coal fragments are also recorded, although it is thought that these are most likely to be intrusive within the context from which the sample was taken.

## Conclusions

In summary, the composition of the assemblage is analogous with materials seen within other cremation deposits of Bronze Age date, although bone fragments are somewhat scarce. Wood/charcoal would appear to have been the primary fuel used for the pyre, and combustion appears to have occurred at a very high temperature. The abraded condition of the remains may indicate that they were either exposed to the elements for some considerable period prior to deposition or were subsequently disturbed.

The larger charcoal/charred wood fragments within this assemblage are almost certainly suitable for C14 dating, although accurate species identification must be completed prior to any dating process.

| **Plant macrofossils** | |
|---|---|
| Charcoal <2mm | xxxx |
| Charcoal >2mm | xxx |
| Charred root/stem | x |
| **Other remains** | |
| Black tar-like material | x |
| Bone | xb |
| Small coal fragments | x |
| Sample volume (litres) | |
| Volume of flot (litres) | 0.3 |
| % flot sorted | 100% |

Table 16. Charred plant macrofossils and other remains from pit G5002

**Key to Table 16**
x = 1–10 specimens; xxx = 50–100 specimens; xxxx = 100+ specimens; b = burnt

## 5.5 Soil micromorphology report

*Dr R. I. MacPhail*

### *5.5.1 Introduction*

The site was visited on the 20 March 2006 and discussed with Clare McLannahan and Stuart Boulter of SCCAS Field Team. Of chief interest were several, sometimes extensive and deep (>1.5m) negative features, with enigmatic fills and usually only trace amounts of archaeological materials. These were investigated alongside an enclosure (G5005) containing the hearth (G5004) and posthole remains of a roundhouse (G5003) and a charcoal and burnt clay spread in one of the large negative features (G5061). These were examined, briefly described and (on occasion) sampled, in order to investigate the origins of the archaeological features and their geoarchaeological potential for helping to understand the site (Goldberg and Macphail, 2006; Hodgson, 1997).

### *5.5.2 Results*

The local soils are Typical Brown Sands formed in glaciofluvial drift over (Lowestoft) chalky till (Hodge *et al*., 1983). The present-day soil cover appears to be partially colluvial (hillwash) in origin, probably since late prehistory, for example infilling the upper part of deep feature G5065. Field examination showed that ditches appeared to be shallow in some parts of the site indicating that the site had been affected by both erosion (ploughing and wind erosion/deflation) and colluviation.

***Large pits and their fills***

These features can be divided into two types, dependant on the nature of their fills:

*Type 1*: Pit G5062 and pit G5065 are deep (>1.5 m) and contain very heterogeneous fills of distinctive large patches of a) light olive brown (2.5Y5/4) clayey chalky till and some flint (redeposited Lowestoft Till) and b) dark

yellowish brown (10YR4/4) sand (Typical Brown Sand soils of glaciofluvial origin). Archaeological material is extremely sparse – trace amounts of pot fragments and occasional large charcoal fragments – and these are usually confined to the patches of sandy soil fill. It can be suggested that these features are possibly clay quarry pits and that they were backfilled very rapidly; hence the paucity of finds and lack of any biologically homogenized layers representing periods of stasis.

*Type 2*: Different fills characterised pit G5061 and pit G5060. These features are shallower, at *c*. 1.0m deep. The fills also differ by being homogeneous sandy fills. The fills are, however, mottled dark yellowish brown (10YR4/6) and light yellowish brown (2.5Y6/4) in colour, but this is a post-depositional result of drainage impedance caused by the underlying clayey till. These features, instead of being rapidly backfilled with sandy soil and chalky till, must have been left open to accumulate the wind-blown local Typical Brown Sands. One possibility is that the open sandy fills may have been animal trampled, but this would have led to an enhanced phosphate content and micro features of trampling, both of which can be detected through soil analysis (Goldberg and Macphail, 2006). Again these fills are almost sterile of archaeological material.

***Occupation deposits***

A charcoal and burnt clay-rich deposit (context 0063) is present in large pit G5061. It was sampled with one Kubiena box (M1: relative depth of 7-15 cm) and bulk samples (x1a), together with underlying fill (context 0064; x1b); the latter being representative of the homogeneous lower fill of G5061 that would be phosphate-enriched with micro features of trampling – if this had occurred.

Many of the sections cut through enclosure ditch G5005 exposed a lower fill rich in charcoal and burned clay (Clare McLannahan, *pers comm*). One such fill was sampled with a Kubiena box (M2: relative depth 328-36 cm) and one bulk sample (x2). These fills are sandy (Typical Brown Sand soils) and gleyed (because of the poorly-draining clayey till substrate) with ochreous, mottled very dark grayish brown colours (2.5Y3/2).

The fragmented hearth G5004 in the roundhouse contains burnt clay but no charcoal was obvious, indicating erosion of the uppermost charcoal-rich hearth layers and post-depositional biological mixing. There were therefore no usage deposits to sample.

The origins of the charcoal and burnt clay deposits sampled in pit G5061 and in enclosure ditch G5005 remain enigmatic; the remains of a pottery kiln would have been more substantial and wasters would be present; cereal processing would have produced charred grain; domestic hearths would have produced midden material containing bone – as the soils are not acidic. Equally, it is possible that the roundhouse was simply razed (cf. Butser Ancient Farm Moel-y-gar roundhouse experiments; Goldberg and Macphail, 2006, Fig 12.8) and that burnt debris is now only preserved. Sampling was therefore carried out in order to attempt to understand these specific burnt clay and charcoal-rich deposits. A combined soil micromorphological, magnetic susceptibility and chemical study would be able to find traces of bone, phytoliths, ashes, and high-temperature burnt soil that could help identify domestic activity, cereal processing and industrial activities; heavy metal (Cu, Pb and Zn) determinations would identify any non-ferrous metal working such as copper and bronze (Courty *et al*., 1989; Goldberg and Macphail, 2006).

### *5.5.3 Recommendations for further work on the micromorphological samples*

- 2 thin sections
- 3 bulk analyses (LOI, fractionated phosphate, magnetic susceptibility with $\chi_{max}$, and the heavy metals Cu, Pb and Zn)
- Soil micromorphology (description, counting, digital recording for archive)

# 6 Potential of the data

## 6.1 Realisation of the Original Research Aims

**OR1:** *Establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation in situ.*

**Realisation:** Archaeological deposits existed in all areas of the site, although none were deemed to be of sufficient importance to merit preservation *in situ.*

**OR2:** *Identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.*

**Realisation:** Archaeological deposits and features of Earlier Bronze Age, Middle Bronze Age, Later Bronze Age / Earlier Iron Age, Roman(?), Early Anglo-Saxon, post-medieval and modern date have been identified. In addition there are a number of significant features that are undated.

Earlier Bronze Age and Middle Bronze Age activity is represented by a number of small pits. These are generally of unknown function, although one of them contains an important assemblage of Earlier Bronze Age artefacts and another contains some (probably redeposited) cremations. Later Bronze Age / Earlier Iron Age occupation on the site is indicated by a roundhouse within a ditched enclosure, some linear ditches of unknown function, at least one external hearth and some pits. At least one large clay extraction pit is possibly of Roman date.

The evidence for Early Anglo-Saxon activity is a localised soil horizon that is rich in pottery and other artefacts of that date. Post-medieval activity is represented by a buried ploughsoil and (probably) some large clay extraction pits. A ditch is assumed to be of 20th-century date.

Depths of deposits vary from < 0.10m for some of the prehistoric pits to >1.0m for some of the larger extraction pits. Generally the older features have been truncated heavily, either by natural wind erosion (deflation) or post-medieval ploughing. For example, the postholes of the Later Bronze Age / Earlier Iron Age roundhouse are no more than 0.18m deep and there is no evidence for contemporary ground surfaces. Similarly, although the surrounding enclosure ditch survives to approximately 0.60m deep there is no evidence for any associated bank, which, if it existed, has been ploughed away.

**OR3:** *Evaluate the likely impact of past land uses and the possible presence of masking colluvial/alluvial deposits.*

**Realisation:** As described above, post-medieval ploughing and perhaps natural deflation have severely truncated the prehistoric features. The excavation of large clay extraction pits, probably in the late post-medieval period, is likely to have destroyed some evidence for earlier activity. There is no evidence to indicate damage to archaeological deposits in modern times.

There is no clear evidence for colluvial deposition, and alluvial deposits do not exist on the site.

**OR4:** *Establish whether waterlogged organic deposits are likely to be present in the proposal area.*

**Realisation:** There are no waterlogged organic deposits on the site.

**OR5:** The academic objective will centre upon the high potential for this site to produce evidence for prehistoric occupation, particularly from the Neolithic, Bronze Age and Iron Age periods.

**Realisation:** There is no clear evidence to indicate that the site was occupied in the Neolithic period and the only find that is potentially of this date is a single sherd of Beaker pottery (Later Neolithic – Earlier Bronze Age) from a small pit or posthole. Similarly, the only evidence for Earlier Bronze Age

activity is a single pit that contained a significant finds assemblage but which is not sufficient to indicate permanent occupation of the site.

An increase in pit digging in the Middle Bronze Age suggests that the site was used more intensively at that time, although no buildings or structures of that date have been identified.

There is clear evidence for occupation of the site in the Later Bronze Age / Earlier Iron Age, represented by a roundhouse inside a ditched enclosure, two linear ditches, one or more external hearths and widespread pits.

The site seems to have been abandoned by the Later Iron Age and was not obviously used during the Roman period, although a large quarry pit might have been dug at that time. The site was re-occupied in the Early Saxon period, although the evidence for this is confined to a localised area within the quarry pit mentioned above. There is no evidence to indicate medieval occupation, and in the post-medieval period it is likely that the site was in agricultural use and was exploited for clay extraction for the brick-making industry.

## 6.2 General discussion of potential

### *6.2.1 Stratigraphic archive*

The stratigraphic evidence for prehistoric occupation of the site is fairly straightforward, being limited to intrusive features that have been truncated by ploughing and soil erosion to the level at which they cut the natural stratum. There are no significant horizontal deposits and little inter-cutting of the intrusive features. The evidence for Early Anglo-Saxon occupation is limited to a single deposit and has been described fully in this report. For these reasons it is unlikely that further analysis of the stratigraphic archive would add to the understanding of the site sequence as outlined in Section 4 of this report. The only further work on the stratigraphic archive that is considered necessary is the production of a publication report for the wider dissemination of the main

results of the fieldwork. The key features of the site that are considered worthy of publication are as follows:

The Earlier Bronze Age pit G5002 is of particular interest because it contains a significant assemblage of finds. The Middle Bronze Age and Later Bronze Age / Earlier Iron Age features (notably enclosure ditch G5005 and its associated roundhouse G5003) provide important evidence for prehistoric settlement and funerary practice to supplement that from other sites in this part of East Anglia.

### *6.2.2 Finds archive*

There are significant amounts of prehistoric pottery and worked flint that have provided important dating evidence but which include few objects of particular interest or significance. The jet ornament and associated finds from pit G5002 are notable exceptions to this and require further analysis and reporting. A small assemblage of Early Anglo-Saxon pottery and a loom weight from pit G5061 are of some interest but have been described adequately in this report. Other categories of finds such as Roman, medieval and post-medieval pottery, ceramic building material of all dates, fired clay, clay tobacco pipes, lava querns, slag and animal bones occur as small assemblages of abraded material and have no potential for further analysis or publication.

All categories of finds have been quantified and catalogued fully. The prehistoric pottery, worked flint and cremated bone reports were commissioned and written as full archive reports before the decision was made that this document should be an assessment report. As such, the pottery and flint illustrations have already been undertaken and are included in this report.

For the majority of finds types therefore, no further work is considered to be necessary. A paragraph of further discussion on the collared urn fragments from pit G5002 (following C14 dating of associated charcoal and further research on the jet ornament) will be required. The cremated bone from pit G5002 needs to be assessed by an appropriate specialist. Above all, the

national importance of the jet object (see 5.3.10) necessitates that it reaches a wider audience. In order to accomplish this, a comprehensive program of analysis, research and reporting will be required.

### *6.2.3 Environmental archive*

Only two samples (16 and 49) contain sufficient densities of material (i.e. >100 specimens) for quantification. Sample 49 from pit G5045 contains an assemblage of Bronze Age dietary waste that is of interest, but analysis of one sample in isolation would contribute very little to the overall interpretation of the site and further work is not recommended. However, a brief note about this assemblage could be included, alongside a written summary of this assessment, within any publication of data from the site.

Sample 16, from Earlier Bronze Age pit G5002 is of particular significance for its association with an important finds assemblage that includes the decorated jet object SF 1004 and the remains of a possible cremation burial. As suitable fragments of charcoal have been found it is recommended that a charcoal specialist should study the assemblage and select two suitable pieces of single-entity samples of short-lived species of charcoal. It is recommended also that two fragments of single-entity samples of short-lived species of charcoal are sent for C14 dating. This is a vital step in establishing the date of this nationally important assemblage. Given the significance of the find, it is strongly advised to obtain two dates, to provide a crosscheck.

It was hoped that material suitable for C14 analysis would be available within seven of the assemblages studied (Samples 3, 6, 12, 36, 44, 58 and 59). However, none contained a sufficient density of material. Individual grains could be submitted for AMS determinations although again, the quantity of available material is extremely low. It should also be noted that most assemblages contain moderately high densities of material that is almost certainly intrusive within the contexts. Therefore, the contemporaneity of individual grains with the contexts from which they were taken cannot be guaranteed.

### *6.2.4 Soil micromorphology*

Some potential for further analysis of the soil samples has been indicated (5.5.3). However, assessment of the stratigraphic, finds and environmental archives suggests that this would add little to the understanding of the site sequence. For example, some of the soils that were sampled for micromorphological analysis have little or no associated dating evidence. Those that do, such as from enclosure ditch G5005, cannot be related with certainty to activities within the enclosure. For these reasons no further soil analysis is proposed.

# 7 Significance of the data

In this section the significance of the results of the fieldwork is considered mainly in terms of the East Anglian Regional Research Framework (Brown & Glazebrook, 1997; Glazebrook, 2000); reference is made also to the Revised Research Framework for the Eastern Region (Medlycott & Brown, 2008).

The important finds assemblage from pit G5002 can make a significant contribution towards the regional Research Theme concerned with *Finds Studies*, in particular the topic *Development of artefacts within the Neolithic and Bronze Age*. The jet ornament has particularly significance (regionally and nationally) for its rarity, use of imported raw material and its obvious similarity to the gold lozenge-shaped ornaments found at Bush Barrow, Wiltshire and Clandon, Dorset (see 5.3.10). The latter suggests interaction between East Anglia and the Wessex region.

In 2000, when the Regional Research Framework was published, most of the evidence for Later Bronze Age settlement sites came from south and central Essex; the density and range of settlement types elsewhere in the East Anglian region was understood poorly. Since then a number of occupation sites and field systems have come to light in Norfolk and Suffolk (for example, the CAC 042 settlement site at Bloodmoor Hill), but further evidence is required for a fuller understanding of regional patterns of settlement and land

use, and changing perceptions of landscape and environment that allowed the development of a farming economy. Of particular interest is the development, during the Later Bronze Age, of enclosed settlements in tandem with the continued use of unenclosed sites.

The settlement evidence from this site is significant therefore in relation to the Research Theme *Origins and development of the agrarian economy* and in particular with the topic *Development of a fully agricultural economy during the Neolithic and Bronze Age.*

The importance of these Research Themes is reinforced in the Revised Research Framework for the Eastern Region (Medlycott & Brown, 2008), in which human interaction with landscape and environment is seen as central to archaeological study. That document proposes that '*the eastern counties are well placed to examine the processes by which agriculture became the dominant economic force……'.* In addition it states '*The creation of more permanent settlements, monuments and in particular field-systems enables the exploration of changing landscapes and environments'.*

# 8 Publication project: Aims and Objectives

## 8.1 Revised research aims

**RR1:** *How does the prehistoric settlement evidence compare to that from other sites in the region? For example, are there other cases of Later Bronze Age / Earlier Iron Age roundhouses within ditched enclosures, and are the methods of construction of roundhouse G5003 (dimensions, post spacing, etc) similar to other buildings?*

**RR2:** *How does the evidence for Bronze Age funerary practices (pit G5010, and perhaps pit G5002) compare to that from other sites in the region? For example, are there other instances of multiple cremations within the same pit, as with G5010?*

**RR3:** *Are the burnt/calcined bones from pit G5002 cremated human remains?*

**RR4:** *Can C14 dating be used to provide an accurate date for the jet ornament, and to refine the dating of associated artefacts such as the collared urn?*

**RR5:** *Is it possible to obtain further information on the method of manufacture of the jet ornament, for example by photo-microscopy? How were the perforations made?*

**RR6:** *Are there any physical traces of the copper pins or rivets that were used to attach the jet ornament?*

**RR7:** *Can analytical techniques, such as X-ray fluorescence spectrometry, be used to provide further evidence for the composition of the jet ornament and the sediment inside its fastening holes?*

### 8.2 Preliminary publication synopsis

The national significance of the jet ornament merits its full publication in a major journal, preferably the *Proceedings of the Prehistoric Society.* This would include a description of its immediate context and associated finds, and a brief summary of other evidence for prehistoric activity on the site. A further article, presenting a more detailed account of the prehistoric funerary and settlement evidence, should be submitted for publication in the Proceedings of the Suffolk Institute of Archaeology and History (PSIAH).

It is proposed that the report on the jet object would include:

- A brief summary of the evidence for prehistoric activity on the site (with appropriate plans and, perhaps, photographs), in order to provide a physical and chronological context for the jet ornament

- Comprehensive description of the jet ornament, of its method of manufacture and decoration, and of its condition, with images

- Analytical report on the object and on the sediment inside the perforations

- Accounts of its physical condition, conservation and replication (these may be presented as appendices)

- Discussion of the object's probable function (as a chest ornament)

- Discussion of the evidence for signs of use, and the likely age of the object at burial

- Discussion of other artefacts found in association with the jet ornament, notably the collared urn, which can be considered in relation to similar vessels in East Anglia

- Discussion of the context of deposition, noting the strong parallels with Earlier Bronze Age graves for in-urned deposits of cremated human remains

- Discussion of decorative and stylistic parallels for the object, notably with the Bush Barrow and Clandon gold lozenges and other examples of Earlier Bronze Age incised gold artefacts, and with jet spacer plate necklaces from East Anglia that share the same decorative technique

- Discussion of the likely date of the jet object (using any C14 dates that are available from the charcoal, together with a discussion of the dating of collared urns and of the likely date of the Wessex gold lozenges)

- Discussion of the significance of this artefact within the local and national context of Earlier Bronze Age high-status artefacts: to include discussion of the links with Wessex (mentioning Needham's 'maritory' concept), and of high-status Earlier Bronze Age graves in East Anglia, especially Little Cressingham. Also to include discussion of other

Earlier Bronze Age artefacts of jet in East Anglia, drawing on research by Alison Sheridan and Colin Pendleton.

# 9 Publication project: Task sequence

## 9.1 Stratigraphic method statement

**Task 1:** *Research, via the Historic Environment Record and published sources, in relation to prehistoric settlement and funerary practices in East Anglia and (more generally) depositional practices, trade, power, religion and associated themes drawn from the Revised Research Framework* (Kieron Heard, SCCAS)

**Task 2:** *Write a summary of the evidence for prehistoric occupation of the site, suitable for publication in Proceedings of the Prehistoric Society* (Kieron Heard, SCCAS)

**Task 3:** *Write a more in-depth summary of the evidence for prehistoric occupation of the site, suitable for publication in PSIAH* (Kieron Heard, SCCAS)

## 9.2 Finds method statement

**Task 4:** *Check/update finds information and appendices* (Cathy Tester, SCCAS)

**Task 5:** *Analyse and report on the cremated bone from environmental sample 16 in pit G5002* (Sue Anderson, CFA Archaeology)

**Task 6:** *Identification of charcoal from pit G5002 and selection of suitable pieces for C14 dating* (Dana Challinor)

**Task 7:** *C14 dating of selected pieces of charcoal from pit G5002* (SUERC Laboratory)

**Task 8:** *Following C14 dating, write publication text for the collared urn from pit G5002* (Sarah Percival, NAU)

**Task 9:** *Removal (and retention) of sediment from the perforations, and non-destructive analysis of this and of the jet ornament using X-ray fluorescence spectrometry* (Alison Sheridan, NMS)

Removal of the sediment to be undertaken using a non-metallic probe, in order to: i) reveal the inner structure of the perforations, and hence show how they had been effected; ii) show whether any physical traces of the copper pins still survive; and iii) allow analysis of the sediment from all the perforations, to add to the results already obtained. If necessary, this analysis can be done using the NMS scanning electron microscope as well as by XRF.

XRF analysis of the object is to provide compositional data to add to the macro- and microscopic identification of raw material.

**Task 10:** *Provision of microscope photographs showing details of the object, its decoration and its perforations. Also provision of conventional digital images showing the sides and back of the lozenge, to accompany those taken already by SCCAS and NMS* (Alison Sheridan, NMS)

The photomicrographs will provide useful additional information about the techniques and tool/s used to decorate and perforate the object, and will also provide close-up images showing its texture and other details.

**Task 11:** *Write publication report on the jet object* (Alison Sheridan, NMS)

### 9.3 Illustration method statement

**Task 12:** *Illustration of the jet ornament* (Marion O'Neil, freelance illustrator)

### 9.4 Replication method statement

**Task 13:** *Replication of the jet ornament*

To be undertaken by expert contemporary Whitby jet worker Hal Redvers-Jones of the Victorian Jet Works.

*Rationale*: it is likely that, despite the best conservation efforts that will be applied to halt the physical degradation of the artefact, the soft jet will ultimately crack and the object will never look as good as it does currently. It has already been discovered that there may be a deep invisible crack running through the object (Mary Davis, *pers.comm*). Given its significance and the considerable interest already engendered by this object, it is strongly recommended that the opportunity be taken to create an accurate replica. This is best done before the object is conserved.

Mr Redvers-Jones can produce an accurate replica of the object, for future display in a museum alongside the real object, in hard jet that will not crack. This will convey to the public the beauty of the piece in its original state. His work will also demonstrate the techniques used to shape, perforate and decorate the object. It would arguably be worthwhile to photograph and/or film him undertaking this work. All this extends the outreach and educational value of the object and lays the foundation for its excellent display and presentation in the long term.

Mr Redvers-Jones has a suitable piece of jet and estimates that 30–40 hours of work would be required to complete the replica.

In order to assist him in his task, in addition to providing him with photographs (already done) it is proposed to bring the object to him, on its way to Cardiff for conservation, so that he can see the real thing. Alison Sheridan and Mary Davis (the conservator) would propose to drive to Whitby (from Edinburgh and Cardiff respectively) and stay over one night. This would allow them to show the object to Mr Redvers-Jones (still being kept cold and wet), to brief him in detail, and to transfer it from the care of NMS to National Museum Wales (NMW), for conservation. (It goes without saying that the object is far too fragile to be sent anywhere; it needs to be couriered personally). During this visit, it may be possible to film/photograph Mr Redvers-Jones in his initial stages of work as well.

### 9.5 Conservation method statement

**Task 14:** *Conservation of the jet object* (Mary Davis, NMW)

The proposed method would be very slow drying over ethanol, with the application (if necessary) of consolidant. Regular monitoring of the process of drying would take place.

**Warning:** from past experience in the conservation of soft jet, it is predicted that serious cracking and surface degradation of the object may well occur; this is the case whatever method of conservation is attempted. (Freeze-drying is not a viable option in this case).

### 9.6 Graphics method statement

**Task 15:** *Production of plans and/or sections, and selection/manipulation of photographs for inclusion in the publication* (Crane Begg, SCCAS)

### 9.7 Integration of publication text method statement

**Task 16:** *Editing and collating publication report* (Kieron Heard, SCCAS)

**Task 17:** *Copy editing publication report* (Richenda Goffin, SCCAS)

**Task 18:** *Specialist edit and corrections* (Alison Sheridan, NMS)

### 9.8 Summary of tasks

| Task | Description | Specialist | Time |
|---|---|---|---|
| 1 | Research in support of stratigraphic method statement | Kieron Heard, SCCAS | 3 days |
| 2 | Write site summary for PPS publication report | Kieron Heard, SCCAS | 1 days |
| 3 | Write site account for PSIAH publication report | Kieron Heard, SCCAS | 4 days |
| 4 | Check/update finds information / appendices | Cathy Tester, SCCAS | 0.5 day |
| 5 | Cremated bone analysis and report | Sue Anderson | 0.25 days |
| 6 | Charcoal ID and selection for C14 | Dana Challinor | 0.5 day |
| 7 | C14 dates (x2) | SUERC Laboratory | n/a |
| 8 | Write publication text for collared urn | Sarah Percival | 0.5 day |
| 9 | Analysis of sediment on jet object & XRF spectrometry | Alison Sheridan, NMS | n/a |
| 10 | Photo-microscopy and digital imaging of jet object | Alison Sheridan, NMS | n/a |
| 11 | Publication report on jet object | Alison Sheridan, NMS | 4 days |
| 12 | Line illustration of the jet object | Marion O'Neil, NMW | n/a |
| 13 | Production of replica of the jet object | Hal Redvers-Jones | 4-5 days |
| 14 | Conservation of the jet object | M Davis, NMW | 2 days |
| 15 | Graphics / photo selection for publication | Crane Begg, SCCAS | 5 days |
| 16 | Editing and collating publication report | Kieron Heard, SCCAS | 2 days |
| 17 | Copy editing publication report | Richenda Goffin, SCCAS | 1 day |
| 18 | Specialist edit and corrections | Alison Sheridan, NMS | 0.25 day |

Table 17. Summary of publication project tasks

## 10 Acknowledgements

Suffolk County Council commissioned and funded the project.

Jess Tipper produced the Brief and Specification documents and monitored the fieldwork (SCCAS, Conservation Team).

The fieldwork was managed by John Newman and the post-excavation project was managed by Rhodri Gardner. The fieldwork was directed by Clare McLannahan. Tim Browne, Phil Camps, Roy Damant, Tony Fisher, Michael

Green, Steve Manthorpe, Kate Mayhew, Nick Taylor, Jonathan Van Jennians and Kevin Wooldridge assisted with the fieldwork (all SCCAS Field Team).

Surveying was by Jonathan Van Jennians and John Duffy. John Duffy digitised the plans (SCCAS Field Team).

The finds were processed by Gemma Adams (SCCAS Field Team).

The finds assessment has been compiled by Cathy Tester (SCCAS, Finds Officer), incorporating individual reports by Sarah Percival (prehistoric pottery), Richenda Goffin (ceramic building material, post-Roman pottery and fired clay), Sarah Bates (flint), Alison Sheridan (jet ornament) and Sue Anderson (cremated bone).

The environmental samples were processed and assessed by Val Fryer and the soil micromorphology assessment is by Richard MacPhail.

Graphics are by Crane Begg (SCCAS, Graphics Officer).

# 11 Bibliography


Barrett, J.C., 1980, *The Pottery of the Later Bronze Age in Lowland England*, Proceedings of the Prehistoric Society 46, 297–320

British Archaeology, 94, May/June 2007, 6. *Unique decorated jet lozenge from Suffolk matches Stonehenge gold*

Brown, N., 1988, *A Later Bronze Age Enclosure at Loft's Farm, Essex*, Proceedings of the Prehistoric Society 54, 249–302

Brown, N., 1995, 'Ardleigh reconsidered: Deverel-Rimbury pottery in Essex', in *Unbaked Urns of Rudely Shape:* Essays on British and Irish pottery for Ian Longworth. Oxbow Monograph 55, 123–145 (Oxford)

Brown, N., 1999, *The Archaeology of Ardleigh, Essex: excavations 1955–80*, East Anglian Archaeology 90, Essex County Council

Brown, N., & Glazebrook, J., (eds), 1997, *Research and Archaeology: a framework for the Eastern Counties 1. resource assessment,* East Anglian Archaeology Occasional Papers 8

Burgess, C. B., 1986, *"Urnes of no small varietie": Collared Urns reviewed*. Proceedings of the Prehistoric Society, 52, 339–351

Courty, M. A., Goldberg, P. & Macphail, R. I., 1989, *Soils and Micromorphology in Archaeology*, Cambridge Manuals in Archaeology, Cambridge University Press

English Heritage, 1991, *Management of Archaeological Projects (MAP2)*

Gibson, A., 2002, *Prehistoric Pottery in Britain and Ireland* (Stroud: Tempus)

Glazebrook, J., (ed), 2000, *Research and Archaeology: a framework for the Eastern Counties 2. research agenda and strategy*, East Anglian Archaeology Occasional Papers 8

Goldberg, P. & Macphail, R. I., 2006, *Practical and Theoretical Geoarchaeology*

Hodge, C. A. H., Burton, R. G. O., Corbett, W. M., Evans, R., George, H., Heaven, F. W., Robson, J. D. & Seale, R. S., 1983, *Sheet 4 Eastern England. Soils of England and Wales*, Ordnance Survey

Hodgson, J. M., 1997, *Soil Survey Field Handbook*, Technical Monograph No. 5, Soil Survey and Land Research Centre

Kinnes, I., Gibson, A., Ambers, J., Bowman, S., Leese, M., & Boast, R., 1991, *Radiocarbon dating and British Beakers: the British Museum programme*, Scottish Archaeological Review 8, 35–78

Longworth, I., Ellison, A. & Rigby, V., 1988, *Excavations at Grimes Graves, Norfolk 1972-1976. Fascicle 2. The Neolithic, Bronze Age and Later Pottery',* British Museum Publications Limited

Macphail, R. I., 1990, Soil history and micromorphology, in *Brean Down Excavations 1983–1987* (ed M. Bell), Archaeological report No. 15, pp. 187–196, English Heritage

McKinley, J. I., 1994, *The Anglo-Saxon Cemetery at Spong Hill, North Elmham Part VIII: the cremations*. E. Anglian Archaeol. 69. Field Archaeology Division, Norfolk Museums Service

McKinley, J. I., 2004, 'Compiling a skeletal inventory: cremated human bone', in Brickley, M. & McKinley, J. I. (Eds.), *Guidelines to the Standards for Recording Human Remains*. IFA Paper No.7. BABAO and IFA

McLannahan, C., 2005, *Archaeological Evaluation Household Waste and Recycling Centre, South Lowestoft Industrial Estate, CAC 035,* SCCAS, (unpubl)

Martin, E., 1993, *Settlements on Hill-Tops: Seven Prehistoric Sites in Suffolk.* East Anglian Archaeology, 65. Suffolk County Planning Department

Martin, E. & Murphy, P., 1988, *West Row Fen, Suffolk: a Bronze Age fen-edge settlement site,* Antiquity 62, 353–8

Mays, S. A., 1998, *The Archaeology of Human Bones*. Routledge, London

Mays, S. A., 1999, 'Cremated bone from CEU excavations, and unpublished bone from earlier work', in Brown, N. R., *The Archaeology of Ardleigh, Essex: Excavations 1955-1980*. East Anglian Archaeology, 90. Heritage Conservation, Essex County Council

Medlycott, M., & Brown, N., 2008, Revised Research Framework for the Eastern Region (available at http://www.eaareports.org.uk/)

Needham, S. P., 2009, 'Encompassing the sea: *Maritories* and Bronze Age maritime interactions', In P. Clark (ed), *Bronze Age Connections: Cultural Contact in Prehistoric Europe*, 12–37.Oxford: Oxbow

Needham, S. P., & Woodward, A., 2008, *The Clandon barrow finery: a synopsis of success in an Early Bronze Age world*. Proceedings of the Prehistoric Society 74, 1–52

Pendleton, C. F., 1999, *Bronze Age Metalwork in Northern East Anglia: A study of its distribution and interpretation*, British Archaeol Reports British Series 279

Prehistoric Ceramic Research Group, 1997, *The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publications*, PCRG Occasional Paper No. 1 & No. 2

Robins, P., 1996, 'Worked flint' in Ashwin, T., *Excavation of an Iron Age Site at Silifield, Wymondham, Norfolk, 1992–3,* Norfolk Archaeol. XLII, 266–270

SCCAS, 2002, *Guidelines and policies for archaeological work in Suffolk*, SCCAS (unpubl)

Sheridan, J. A. & Davis, M., 1994, 'The jet beads from Deeping St Nicholas', in French, C. A. I., *Excavation of the Deeping St Nicholas Barrow Complex, South Lincolnshire*, 70–72. Sleaford: Heritage Trust

Stace, C., 1997, *New Flora of the British Isles*, Second edition, Cambridge University Press

Tipper, J., 2005a, *Brief and Specification for an Archaeological Evaluation: Household Waste and Recycling Centre, South Lowestoft Industrial Estate, Hadenham Road, Lowestoft*, SCCAS, (unpubl)

Tipper, J., 2005b, *Brief and Specification for an Archaeological Excavation: Household Waste and Recycling Centre, South Lowestoft Industrial Estate, Hadenham Road, Lowestoft*, SCCAS, (unpubl)

Tipper, J., 2009, 'The Anglo-Saxon Pottery' in Tipper, J., Lucy, S. & Dickens, A*., Bloodmoor Hill, Carlton Colville, Suffolk: the Anglo-Saxon Settlement and Cemetery*. East Anglian Archaeology Report No 131

WEA, 1980, *Recommendations for age and sex diagnoses of skeletons*, in J. Human Evolution 9, 517–49

West, S., 1963, 'The local pottery', in *Excavations at Cox Lane (1958) and at the Town Defences, Shire Hall Lane, Ipswich (1959)*, Proc. Suff. Inst. Archaeol. 29(3)

Young, R. & Humphrey J., 1999, *Flint Use in England after the Bronze Age: Time for a Re-evaluation?* Proceedings of the Prehistoric Society 65, 231–242

# Appendix 1. Brief and Specification

## *Brief and Specification for an Archaeological Excavation*

HOUSEHOLD WASTE & RECYCLING CENTRE, SOUTH LOWESTOFT INDUSTRIAL ESTATE, HADENHAM ROAD, LOWESTOFT

*Although this document is fundamental to the work of the specialist archaeological contractor the developer should be aware that certain of its requirements are likely to impinge upon the working practices of a general building contractor and may have financial implications, for example see paragraphs 2.1 & 4.1*

### 1. Background

1.1 Consent has been granted for development. The planning authority have applied a PPG 16, paragraph 30 condition to the consent.

1.2 The development area has been evaluated (Suffolk County Council Archaeological Service, Report No 2005/192, Oasis ref. Suffolkc1-11569).

1.3 In order to comply with the planning condition the prospective developer has requested a brief and specification for the archaeological recording of archaeological deposits which will be affected by development.

1.4 There is a presumption that all archaeological work specified for the whole area will be undertaken by the same body, whether the fieldwork takes place in phases or not. There is similarly a presumption that further analysis and post-excavation work to final report stage will be carried through by the excavating body. Any variation from this principle would require a justification which would show benefit to the archaeological process.

1.5 All arrangements for field excavation of the site, the timing of the work, and access to the site, are to be negotiated with the commissioning body.

### 2. Brief for Archaeological Excavation

2.1 In the area defined on Figure 1, archaeological excavation, as specified in Section 4, is to be carried out prior to development. This area relates to whole development site, and measures approximately 100m E to W by 100m (max.) N to S (*c.* 1 ha.).

2.2 The excavation objective will be to provide a record of all archaeological deposits which would otherwise be damaged or removed by development, including services and landscaping permitted by any future detailed consent.

2.3 The academic objective will centre upon the high potential for this site to produce evidence for prehistoric occupation, particularly from the Neolithic, Bronze Age and Iron Age periods.

2.4 This project will be carried through in a manner broadly consistent with English Heritage's *Management of Archaeological Projects,* 1991 (*MAP2*). Excavation is to be followed by the preparation of a full archive, and an assessment of potential for analysis. Analysis and final report preparation will follow assessment and will be the subject of a further brief and updated project design.

2.5 In accordance with the standards and guidance produced by the Institute of Field Archaeologists this brief should not be considered sufficient to enable the total execution of the project. A Project Design or Written Scheme of Investigation (PD/WSI) based upon this brief and the accompanying outline specification of minimum requirements, is an essential requirement. This must be submitted by the developers, or their agent, to the Conservation Team of the Archaeological Service of Suffolk County Council (Shire Hall, Bury St Edmunds IP33 2AR; telephone/fax: 01284 352443) for approval. The work must not commence until this office has approved both the archaeological contractor as suitable to undertake the work, and the PD/WSI as satisfactory. The PD/WSI will *provide the basis for measurable standards* and will be used to establish whether the requirements of the planning condition will be adequately met; an important aspect of the PD/WSI will be an assessment of the project in relation to the Regional Research Framework (*East Anglian Archaeology* Occasional Papers 3, 1997, 'Research and Archaeology: A Framework for the Eastern Counties, 1. resource assessment', and 8, 2000, 'Research and Archaeology: A Framework for the Eastern Counties, 2. research agenda and strategy').

2.6 The developer or his archaeologist will give the Conservation Team of Suffolk County Council's Archaeological Service (SCCAS) five working days notice of the commencement of ground works on the site, in order that the work of the archaeological contractor may be monitored. The method and form of development will also be monitored to ensure that it conforms to previously agreed locations and techniques upon which this brief is based.

**3. Specification for the Archaeological Excavation *(See also Section 4)***

The excavation methodology is to be agreed in detail before the project commences, certain minimum criteria will be required:

3.1 Plough soil and hillwash deposits can be removed by machine with a toothless bucket to the top of the first archaeological level.

3.2 Fully excavate all features which are, or could be interpreted as, structural. Post-holes, and pits which may be interpreted as post-holes, must be examined in section and then fully excavated. Fabricated surfaces within the excavation area (e.g. yards and floors) must be fully exposed and cleaned. Any variation from this process can only be made by agreement with a member of the Conservation Team of SCCAS, and must be confirmed in writing.

3.3 All other features must be sufficiently examined to establish, where possible, their date and function. For guidance:

*a)* A minimum of 50% of the fills of the general features is be excavated.

*b)* Between 10% and 20% of the fills of substantial linear features (ditches etc) are to be excavated, the samples must be representative of the available length of the feature and must take into account any variations in the shape or fill of the feature and any concentrations of artefacts.

Any variation from this process can only be made by agreement [ if necessary on site] with a member of the Conservation Team of SCCAS, and must be confirmed in writing.

3.4 Collect and prepare environmental bulk samples (for flotation and analysis by an environmental specialist). The fills of all archaeological features should be bulk sampled for palaeoenvironmental remains and assessed by an appropriate specialist. The Project Design must provide details of a comprehensive sampling strategy for

retrieving and processing biological remains (for palaeoenvironmental and palaeoeconomic investigations), and samples of sediments and/or soils (for micromorphological and other pedological/sedimentological analyses. All samples should be retained until their potential has been assessed. Advice on the appropriateness of the proposed strategies will be sought from J. Heathcote, English Heritage Regional Adviser in Archaeological Science (East of England). A guide to sampling archaeological deposits (Murphy, P.L. and Wiltshire, P.E.J., 1994, *A guide to sampling archaeological deposits for environmental analysis*) is available for viewing from SCCAS.

3.5 A finds recovery policy is to be agreed before the project commences. It should be addressed by the Project Design. Use of a metal detector will form an essential part of finds recovery. Sieving of occupation levels and building fills will be expected.

3.6 All finds will be collected and processed. No discard policy will be considered until the whole body of finds has been evaluated.

3.7 All ceramic, bone and stone artefacts to be cleaned and processed concurrently with the excavation to allow immediate evaluation and input into decision making.

3.8 Metal artefacts must be stored and managed on site in accordance with *UK Institute of Conservators Guidelines* and evaluated for significant dating and cultural implications before despatch to a conservation laboratory within 4 weeks of excavation.

3.9 Human remains are to be treated at all stages with care and respect, and are to be dealt with in accordance with the law. They must be recorded *in situ* and subsequently lifted, packed and marked to standards compatible with those described in the Institute of Field Archaeologists' *Technical Paper 13: Excavation and post-excavation treatment of Cremated and Inhumed Human Remains*, by McKinley & Roberts. Proposals for the final disposition of remains following study and analysis will be required in the Project Design.

3.10 Plans of the archaeological features on the site should normally be drawn at 1:20 or 1:50, depending on the complexity of the data to be recorded. Sections should be drawn at 1:10 or 1:20 again depending on the complexity to be recorded. All levels should relate to Ordnance Datum. Any variations from this must be agreed with the Conservation Team.

3.11 A photographic record of the work is to be made, consisting of both monochrome photographs and colour transparencies.

3.12 Excavation record keeping is to be consistent with the requirements Suffolk County Council's Sites and Monuments Record and compatible with its archive. Methods must be agreed with the Conservation Team of SCCAS.

**4. Area for Excavation (Figure 1) (see 2.1)**

4.1 Within the development area marked on Figure 1, topsoil stripping will be done under close archaeological supervision with a toothless machine bucket and will cease at the uppermost archaeological deposit or the surface of clean subsoil. Archaeological features will be excavated and recorded as defined in Section 3 of this brief. If the machine stripping is to be undertaken by the main contractor, all machinery must keep off the stripped areas until they have been fully excavated and recorded, in accordance with this specification.

## 5. General Management

5.1 A timetable for all stages of the project must be agreed before the first stage of work commences.

5.2 Monitoring of the archaeological work will be undertaken by the Conservation Team of SCCAS. Where projects require more than a total of two man-days on site monitoring and two man-days post-excavation monitoring, an 'at-cost' charge will be made for monitoring (currently at a daily rate of £150, but to be fixed at the time that the project takes place), provision should be made for this in all costings. [A decision on the monitoring required will be made by the Conservation Team on submission of the accepted Project Design.]

5.3 The composition of the project staff must be detailed and agreed (this is to include any subcontractors). For the site director and other staff likely to have a major responsibility for the post-excavation processing of this site there must be a statement of their responsibilities for post-excavation work on other archaeological sites.

5.4 A general Health and Safety Policy must be provided, with detailed risk assessment and management strategy for this particular site.

5.5 The Project Design must include proposed security measures to protect the site and both excavated and unexcavated finds from vandalism and theft.

5.6 Provision for the reinstatement of the ground and filling of dangerous holes must be detailed in the Project Design.

5.7 No initial survey to detect public utility or other services has taken place. The responsibility for this rests with the archaeological contractor.

6.8 The Institute of Field Archaeologists' *Standard and Guidance for Archaeological Desk-based Assessments* and for *Field Evaluations* should be used for additional guidance in the execution of the project and in drawing up the report.

## 6. Archive Requirements

6.1 Within four weeks of the end of field-work a timetable for post-excavation work must be produced. Following this a written statement of progress on post -excavation work whether archive, assessment, analysis or final report writing will be required at three monthly intervals.

6.2 An archive of all records and finds is to be prepared consistent with the principle of English Heritage's *Management of Archaeological Projects*, 1991 (*MAP2*), particularly Appendix 3. However, the detail of the archive is to be fuller than that implied in *MAP2* Appendix 3.2.1. The archive is to be sufficiently detailed to allow comprehension and further interpretation of the site should the project not proceed to detailed analysis and final report preparation. It must be adequate to perform the function of a final archive for lodgement in the County SMR or museum.

6.3 A clear statement of the form, intended content, and standards of the archive is to be submitted for approval as an essential requirement of the Project Design (see 2.5).

6.4 The site archive quoted at *MAP2* Appendix 3, must satisfy the standard set by the "Guideline for the preparation of site archives and assessments of all finds other than fired clay vessels" of the Roman Finds Group and the Finds Research Group AD700-1700 (1993).

6.5 Pottery should be recorded and archived to a standard comparable with 6.3 above, i.e. *The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication,* Prehistoric Ceramics Research Group Occ Paper 1 (1991, rev 1997), the *Guidelines for the archiving of Roman Pottery*, Study Group Roman Pottery (ed M G Darling 1994) and the *Guidelines of the Medieval Pottery Group* (in draft).

6.6 All coins must be identified and listed as a minimum archive requirement.

6.7 The data recording methods and conventions used must be consistent with, and approved by, the County Sites and Monuments Record. All record drawings of excavated evidence are to be presented in drawn up form, with overall site plans. All records must be on an archivally stable and suitable base.

6.8 A complete copy of the site record archive must be deposited with the County Sites and Monuments Record within 12 months of the completion of fieldwork. It will then become publicly accessible.

6.9 Finds must be appropriately conserved and stored in accordance with UK Institute Conservators Guidelines.

6.10 Every effort must be made to get the agreement of the landowner/developer to the deposition of the finds with the County SMR or a museum in Suffolk which satisfies Museum and Galleries Commission requirements, as an indissoluble part of the full site archive. If this is not achievable for all or parts of the finds archive then provision must be made for additional recording (e.g. photography, illustration, analysis) as appropriate. If the County SMR is the repository for finds there will be a charge made for storage, and it is presumed that this will also be true for storage of the archive in a museum.

6.11 Where positive conclusions are drawn from a project, a summary report in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the Proceedings of the Suffolk Institute for Archaeology journal, must be prepared and included in the project report, or submitted to the Conservation Team by the end of the calendar year in which the evaluation work takes place, whichever is the sooner.

## 7. Report Requirements

7.1 A report on the fieldwork and archive must be provided consistent with the principle of *MAP2*, particularly Appendix 4. The report must be integrated with the archive.

7.2 The objective account of the archaeological evidence must be clearly distinguished from its archaeological interpretation.

7.3 An important element of the report will be a description of the methodology.

7.4 Reports on specific areas of specialist study must include sufficient detail to permit assessment of potential for analysis, including tabulation of data by context, and must include non-technical summaries. Provision should be made to assess the potential of scientific dating techniques for establishing the date range of significant artefact or ecofact assemblages, features or structures.

7.5 The report will give an opinion as to the potential and necessity for further analysis of the excavation data beyond the archive stage, and the suggested requirement for publication; it will refer to the Regional Research Framework (see above, 2.5). Further analysis will not be embarked upon until the primary fieldwork results are assessed and the need for further work is established. Analysis and publication can be neither developed in detail or costed in detail until this brief and specification is

satisfied, however, the developer should be aware that there may be a responsibility to provide a publication of the results of the programme of work.

7.6 The assessment report must be presented within six months of the completion of fieldwork unless other arrangements are negotiated with the project sponsor and the Conservation Team of SCCAS.

Specification by: Dr Jess Tipper

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Archaeological Service Conservation Team
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Date: 14 December 2005

**This brief and specification remains valid for 12 months from the above date. If work is not carried out in full within that time this document will lapse; the authority should be notified and a revised brief and specification may be issued.**

**If the work defined by this brief forms a part of a programme of archaeological work required by a Planning Condition, the results must be considered by the Conservation Team of the Archaeological Service of Suffolk County Council, who have the responsibility for advising the appropriate Planning Authority.**

# Appendix 2. Group descriptions

**Group 5001: Natural strata**
*Contexts: 0167, 0180, 0181, 0182, 0183*

The natural stratum varies from firm, light yellowish brown sandy clay with flint fragments to light greenish brown or yellowish brown, plastic clay with frequent chalk and flint fragments. These deposits are interpreted as glacial till (boulder clay). The surface of the natural slopes gradually down from east to west. It was recorded at a maximum height of 13.92m OD in the NE corner of the site, and a minimum height of 12.71m OD in the western central part of the site.

At a few locations the glacial till (which is at least 1m thick) overlies deposits of horizontally-bedded sand (0182, 0183).

**Group 5002: Pit and its fill (EBA)**
*Contexts: **0087**, 0088*

0087 is an oval pit measuring 1.35 x 1.25 x 0.34m deep, with steep sides and a flat base. Its fill 0088 is loose, dark brownish grey clayey silt with large fragments of charcoal throughout; the charcoal becomes more frequent towards the base of the cut. The sides and base of the pit are scorched, possibly indicating burning *in situ*.

The pit contained an important finds assemblage consisting of an incised jet lozenge (SF 1004), a flint knife (SF 1005) and 24 fragments from an EBA collared urn.

**Group 5003: Posthole circle / Roundhouse (LBA/EIA)**
*Contexts: 0042, **0077**, 0078, **0079**, 0080, **0081**, 0082, **0083**, 0084, **0114**, 0115, **0116**, 0117, **0133**, 0134, **0135**, 0136, 0137, **0138**, 0139, **0140**, 0141, **0202**, 0203, **0233**, 0234, 0235*

0042 is a roundhouse building represented by 11 postholes arranged in a circle with a diameter of approximately 7m. They are spaced irregularly, generally at an average of 1.8m apart. Postholes 0077 and 0138 are more widely spaced (at 2.85m) and are thought to indicate the position of an entrance on the south-eastern side of the roundhouse.

The postholes are sub-circular or oval, with an average width of 0.34m and an average surviving depth of only 0.15m (0.18m maximum depth). They have steep or vertical sides and (mostly) rounded bases. Only posthole 0233 displays an obvious post pipe. They are filled with deposits of grey or brown clayey silt or sandy clay containing flecks of charcoal and pebbles but few artefacts; fill 0117 in posthole 0116 contains three fragments of LBA/EIA pottery and fill 0084 in posthole 0083 contains a fragment of struck flint.

Posthole 0138 (on the southwest side of the postulated entrance), cuts earlier posthole 0140, suggesting that the structure was repaired at this point.

The roundhouse is located within the northern half of a circular, ditched enclosure (Group 5005).

**Group 5004: Hearth (LBA/EIA)**
*Contexts: **0204**, 0205, 0236, 0237*

0204 is a sub-circular pit measuring 1.40m wide x 0.30m deep, with moderately steep sides and a flat base. It is located slightly north of the centre of the roundhouse (Group 5003).

The pit contains a sequence of three fills:

- Basal fill 0236 is mid greyish brown silty sandy clay with occasional charcoal flecks and small stones
- Middle fill 0205 is greenish brown clay with frequent scorched patches mixed with greyish brown silty sandy clay containing occasional charcoal flecks
- Upper fill 0237 is mid greyish brown silty sandy clay with frequent charcoal flecks and occasional scorched patches. It contains occasional large stones, some of which are fire-cracked.

No datable artefacts were found in the hearth (other than an intrusive fragment of Anglo-Saxon pottery) but the form and location of the feature indicate that it is a fire-pit/hearth associated with the roundhouse.

**Group 5005: Penannular ditch (LBA/EIA)**
*Contexts: **0021**, 0022, **0041**, 0043, 0051, 0052, 0055, 0056, 0057, 0058, 0059, 0060, 0061, 0062, 0063, 0065, 0066, 0067, 0068, 0069, 0070, 0071, 0072, 0073, 0074, 0075, 0076, 0089, 0090, 0093, 0094, **0095**, 0096, 0102, **0103**, 0142, 0143, 0214, 0215, 0287, 0288, 0289, 0290, 0291, 0292, 0298, 0299, 0302*

0021/0041/0095/0102 is a penannular enclosure ditch surrounding roundhouse Group 5003. The enclosure is 19.50m wide internally. The ditch is generally from 1.2m to 1.5m wide and up to 0.64m deep with steep (though sometimes irregular) sides and a rounded base. On either side of the entrance the ditch widens to approximately 2.5m and has a stepped profile on its eastern (interior) edge (0095). The entrance is on the west side of the enclosure and is approximately 4.2m wide.

On the northeast side of the enclosure there is an apparent area of erosion (0103) on the western (interior) edge of the ditch. At this point, primary fill 0104, lying against the western side and in the base of the ditch, seems to have been trampled into the underlying natural.

12 sections of the ditch were excavated, each revealing a sequence of from two to four fills. The fills are mostly grey or brown sandy clay/silts, containing varying amounts of charcoal, as discrete fragments or concentrated lens. Some fills contain also lens or pockets of scorched clay and sand. There is no clear evidence to demonstrate whether the ditch silted up gradually or was backfilled deliberately. Similarly, the deposition of the fills does not provide clear evidence for the location of the associated bank; because of the position of the roundhouse close to the ditch it seems unlikely that the bank was internal.

The finds assemblage consists mainly of pottery that is almost all LBA/EIA. A small group of residual MBA pottery fragments came from upper fill 0290 on the eastern side of the ditch, and occasional post-prehistoric artefacts are assumed to be intrusive. The greatest concentrations of pottery were in the ditch termini on either side of the entrance.

**Group 5006: Pit and its fill (LBA/EIA)**
*Contexts: **0227**, 0228*

Pit 0227 is oval, measuring 1.00 x 0.60 x 0.40m deep with vertical sides and an irregular base. It is located inside the LBA/EIA enclosure (Group 5005), just inside the entrance. Its fill 0228 is mid greyish brown silty sandy clay with large pockets of olive brown clay (probably redeposited natural) mostly at the south end of the feature. There are frequent charcoal flecks in the centre of the deposit and occasional LBA/EIA pottery sherds, scorched clay fragments and small, angular flints.

**Group 5007: Pit and its fill (undated)**
*Contexts: **0219**, 0220*

Pit 0219 is oval, measuring 0.75 x 0.60 x 0.17m deep with moderately steep sides and an irregular base. It is located inside the LBA/EIA enclosure (Group 5005), 3m southeast of the postulated entrance to the roundhouse (Group 5003). Its fill 0220 is mid brownish grey silty sandy clay mottled with orange towards the base, containing frequent charcoal flecks but no cultural material.

**Group 5008: Ditch and its fills (LBA/EIA)**
*Contexts: **0017**, 0018, 0157, **0164**, 0208, 0244, 0245, 0252, 0272, 0293, 0318*

Ditch 0017/0164 is oriented NW-SE. It is 41.8m long x up to 0.60m wide x up to 0.30m deep, with a rounded terminus at each end. Generally it has steep sides and a rounded base.

Eight sections of the ditch were excavated, each revealing a single fill of (mostly) sandy clay containing small quantities of pottery and struck flints. The pottery is mostly of MBA date, although two sherds of LBA/EIA pottery were recovered from fill 0208.

The function of the ditch is unknown. It is shallow, but has obviously been truncated by ploughing. It is cut by later ditch 0100/0206 (Group 5009).

**Group 5009: Ditch and its fills (LBA/EIA)**
*Contexts: **0100**, 0101, **0206**, 0207, 0248, 0263, 0264, 0273, 0278, 0279*

Ditch 0100/0206 is oriented WSW-ENE. It is approximately 66m long x up to 0.46m wide x up to 0.22m deep. It runs beyond the limit of excavation to the west and peters out to the east. Generally it has moderately steep sides and a rounded base.

Eight sections of the ditch were excavated, each revealing a single fill of (mostly) orangey brown clayey silty sand, some of which contain occasional fragments of LBA/EIA pottery and/or struck flints.

The function of the ditch is unknown. It is shallow, but has obviously been truncated by ploughing. It cuts earlier ditch 0017/0164 (Group 5008).

**Group 5010: Cremation (MBA)**
*Contexts: **0150**, 0151, 0152*

0150 is a small, oval pit measuring 0.46 x 0.38 x 0.14 deep, with a bowl-shaped profile. Its fill 0151 is black (charcoal-rich) clay containing frequent flecks and small fragments of burnt bone and 36 sherds of an incomplete vessel (0152) that appears to have been broken before being deposited in the pit.

**Group 5011: Pit and its fill (MBA)**
*Contexts: **0200**, 0201*

0200 is a sub-circular pit measuring 0.40m wide x 0.14m deep, with a bowl-shaped profile. Its fill 0201 is mid to dark brown silty clay containing very occasional charcoal flecks and .four sherds of MBA pottery.

**Group 5012: Pit and its fill (MBA)**
*Contexts: **0246**, 0247*

0246 is a small, sub-circular pit measuring 0.57m wide x 0.18m deep, with steep sides and a rounded base. Its fill 0247 is dark grey silty clay with frequent fragments of charcoal and MBA pottery, all from the same vessel. Note that there are many sherds from the same vessel in pit 0113 (Group 5013), which is located 58m to the southeast.

**Group 5013: Pit and its fill (MBA)**
*Contexts: 0111, 0112**, 0113***

0113 is an oval pit measuring 0.96 x 0.40 x 0.14m deep, with moderately steep sides and a concave base.

Its fill 0111 is mid greyish green silty clay with occasional angular flint pebbles and charcoal flecks. It contains some large sherds (context 0112) from a single vessel placed at the east

end of the pit. Note that there are many sherds from the same vessel in pit 0246 (Group 5012), which is located 58m to the northwest.

**Group 5014: Pit and its fill (MBA)**
*Contexts: **0240**, 0241, 0265*

Pit 0240 is sub-circular, measuring approximately 1m wide x 0.60m deep with a conical profile. Its lower fill 0241 is mid brownish grey silty sandy clay containing charcoal flecks and six flint flakes. Upper fill 0265 is mid brown silty sandy clay with occasional charcoal fragments and one sherd of MBA pottery.

**Group 5015: Posthole and its fill (LBA/EIA)**
*Contexts: **0146**, 0147*

0146 is an oval pit located approximately 15m to the west of the entrance to enclosure G5005. It measures 1.10m x 0.85m and is generally only 0.12m deep, but at its southeast end there is a deeper area with vertical edges and a flat base measuring 0.34m wide x 0.44m deep. This is interpreted tentatively as the socket for a timber post.

There is a single fill (0147) of light to mid brown silty sandy clay with pockets of olive brown clay and patches of charcoal. It produced 10 sherds of LBA/EIA pottery.

**Group 5016: Pit and its fill (PREH)**
*Contexts: **0098**, 0097*

0098 is a sub-circular pit measuring 1.26m wide x 0.20m deep, with gently sloping sides and a flat base. It is located 3m south of EBA pit 0087 (Group 5002). Its fill 0097 is mid brownish grey silty sandy clay with frequent charcoal flecks and fragments, occasional sub-angular flints and scorched clay lumps and a single worked flint, probably part of a scraper.

**Group 5017: Cooking(?) pit and its fill (PREH)**
*Contexts: **0003**, 0004*

0003 is a small, circular pit measuring 0.60m wide x 0.26m deep with steep sides and a flat base. Fill 0004 is light greyish brown silty sandy clay with occasional patches of scorched clay, frequent charcoal throughout and a concentration of fire-cracked flints at the base. It also contained a single sherd of un-diagnostic prehistoric pottery. This is interpreted as a probable cooking pit.

**Group 5018: Pit and its fill (undated)**
*Contexts: **0005**, 0006*

0005 is a shallow, circular pit measuring 0.26m wide x 60mm deep, with a saucer-shaped profile. Its fill 0006 is mottled, mid greyish brown and orangey brown silty clay with occasional charcoal flecks but no cultural material.

**Group 5019: External hearth/cooking area (LBA/EIA)**
*Contexts: **0007**, 0008*

0007 is a large, irregularly-shaped pit or depression (possibly two intercutting features) measuring approximately 2.0m x 0.85m x 0.26m deep with gently-sloping sides and an undulating base. Fill 0008 is mottled, light greyish brown and orangey brown clay containing frequent charcoal flecks and lenses of fire-cracked flints and sandstone fragments. It also contained 20 sherds of LBA/EIA pottery. Given the amount of burnt material this is interpreted provisionally as an external hearth or cooking area, although an industrial function cannot be ruled out.

**Group 5020: Pit and its fill (undated)**
*Contexts: **0091**, 0092, 0099*

0092 is a small pit measuring 0.90 x 0.80 x 0.20m deep and with a bowl-shaped profile. It contains two fills – primary fill 0099 is mid to dark brown silty clay containing moderate flint inclusions and frequent charcoal, but no cultural material. Upper fill 0091 is mid brownish grey silty sandy clay with frequent flint inclusions and occasional charcoal flecks but no cultural material.

**Group 5021: Pit and its fill (undated)**
*Contexts: **0118**, 0119*

0118 is a small, oval pit measuring 0.50 x 0.26 x 0.16m deep, with steep sides and a concave base. Single fill 0119 is light to mid brown silty sandy clay with frequent charcoal but no cultural material.

**Group 5022: Pit and its fill (undated)**
*Contexts: **0120**, 0121*

0120 is a small, oval pit measuring 0.56 x 0.40 x 0.16m deep, with steep sides and a flat base. Single fill 0121 is mid brown silty sandy clay with orange mottling, containing occasional charcoal flecks and one fragment of fired-cracked flint.

**Group 5023: Pit and its fill (LBA/EIA)**
*Contexts: **0122**, 0123*

0122 is a circular pit measuring 0.53m wide x 0.26m deep, with vertical sides and a concave base. Single fill 0123 is mid brownish grey silty sandy clay with orange mottling, containing frequent charcoal flecks, two sherds of LBA/EIA pottery and a struck flint.

**Group 5024: Pit and its fill (LBA/EIA)**
*Contexts: **0124**, 0125*

0124 is a small, circular pit measuring 0.40m wide x 0.22m deep, with steep sides and a concave base. Fill 0125 is mid brown silty sandy clay with orange mottling, containing frequent charcoal flecks, occasional fire-cracked flint and two sherds of LBA/EIA pottery.

**Group 5025: Pit and its fill (undated)**
*Contexts: **0126**, 0127*

0126 is a small, shallow pit measuring 0.60 x 0.50 x 0.14m deep, with a concave profile. Single fill 0127 is mid brownish grey silty sandy clay mottled with orange, containing frequent small fragments of charcoal, occasional small stones and scorched clay flecks and a single fragment of fire-cracked flint.

**Group 5026: Pit and its fill (PREH)**
*Contexts: **0128**, 0129*

0128 is a large but shallow pit or depression measuring 1.46 x 0.85 x 0.22m deep, with gently-sloping sides and an undulating base. Fill 0129 is mid grey silty clay with some iron panning, and contains eight flint flakes.

**Group 5027: Pit and its fill (LBA/EIA)**
*Contexts: **0130**, 0131, 0132*

0130 is a circular pit measuring 0.80m wide x 0.44m deep, with vertical sides and a concave base. It contains two fills – primary fill 0131 is dark brownish grey silty sandy clay with frequent charcoal flecks and fragments, occasional scorched clay lumps and three fragments of LBA/EIA pottery. Upper fill 0032 is mottled mid brown and orange silty sandy clay containing frequent sherds of LBA/EIA pottery, mostly from of small, fine vessels.

**Group 5028: External hearth/cooking area (PREH)**
*Contexts: **0106**, 0107*

0106 is a shallow, sub-circular pit or depression measuring 0.52m wide x 70mm deep, with a saucer-shaped profile. Its fill 0107 is dark grey silty clay with moderate flecks of charcoal and fragments of fire-cracked flint, but no cultural material. It is interpreted as an external hearth or the base of a cooking pit.

**Group 5029: Boundary ditch and its fills (PMED)**
*Contexts: **0030**, 0031, 0032, 0033, 0034, 0035, 0036, 0037, 0046, 0048, 0049, 0050*

Ditch 0030 is oriented north-south, extending beyond the limits of excavation in both directions. It is >90m long x up to 1.8m wide x 0.72m deep, with steep (slightly irregular) sides and a narrow, flat base.

Four sections of the ditch were investigated, each revealing sequences of two or three fills; these are mostly brown sandy/silty clays, some of which contain occasional fragments of clay tobacco pipe, post-medieval pottery, brick and roof tile.

This feature does not coincide with any of the field boundaries shown on the 1880-1920 OS maps.

**Group 5030: Linear feature and its fills (undated)**
*Contexts: **0053**, 0054, 0086*

0053 is a narrow, linear feature oriented NW-SE. It measures >8.0m long x 0.37m wide x 0.10m deep, with a U-shaped profile. To the SE it is cut by post-medieval ditch 0030 (Group 5029), and to the NE it has an uncertain relationship with enclosure ditch 0021/0041 (Group 5003).

Two sections of the feature were investigated, each revealing a single fill of greyish brown silty sandy clay with patches of orange brown sandy clay containing varying amounts of charcoal, some scorched clay, fragments of chalk and pebbles. Fill 0086 produced three small fragments of un-datable flint waste. The date and function of this feature are unknown.

**Group 5031: Pit and its fill (undated)**
*Contexts: **0238**, 0239*

0238 is an oval pit measuring 0.60 x 0.45 x up to 0.18m deep, with very steep sides and an irregular base. Its fill 0239 is dark grey silty clay with frequent charcoal fragments and small pellets of burnt or fired clay. The date and function of the pit are unknown.

**Group 5032: Pit and its fill (LBA/EIA)**
*Contexts: **0276**, 0277*

0276 is a small, circular pit measuring 0.40m wide x 0.12m deep, with a bowl-shaped profile. Its fill 0277 is mid brown sandy clay with occasional stones, charcoal flecks and a fragment of LBA/EIA pottery.

**Group 5033: Pit and its fill (LBA/EIA)**
*Contexts: **0162**, 0163*

0162 is a sub-circular pit measuring 0.57m wide x 0.12m deep, with steep sides and an irregular base. Its fill 0163 is dark brown sandy silt containing moderate LBA pottery and occasional charcoal flecks.

**Group 5034: Pit and its fill (LBA/EIA)**
*Contexts: **0231**, 0232*

Pit 0231 is sub-circular, measuring 0.50m wide x 0.27m deep with steep sides and a flat base. Its fill 0232 is dark brown silty sand containing occasional LBA/EIA pottery, struck flint, fire-cracked flint and fired clay fragments.

**Group 5035: Pit or posthole and its fill (undated)**
*Contexts: **0198**, 0199*

0198 is a small pit or posthole, 0.10m wide x 70mm deep with a bowl-shaped profile. Fill 0199 is mid to dark brown silty clay with no inclusions.

**Group 5036: Posthole and its fill (undated)**
*Contexts: **0229**, 0230*

Posthole 0229 is irregular in plan, measuring approximately 0.40m wide x 0.38m deep with steep but irregular sides and a flat base. Fill 0230, dark greyish brown silt, is confined to the central post pipe, which is 0.17m wide. This is surrounded by a packing of mid brown silty sand.

**Group 5037: Pit and its fill (LBA/EIA)**
*Contexts: **0223**, 0224*

0223 is an irregular pit measuring 0.66m wide x 0.36m deep, with steep but irregular sides and a concave base. Fill 0224 is mid brown silty sand containing charcoal flecks, occasional LBA/EIA pottery and moderate fired clay fragments.

**Group 5038: Pit and its fill (LBA/EIA)**
*Contexts: **0294**, 0295*

0294 is an irregular pit measuring 0.66m wide x 0.62m deep, with very steep sides and a conical profile. Fill 0295 is mid orangey brown clayey silty sand containing occasional LBA/EIA pottery. It is immediately adjacent to pit 0296 (Group 5039). The function of the pit is unknown.

**Group 5039: Pit and its fill (undated)**
*Contexts: **0296**, 0297*

0296 is a small, oval pit measuring 0.55 x 0.44 x 0.26m deep, with steep sides and a flat base. Fill 0297 is mid orangey brown silty clay sand containing occasional stones but no cultural material. It is immediately adjacent to pit 0294 (Group 5038). The function of the pit is unknown.

**Group 5040: Pit or posthole and its fill (PREH)**
*Contexts: **0155**, 0156*

0155 is a small, sub-circular pit or posthole measuring 0.27m wide x 0.22m deep, with steep sides and a concave base. Fill 0156 is mid brown silty sand with very occasional charcoal flecks and a single sherd of prehistoric pottery.

**Group 5041: Pit or posthole and its fill (LBA/EIA)**
*Contexts: 0158, 0159*

0158 is a small pit or posthole measuring 0.38m wide x 0.22m deep, with a conical profile. Its fill 0159 is mid brown silty sandy clay with occasional charcoal flecks and fragments of LBA/EIA pottery.

**Group 5042: Pit or posthole and its fill (undated)**
*Contexts: **0160**, 0161*

0160 is a small, circular pit or posthole measuring 0.34m wide x 0.20m deep, with near vertical sides and a concave base. Fill 0161 is mid brown silty sandy clay with occasional charcoal flecks but no cultural material.

**Group 5043: Pit and its fill (undated)**
*Contexts: **0196**, 0197*

0196 is a shallow, circular pit measuring 0.42m wide x 0.10m deep, with moderately steep sides and a concave base. Its fill 0197 is dark grey silty clay with occasional charcoal flecks/lumps but no cultural material.

**Group 5044: Pit and its fill (LBA/EIA)**
*Contexts: **0274**, 0275*

0274 is an oval pit measuring 0.97 x 0.75 x 0.25m deep, with steep sides and a flat base. Its fill 0275 is mid brown silty sandy clay with frequent charcoal flecks and occasional small fragments of scorched clay, LBA/EIA pottery, fired-cracked flint and a struck flint.

**Group 5045: Pit or posthole and its fill (LBA/EIA)**
*Contexts: **0266**, 0267*

0266 is a small, circular pit or posthole measuring 0.40 x 0.20m deep, with vertical sides and a flat base. It has an inter-cutting relationship with pit/posthole 0270 (Group 5046) but the sequence of events is unknown. Its fill 0267 is mid to dark brownish grey silty sandy clay with very frequent charcoal flecks and fragments, a sherd of LBA/EIA pottery and three fragments of fire-cracked flint. An environmental sample contains a high density of flax seeds, along with hazel nutshell fragments and a piece of sloe type fruit stone. This material is almost certainly the residue from a snack or meal.

**Group 5046: Pit or posthole and its fill (undated)**
*Contexts: **0270**, 0271*

0270 is a small, circular pit or posthole measuring 0.40 x 0.20m deep, with vertical sides and a flat base. It has an inter-cutting relationship with pit/posthole 0266 (Group 5045) but the sequence of events is unknown. Its fill 0271 is mid to dark brownish grey silty sandy clay with very frequent charcoal flecks and fragments and occasional fire-cracked flint and fired clay.

**Group 5047: Pit or posthole and its fill (LNEO/EBA)**
*Contexts: **0268**, 0269*

0268 is a small, circular pit or posthole measuring 0.22 x 0.13m deep, with vertical sides and a flat base. It has an inter-cutting relationship with pit/posthole 0270 (Group 5046) but the sequence of events is unknown. Its fill 0269 is mid greyish brown silty sandy clay with occasional charcoal flecks and a fragment of LNEO/EBA pottery that is likely to be residual.

**Group 5048: Pit or posthole and its fill (undated)**
*Contexts: **0300**, 0301*

0300 is a small, circular pit or posthole 0.30m wide x 0.12m deep, with a bowl-shaped profile. Its fill 0301 is mid brown silty sandy clay with frequent charcoal flecks and fragments but no cultural material.

**Group 5049: Animal or root disturbance (undated)**
*Contexts: **0211**, 0212, 0213*

Small, soil-filled feature of irregular plan and section, interpreted on site as animal or root disturbance.

**Group 5050: Pit and its fill (LBA/EIA)**
*Contexts: **0242**, 0243*

0242 is an oval pit measuring 0.90 x 0.50 x 0.40m deep, with steep but irregular sides and a concave base. Its fill 0243 is dark greyish brown and orangey brown sandy silt, with some redeposited natural boulder clay. It contains occasional LBA/EIA pottery, struck flints, fire-cracked flints and fired clay fragments. The function of the pit is unknown. It is located close to the SE terminus of ditch Group 5008.

**Group 5051: Pit and its fill (undated)**
*Contexts: **0144**, 0145*

0144 is an oval pit or depression measuring 0.96 x 0.60 x 0.10m deep, with a saucer-shaped profile. Its fill 0145 is mid brownish grey silty sandy clay with frequent charcoal flecks and small fragments and occasional small sub-angular flints, but no cultural material.

**Group 5052: Posthole and its fills (undated)**
*Contexts: **0153**, 0154, 0225*

Posthole 0153 is circular, measuring 0.78m wide x 0.44m deep with steep sides and a narrow, concave base. The central post pipe is 0.15m wide and is filled by 0225 - mid to dark brown silty sandy clay with frequent small fragments of charcoal. The surrounding packing 0154 is similar, but with less charcoal inclusions. This feature might relate to nearby posthole Group 5053.

**Group 5053: Posthole and its fills (LBA/EIA)**
*Contexts: **0217**, 0218, 0226*

0217 is a circular posthole measuring 0.60m wide x 0.58m deep with a conical profile. The central post pipe is 80mm wide and is filled by 0226 – soft, mid to dark brown silty sandy clay with frequent flecks and small fragments of charcoal. The surrounding packing 0218 is mid brown silty sandy clay with frequent charcoal and occasional LBA/EIA pottery and struck flints. This feature might relate to nearby posthole Group 5052.

**Group 5054: Pit and its fill (PREH)**
*Contexts: **0038**, 0039, 0047*

0038 is a large but shallow pit measuring 1.36m wide x 0.22m deep, with shallow sides and an undulating base. It contains two fills – basal fill 0047 is light brown slightly silty sandy clay with charcoal flecks and very occasional small angular flints. Upper fill 0039 is similar but contains more charcoal. It also produced two struck flints. The precise date and function of the pit are unknown.

**Group 5055: External hearth? (PREH)**
*Contexts: **0148**, 0149*

0148 is a shallow pit or depression, 0.66m wide x 0.10m deep and with a saucer-shaped profile. Its fill 0149 is mid orange brown sandy clay silt with frequent fire-cracked flint, occasional fired clay fragments and one sherd of prehistoric pottery. Given the amount of heated flint this is interpreted provisionally an external hearth or cooking area, although an industrial function cannot be ruled out. An environmental sample of the fill does not provide any evidence for the use of this feature.

**Group 5056: Unspecified cut and its fill (PREH)**
*Contexts: **0019,** 0020*

0019 is an irregular cut feature measuring at least 0.60m wide x 0.40m deep, with steep sides and a flat base. Its fill 0020 is mid brown sandy clay with occasional lumps of redeposited natural boulder clay. It produced two flint flakes.

This feature was identified in evaluation trench 3, but its full extent was not recorded subsequently during the open-area excavation. It was interpreted provisional as a possible tree-throw hole.

**Group 5057: Animal or root disturbance (undated)**
*Contexts: **0209**, 0210*

Localised intrusion on the SW edge of ditch Group 5008, interpreted as animal or root disturbance.

**Group 5058: Animal or root disturbance (undated)**
*Contexts: **0221**, 0222*

Localised intrusion on the northern edge of ditch Group 5009, interpreted as animal or root disturbance.

**Group 5059: Pit and its fill (undated)**
*Contexts: **0280**, 0281*

0280 is a shallow, oval pit measuring 1.0m x 0.70m x 0.20m deep, with concave sides and an irregular base. Fill 0281 is mid brown/orange mottled clayey silty sand with occasional pebbles but no cultural material. The date and function of the pit are unknown.

**Group 5060: Quarry pit and its fills (undated)**
*Contexts: **0255, 0256**, 0257, 0313, 0314, 0315, 0316, 0317*

0255/0256 is a large, pear-shaped pit measuring 10.5 x 6.5 x 0.8m deep. The sides varying from shallow to moderately steep and break gradually into a slightly concave base. Its fills are similar deposits of homogeneous orangey brown or greyish brown sandy clay mottled with yellowish brown patches due to poor drainage. It is suggested that this feature became filled gradually due to the accumulation of wind-blown soils (see R McPhail report). No cultural material was recovered from the fills of the pit, which is assumed to have been for clay extraction.

**Group 5061: Quarry pit and its fills (Early Saxon?)**
*Contexts: **0044**, 0045, 0063, 0064*

0044 is a large, irregular pit measuring 15.8 x 11.6 x 1.6m deep with sides that are either shallow or steep and irregular. The base is slightly concave. The pit is dug through the natural glacial till and slightly into the underlying natural sand. Due to its size this is interpreted as a clay extraction pit.

Primary fill 0064 (which is up to 1m thick) is homogeneous, mid orangey brown silty sand with occasional pebbles and charcoal flecks or patches. It contains occasional LBA/EIA pottery and some struck flints. It is suggested that this deposit resulted from the accumulation of wind-blown soils (see R McPhail report).

Above this is a relatively thin deposit (up to 70mm) of mid greyish brown charcoal-rich silty clay (0063). It produced 16 sherds of Early Saxon pottery (representing at least four vessels), a single sherd of Roman pottery, 13 fragments of lava quern (probably from the same object), a fragment of a ring-shaped, Saxon ceramic loom weight, two, un-diagnostic fragments of iron-working slag, some struck flints, fire-cracked flint and fired clay. This is interpreted as a probable occupation deposit.

Upper fill 0045 is homogeneous, mid greyish brown silty clay with occasional pebbles and charcoal flecks. It produced a sherd of Roman pottery and two sherds of un-diagnostic prehistoric pottery, all of which are residual. The deposit is assumed to have accumulated gradually subsequent to the use of the pit in the Early Saxon period.

**Group 5062: Quarry pit and its fills (undated)**
*Contexts: **0249**, **0250**, 0251, 0303, 0304, 0305, 0306, 0307, 0308, 0309*

0249/0250 is a large, oval pit measuring 11.3m long x 6.0m wide x 2.1m deep, with very steep (but irregular) sides breaking gradually into a concave base. It contains a sequence of fills – the lower fills 0303-0307 are mostly greenish brown or brown clays (apparently derived from the natural till deposits) with some pockets of yellowish brown clayey sand. Upper fills 0308 and 0309 are deposits of yellowish brown clayey sand that are thought to reflect the local, naturally-occurring Brown Sands. The fills contain varying amounts of fragmented flint and pebbles and some contain charcoal flecks, but none produced any cultural material. A sherd of medieval pottery was recovered from the surface of this feature (0251).

The nature of the fills and the absence of cultural material suggest that this pit (which is assumed to have been for clay extraction) was backfilled rapidly.

**Group 5063: Quarry pit and its fills (undated)**
*Contexts: 0190, 0191, 0283, **0284***

0284 is a large cut of uncertain plan and extent, recorded mainly in section. It is at least 1.7m wide x 1.6m deep, with very steep (and heavily under-cut) sides and an irregular base. *As recorded*, it has an apparent intercutting relationship with pit 0170 (Group 5064) but the sequence of events is unknown – it is possible that they were part of the same feature.

The pit contains a horizontal sequence of three fills, these being variously coloured clays with chalk and flint fragments. Basal fill 0283 produced one small sherd of un-diagnostic prehistoric pottery but this is insufficient to date the feature.

The pit is dug into natural sands and is assumed to have been a quarry. The nature of the fills and the paucity of cultural material within them suggest that the pit was backfilled rapidly. It is apparently truncated by a much larger quarry pit 0194 (Group 5065).

**Group 5064: Quarry pit and its fills (undated)**
*Contexts: **0170**, 0286, 0310*

0170 is a large cut of uncertain plan and extent, recorded mainly in section. It is at least 1.5m wide x 0.9m deep, with very steep sides and a concave base. *As recorded*, it has an apparent intercutting relationship with pit 0170 (Group 5063) but the sequence of events is unknown – it is possible that they were part of the same feature.

The pit contains a sequence of two fills, both being mixed clayey deposits containing chalk and flint fragments but no cultural material.

The pit is dug into natural sands and is assumed to have been a quarry. The nature of the fills and the lack of cultural material within them suggest that the pit was backfilled rapidly. It is apparently truncated by a much larger quarry pit 0194 (Group 5065).

**Group 5065: Quarry pit and its fills (undated)**
*Contexts: **0104**, 0105, 0165, 0166, 0168, 0169, 0171, 0172, 0173, 0174, 0175, 0176, 0177, 0178, 0179, 0184, 0185, 0186, 0187, 0188, 0189, 0192, **0193**, **0194**, 0282, 0285, 0311, 0312*

0104/0193/0194 is a very large pit, or area of intercutting pits, measuring 23m x 15m x up to 1.9m deep. The edges (where seen) are generally steep and the base is extremely undulating.

The pit (pits?) contains a complicated sequence of dumped fills, mostly clayey with chalk and flint inclusions (similar to the natural glacial till) but including sandier deposits that are thought to have derived from the locally occurring Brown Sands (see R MaPhail report). The fills produced a negligible amount of cultural material – a single sherd of un-diagnostic prehistoric pottery came from 0174, and three sherds of medieval pottery were retrieved from the surface of the feature following topsoil stripping.

**Group 5066: Possible quarry it and its fill (undated)**
*Contexts: **0009**, 0010, **0261**, 0262*

0009/0261 is a sub-oval pit measuring 5.5 x 3.0 x 0.80m deep, with vertical sides and a flat base. Its fill 0010/0262 is highly compacted, mid orangey brown sandy clay with frequent charcoal flecks, a fragment of prehistoric pottery, a struck flint and three fragments of fire-cracked flint. The function of the pit is unknown and its date is uncertain due to the limited dating evidence. However, its similarity to nearby feature Group 5067 suggests that it is a quarry pit.

**Group 5067: Quarry pit and its fills (undated)**
*Contexts: **0011**, 0012, **0013**, 0014, **0258**, **0259**, 0260*

0258/0259 is a large, irregular cut with maximum dimensions of 15.5 x 8.5 x at least 1.5m deep with vertical sides and a flat base. It was identified originally as two separate features 0011 and 0013 in evaluation trench 2. Its fill is highly compacted, mid orangey brown sandy clay with frequent charcoal flecks but no cultural material. Note that the fill is identical to that of nearby pit 0009 (Group 5066). Given its size, it is interpreted as a quarry pit

**Group 5068: Ditch and its fill (PREH?)**
*Contexts: **0015**, 0016*

Ditch 0015 was identified in evaluation trench 3 but not seen subsequently during the open-area excavation. It is 0.40m wide x 0.12m deep, with moderately steep sides and a concave base. Its fill 0016 is mid brown silty sandy clay with very occasional charcoal flecks and small stones, and a single sherd of un-diagnostic prehistoric pottery.

**Group 5069: Pit and its fill (LBA/EIA)**
*Contexts: **0253**, 0254*

0253 is an elongated, oval pit measuring ???m long x 0.50m wide x 0.25m deep, with steep sides and a flat base. The pit does not seem to have been planned, but is located within grid square E9. Its fill is mid to dark brown sandy silt with moderate charcoal inclusions, two sherds of LBA/EIA pottery and some animal bone.

**Group 5070: Subsoil / former ploughsoil (post-medieval?)**
*Contexts: 0216*

A subsoil layer exists below the current topsoil but was generally not recorded archaeologically, being removed by machine as part of the topsoil. It is assumed to have extended site-wide and seems to have been approximately 0.30m thick. A localised deposit of mid brown silty soil with occasional charcoal flecks (0216) was noted in the vicinity of pits 0162 (Group 5033) and 0223 (Group 5037), but was not planned. This is assumed to have been a remnant of the subsoil / former ploughsoil.

**Group 5071: Colluvial? deposit (undated)**
*Contexts: 0085*

An extensive deposit in the SW corner of the site was interpreted during fieldwork as “hill wash”. It is described as homogenous silty clay fill with few stones, and (where recorded against the LOE) is about 0.85m thick, overlying natural till Group 5001.

**Group 5072: Current topsoil (modern)**
*Contexts: 0002*

The current topsoil is mid to dark brown clayey loam with occasional stones. It extends site-wide and is about 0.25m thick.