Westfield Primary School Replacement site Chalkstone Way, Haverhill

HVH 072

Archaeological Post-excavation Assessment & Updated Project Design

SCCAS Report No. 2011/084

Client: Suffolk County Council (Corporate Property)

Author: Kieron Heard
August 2012

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Report Date: August 2012

HER Information

Report Number:	**2011/084**
Site Name:	**Westfield Replacement**
Planning Application No:	**N/A**
Date of Fieldwork:	**15 June – 15 October 2010**
Grid Reference:	**TL 6801 4593**
Client/Funding Body:	**Suffolk County Council (Corporate Property)**
Client Reference:	**N/A**
Curatorial Officer:	**Jess Tipper**
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Oasis Reference:	**suffolkc1-124349**
Site Code:	**HVH 072**

Digital report submitted to Archaeological Data Service:
http://ads.ahds.ac.uk/catalogue/library/greylit

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Any opinions expressed in this report about the need for further archaeological work are those of the Field Projects Team alone. Ultimately the need for further work will be determined by the Local Planning Authority and its Archaeological Advisors when a planning application is registered. Suffolk County Council's archaeological contracting services cannot accept responsibility for inconvenience caused to the clients should the Planning Authority take a different view to that expressed in the report.

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Summary

This report presents the results of an archaeological evaluation and subsequent excavation on the Westfield Primary School Replacement site, Chalkstone Way, Haverhill. 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. In this instance it is recommended that following further analysis a full analytical report should be prepared. A summary of the results of further analysis should also be submitted for inclusion in a regional journal such as the Proceedings of the Suffolk Institute of Archaeology and History.

The Westfield Replacement site is located on a ridge of relatively high ground to the north of Haverhill town centre. The underlying geology is boulder clay and prior to the archaeological investigation the site was in agricultural use. Truncation by ploughing had removed any evidence that might have existed for former land surfaces.

A small amount of probable earlier Neolithic worked flint (4000–3000 BC) occurred residually in later deposits and suggests transitory use of the site at that time. A low level of activity took place also in the later Neolithic / earlier Bronze Age, represented by a large pit containing Beaker pottery (2600–1800 BC). Earlier Bronze Age pottery (2500–1600 BC) was found in part of a (probable) discontinuous, curvilinear ditch, and small amounts of pottery and worked flint of similar date occurred residually in later features.

Intensive occupation of the site began in the middle Iron Age (500–300 BC) and was represented by a (probable) roundhouse, two substantial ring-ditch features (one of which had a double ditch) that were possibly ritual/funerary monuments, a number of other ditches, some pits and post holes, all located on the higher ground in the central and northern parts of the site. Two un-urned cremation burials found close to the postulated roundhouse might have been part of an associated cemetery, if not belonging to an earlier period entirely. The middle Iron Age artefactual evidence includes significant amounts of pottery, found in association with worked flints, animal

bones, fired clay fragments, loomweights and a spindle whorl, all of which are indicative of domestic activity on the site.

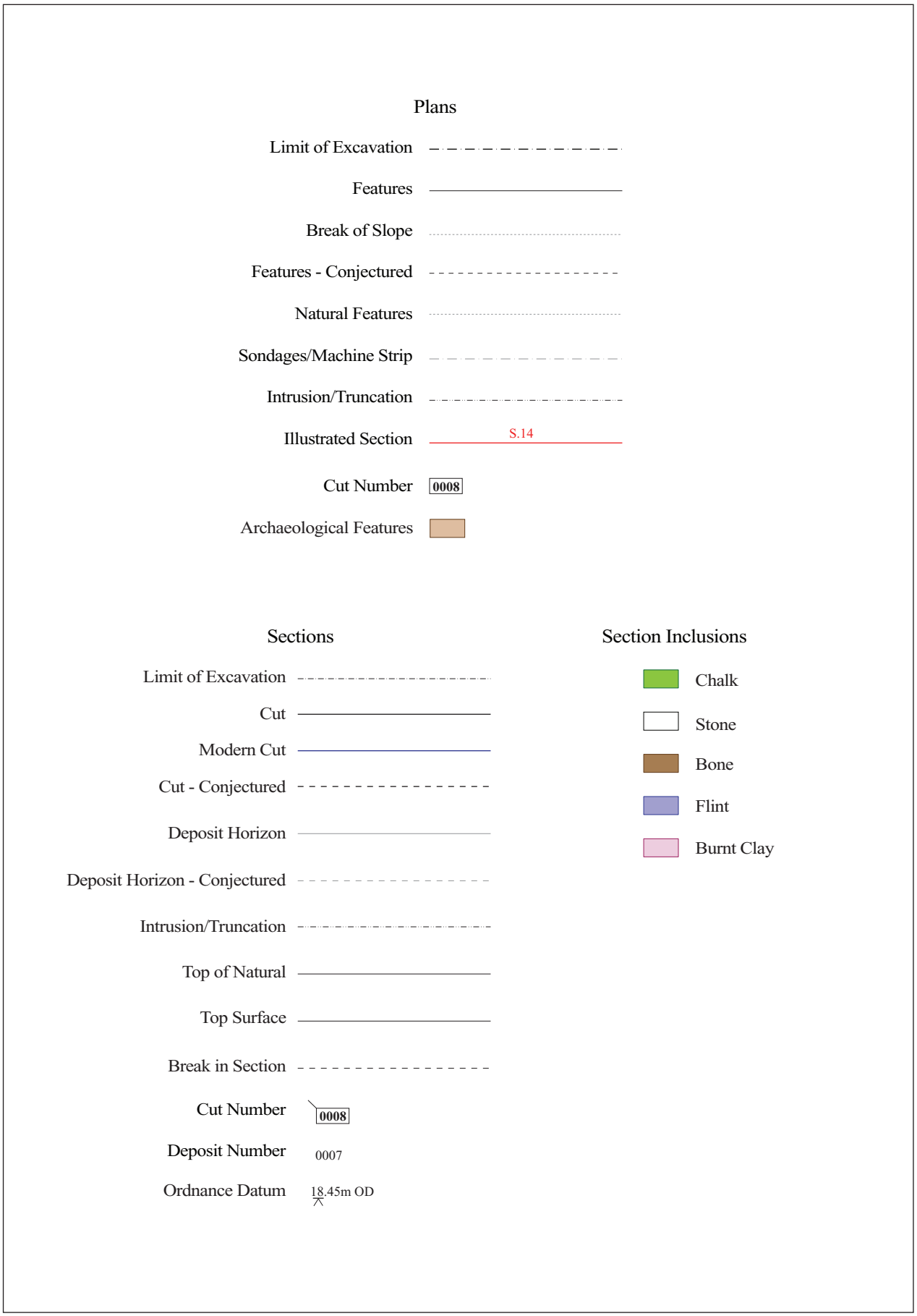
Subsequent phases of activity can be dated less precisely. For example, a linear boundary ditch, extending across much of the site, bisected the double-ring-ditch feature and obviously represented a significant change of land use. Unfortunately, only small amounts of non-diagnostic prehistoric pottery were recovered from the ditch and its date is uncertain.

The boundary ditch was cut by a large, irregular pit, up to 10m wide and 2.40m deep, which had a complicated history of infilling and re-excavation. The function of the pit is uncertain, although a reservoir seems the most likely interpretation. Pottery from all phases of infilling has been dated to the middle Iron Age but is likely to have been residual. Some of the pit fills were rich in charcoal and heated stones, on a scale that suggests some form of industrial process in the immediate vicinity.

Very few Roman and medieval artefacts were recovered, and these came mainly from the topsoil during field-walking. None of the excavated features can be assigned positively to those periods.

Post-medieval activity was represented mainly by field drainage/boundary ditches. One of these followed the ridge of higher ground that bisected the site, marking the boundary between the parishes of Haverhill and Little Wratting.

Drawing Conventions



1. Introduction

1.1 Site location

An evaluation by field-walking and trial-trenching and a subsequent open-area excavation took place on the Westfield Primary School Replacement site, to the northeast of Haverhill town centre (Fig. 1). The site was centred at Ordnance Survey National Grid Reference TL 6801 4593 and encompassed an area of approximately 33,500m^2. It was bounded by Chalkstone Way to the south, by farm land to the north and east and by Chalkstone Way sports field and the grounds of Samuel Ward Arts and Technical College to the west.

1.2 The scope of this report

This report was commissioned by Suffolk County Council (Corporate Property) and produced by the Suffolk County Council Archaeological Service (SCCAS), Field Team. It has been prepared in accordance with the relevant Brief and Specification (Tipper, 2010b) and Written Scheme of Investigation (Heard, 2011). The report is consistent with the principles of Management of Research Projects in the Historic Environment (MORPHE), notably Project Planning Note 3 Archaeological Excavations (English Heritage, 2008). The principal aims of the report 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
- Assess the significance of the data in relation to the Regional Research Framework (Glazebrook, 1997; Brown & Glazebrook, 2000) and in relation to the recently published Revised Framework (Medlycott & Brown, 2011)
- Make recommendations for further analysis (if appropriate) and dissemination 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 an archaeological condition relating to a planning application for the erection of a new school complex. Specifically, the Planning Authority was advised that any consent should be conditional upon an agreed programme of archaeological work taking place before development began, in accordance with Policy HE12.3 of PPS 5.

An evaluation by field-walking and trial-trenching took place on 20–21 January 2010 (field-walking) and 08 February – 08 March 2010 (trial-trenching), in accordance with a Brief and Specification issued by SCCAS, Conservation Team (Tipper, 2009) and a Written Scheme of Investigation produced by SCCAS, Field Team (Heard, 2010a). Thirty-seven trenches were excavated on the Westfield Replacement site and nine on the adjoining site of the Samuel Ward Extension. The results of the evaluation are described fully in SCCAS report 2010/049 (Heard, 2010b). In summary, the evaluation produced considerable evidence for prehistoric activity on the Westfield Replacement site, represented principally by two ditched enclosures, a linear ditch and several pits. The evidence was concentrated in the central and northern parts of the site; no archaeological remains were found on the Samuel Ward Extension site.

Due to the positive results of the evaluation a Brief and Specification for an excavation were issued by SCCAS, Conservation Team (Tipper, 2010; Appendix 1).

The excavation was carried out in two phases. The first phase, relating to topsoil stripping along the line of a proposed road and within an adjacent area intended for use as a car park, took place on 15–25 June 2010 and was carried out in accordance with a Written Scheme of Investigation produced by SCCAS, Field Team (Heard, 2010c).

The second phase, an open-area excavation, took place on 28 June – 15 October 2010 and was carried out broadly in accordance with a Written Scheme of Investigation (Heard, 2010d). It covered the area of archaeological potential that was considered to be most at risk from the proposed development of the site, as defined in an Archaeological Impact Assessment (Heard, 2010e). An area at the northern end of the proposed development that was intended for use as a playing field was excluded from

the excavation because generally no ground reduction was planned in that part of the site and there was no perceived threat to the archaeological resource. The only exception to this was a narrow trench extending northwards from the north-eastern corner of the main area of excavation (see Fig. 3) in an area where attenuation tanks where going to be installed.

The area of the road/car park strip and the open-area excavation overlapped partially resulting in a single area of excavation measuring 14,140m^2 (approximately 40% of the total area of the development) as shown on Figure 3.

Within this area topsoil was stripped using a 360° tracked mechanical excavator fitted with a 1.80m wide, toothless bucket. Exposed archaeological features and deposits were recorded using a unique sequence of context numbers in the range 0188–0821 (0001–0187 having been used during the evaluation). Linear features were sample-excavated and all other feature types were excavated fully. Most features were drawn in plan (at 1:20) and section (at scales of 1:10 or 1:20, as appropriate) on 290mm x 320mm sheets of gridded drawing film; a few post-medieval/modern features were planned using a GPS. Written records (context descriptions, etc) were made on *pro forma* context sheets.

A digital photographic record was made, consisting of high-resolution .jpg images; these included a number of wide angle and near vertical images taken using an elevated camera mounted on a 25m pole, and aerial photographs taken from a helicopter.

Selected deposits were sampled for environmental analysis.

The brief and specification for the excavation required a public outreach element to the project. Pupils from Westfield Primary School visited the site on 19 July 2010.

The primary (paper) archive for both phases of fieldwork is located currently at the SCCAS Ipswich office. The finds are stored at the SCCAS Bury St Edmunds office (box locations I/90/5, I/91/5 and I/95/3) and the environmental samples are at the SCCAS warehouse in Ipswich.

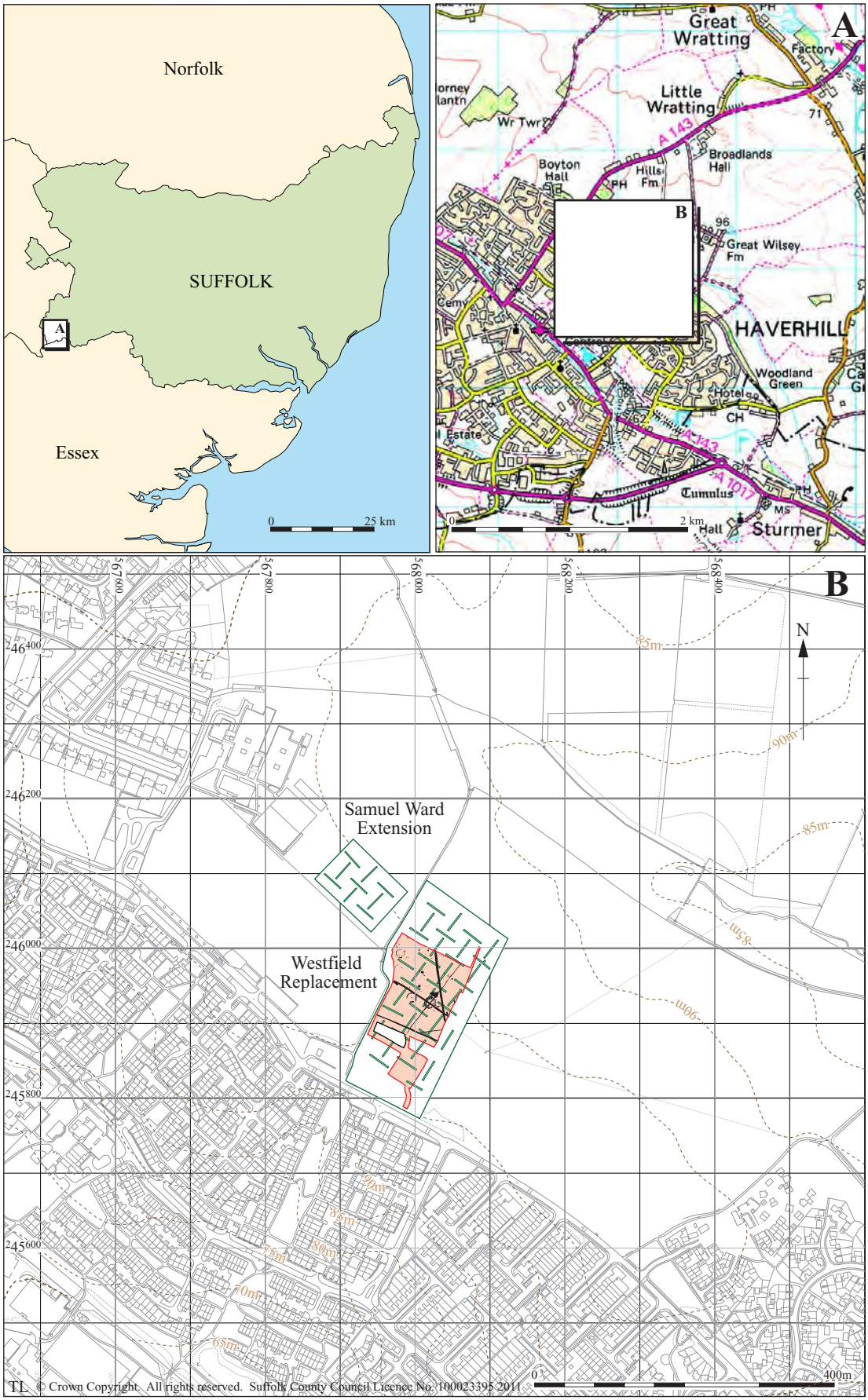


Figure 1. Site location, showing evaluation trenches (green) and excavation area (red)

2. Geological, topographic and archaeological background

2.1 Geology and topography

The published Quaternary geology in the area of the site is glacial till (British Geological Survey, East Anglia, Sheet 52N 00, Quaternary). Deep, clay soils of the Hanslope series overlie the till.

The site was located on an interfluvial ridge between two tributaries of the River Stour, which lies 2.7km to the east (Fig. 2). The ridge runs northwest–southeast and had a maximum height within the site of approximately 96.6m OD. From this high point the ground surface sloped down gradually to the northeast, to a minimum height of 93.84m OD, and to the southwest, to a minimum height of 93.84m OD.

The site was located in an area of Undulating Estate Farmlands, as defined in Suffolk County Council's *Suffolk Landscape Character Assessment* (www.suffolklandscape.org.uk). The key characteristics of this landscape type are:

- Undulating arable landscape
- Organic field pattern rationalised by estate ownership
- Oak, ash and field maple as hedgerow trees
- Complex arrangements of plantations, especially in the north
- Ancient woodlands
- Landscape parks and ornamental tree species
- Substantial open areas created for airfields and by post WWII agricultural improvement
- Dispersed settlement pattern of loosely clustered villages, hamlets and isolated farmsteads, especially in the north
- Settlements more clustered and less dispersed in the south
- Rich stock of medieval and Tudor timber-framed and brick buildings, and moated sites
- A landscape of well-wooded farmland, in many places often with a well kept appearance

2.2 Archaeology

Prior to the evaluation of February–March 2010 there had been no archaeological fieldwork on the site. However, it was known to be located in an area of archaeological importance, as defined in the County's Historic Environment Record, with four sites being recorded within a 500m radius (Fig. 2). An Iron Age coin hoard (HER number: HVH 001) was found by antiquarians approximately 240m west of the centre of the site, and two Roman coins (HVH 002) have been found approximately 380m southeast of the site. An archaeological evaluation in advance of a housing development 400m southeast of the site (HVH 059) revealed isolated pits of Bronze Age and earlier Iron Age date, and an earlier Iron Age ditch (Craven, 2008).

An archaeological evaluation on the Chalkstone Way sports field (HVH 068), immediately to the west of the Westfield Replacement site and south of the Samuel Ward Extension site, identified a small, truncated pit containing a few sherds of Bronze Age pottery and two undated ditches that were potentially of prehistoric date (Heard, 2010f).

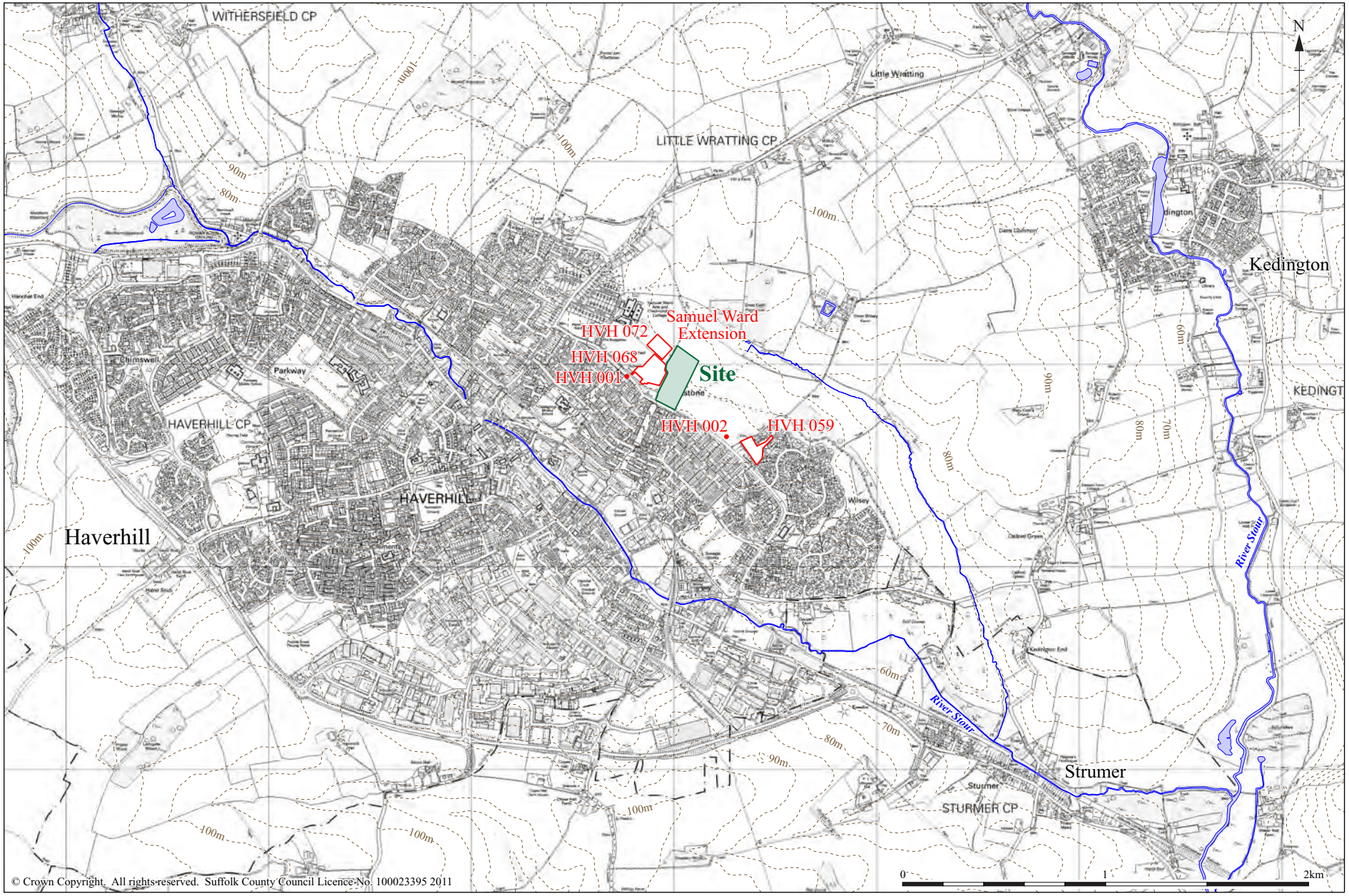


Figure 2. Location of the site (green) in relation to local topography (contours in brown) and relevent HER entries (red)

3. Original Research Aims

The Original Research Aims (academic objectives) for the excavation phase of the project were defined in the evaluation report (Heard 2010b, 68) as follows:

ORA 1: What are the extent, form, function and date of ditch G1003, identified in Trench 41?

ORA 2: Is there any evidence for contemporary activity in the vicinity of ditch G1003?

ORA 3: What are the extent, form, function and date of the postulated double-ditched enclosure G1013 / G1016, identified in Trench 49?

ORA 4: What is the evidence for activity inside enclosure G1013 / 1016?

ORA 5: Is there any further evidence for contemporary activity in the area outside of enclosure G1013 / 1016?

ORA 6: What are the extent, date and likely origin of soil horizon G1019 in Trench 49?

ORA 7: What are the extent, date and function of ditch G1002? Was it contemporary with the postulated ditched enclosure G1003 (to the east) and the double-ditched enclosure G1013 / G1016 (to the west)?

In addition the stated objective of the excavation, as defined in the Brief and Specification was ‘to provide a record of all archaeological deposits which would otherwise be damaged or removed by development, including services and landscaping permitted by the consent’ (Tipper 2010b; Appendix 1).

4. Site sequence: preliminary results of the fieldwork

4.1 Introduction

The following summary of the results of the fieldwork is based on a low level of interpretation of the site data. Some of the archaeological contexts have been assigned to provisional *groups* (numbered G1001, etc) based on their stratigraphic relationships and on the dating of pottery and other artefacts from selected features. It is likely that further analysis of the archive will allow considerable revision of the site sequence.

All excavated features (including those from the evaluation) are shown on Figure 3, with selected areas of excavation being shown in more detail on Figures 4–6.

4.2 Natural stratum

Glacial till (boulder clay) G1001 extended site wide. It was firm, light greyish brown clay/silt containing varying amounts of crushed chalk, angular and rounded flint nodules and some veins of sand. The glacial till was at a maximum height of approximately 96.5m OD in the western central part of the excavation, on the summit of the ridge that ran through the middle of the site. From this high point the surface of the natural stratum sloped down to the northeast and southwest. It was recorded at minimum heights of 93.58m OD in the northeast corner of the site and 93.22m OD in the southwest corner of the site.

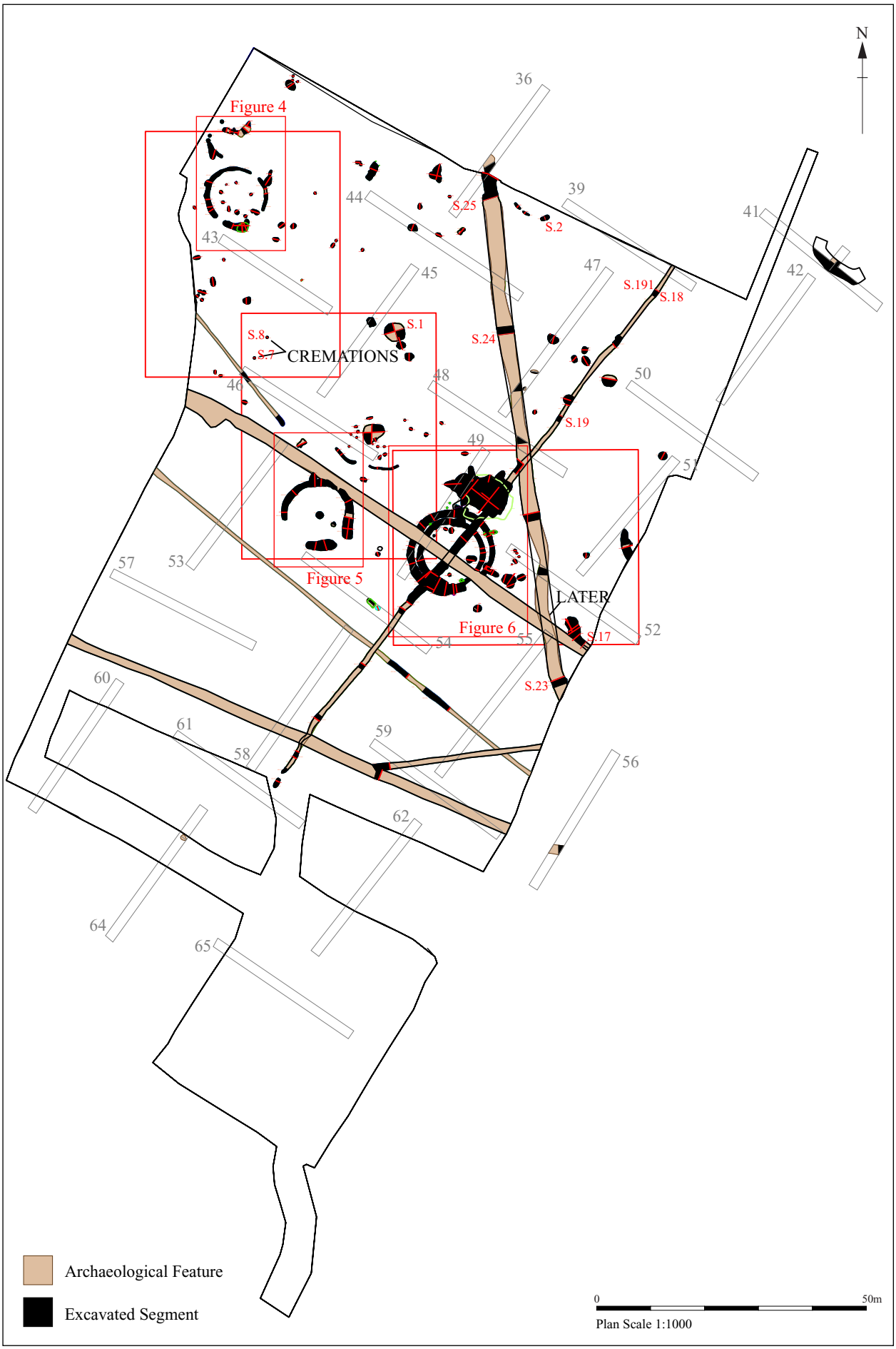


Figure 3. Excavation area with relevant evaluation trenches

4.3 Later Neolithic – earlier Bronze Age (2600–1600 BC)

A large, sub-circular pit G1030 (0663/0664), about 3.5m wide and 0.75m deep with a bowl-shaped profile (Section 1, Fig. 7; located on Fig. 3) produced forty small sherds of later Neolithic / earlier Bronze Age (Beaker period) pottery (2600–1800 BC), together with three fragments of middle Iron Age pottery and a small quantity of animal bone and charcoal. The Iron Age material was found in a part of the pit that was disturbed by a modern land drain and it is possible therefore that the later pottery was intrusive.

A smaller feature 0607 (Section 2, Fig. 7; located on Fig. 3) produced twenty-four small sherds of earlier Bronze Age pottery (2500–1600 BC). It might have been part of a discontinuous, curvilinear ditch or gully, in association with nearby linear features 0625 and 0682.

Five sherds of earlier Bronze Age pottery occurred residually in later features. Four were found in a post hole associated with possible Iron Age roundhouse G1024 and the fifth came from a probable gully associated with an Iron Age or later quarry/reservoir (G1035 etc).

4.4 Middle Iron Age (*c.* 500–350 BC)

Probable roundhouse G1021/G1024

A probable roundhouse was recorded in the northwest corner of the excavated area (Figs. 3 & 4; Pl. 1). It was represented by an oval alignment of nine post holes (G1024) surrounded by a penannular, causewayed ditch (G1021).

The post holes varied considerably in their forms and dimensions but were generally shallow due to modern truncation; it is possible that a further two post holes were destroyed by ploughing. The oval measured approximately 6.8m x 4.6m, with its long axis oriented northwest–southeast. The post hole centres were fairly evenly spaced at intervals of approximately 1.8m. One of the post holes (0336) produced four small sherds of earlier Bronze Age pottery and another (0305) produced seven sherds of abraded middle Iron Age pottery.

Two slightly larger pits (0238 and 0310 on Fig. 4) were located adjacent to the southeast end of the oval arrangement of post holes and these might also have been structural features, possibly holding posts for a projecting porch.

There was no evidence for activity within the building, although it is likely that this would have been removed by ploughing.

The surrounding ring ditch was penannular with an internal diameter of approximately 10m. It had two (or possibly three) causeways, the widest of which (at approximately 3.8m) was to the southeast and in line with the long axis of the oval alignment of post holes. An apparent break in the ditch to the northeast was possibly caused by modern truncation, since the surviving depth of the ditch to either side of the break was negligible.

Assuming that the break to the northeast was created by modern truncation, the ring ditch had two elements – a longer, horseshoe-shaped section and a shorter, almost linear section to the south. Generally the horseshoe-shaped part of the ditch was shallow (up to 0.36m deep but petering out to the north) with a U-shaped profile (Sections 3 & 4, Fig. 4). Its principal fill was stiff, mid brownish grey clayey silt containing chalk and flint fragments but little cultural material; a single, small fragment of middle Iron Age pottery was recovered. The shorter, linear section was considerably wider and deeper (up to 1.60m wide x 0.90m deep) and contained a complicated sequence of fills that might have indicated one or more re-cuts (Sections 5 & 6, Fig. 4). These fills were relatively rich in finds, producing at least sixty fragments of abraded middle Iron Age pottery.

Several pits were located close to the probable roundhouse, mainly to the south of the building. These were generally shallow (presumably highly truncated) and their functions are unknown. Few of them produced datable finds, but some contained moderate amounts of charcoal and fired clay.

Cremations G1046

Two un-urned cremations (0319 and 0321) were located approximately 20m south of the postulated roundhouse. They are undated at present (pending radiocarbon dating); they have been assigned to this period provisionally because they were found in an

area of Iron Age activity, although the presence on site of later Neolithic – earlier Bronze Age features raises the possibility that the cremations belonged to that earlier period.

The cremations were within two small pits 0320 and 0322, approximately 0.35m in diameter and with bowl-shaped profiles (Sections 7 & 8, Fig. 7; located as S.7 and S.8 on Fig. 3). Both deposits contained moderate amounts of cremated human bone representing at least one but presumably two individuals, both mature adults of unknown sex. The quantities of bone in these assemblages are thought to represent only a small proportion of the combusted weight of an average adult skeleton, and this is most likely due to modern truncation.

Small fragments of fired clay and heat-altered flint were present in both features, and the fill of pit 0320 contained thirteen tiny fragments of undiagnostic prehistoric pottery.

Single ring ditch G1022

A penannular, causewayed ring ditch was located near the centre of the excavated area (Figs. 3 & 5; Pl. 2). The ditch had two distinct elements – a long, horseshoe-shaped section open to the south and a shorter, linear section partially blocking the open end of the 'horseshoe', resulting in two causeways of uneven widths to the southwest and southeast. The internal diameter of the ring ditch was approximately 10.5m.

The longer section of ditch was up to 1.7m wide and was generally about 0.9m deep, although it became wider and shallower towards it southeast terminus. The ditch had steep sides and a narrow base, producing a V-shaped profile (Pl. 3). It was excavated in segments, all of which contained similar sequences of up to three fills: a primary fill of mottled light yellowish brown and mid grey silty clay derived from the weathering of the sides of the ditch, a middle fill of light brown silty clay and an upper fill of mid brown silty clay (Sections 9 & 10, Fig. 5). Small amounts of middle Iron Age pottery, charcoal, fired clay, worked flint and animal bone were recovered from these fills, although detailed analysis of the distribution of these finds has not been undertaken for this assessment.

The shorter, linear section of ditch was 5.5m long x up to 1.8m wide and 0.9m deep (Section 11, Fig. 5). It contained a sequence of three or four fills broadly similar to those in the horseshoe-shaped ditch but with significantly more inclusions of pottery, charcoal,

bone and fired clay. Again, no attempt has been made at this stage to analyse the distribution of finds within the ditch. The pottery was exclusively of middle Iron Age date.

Only two features were identified within the circular area defined by the ring ditch and one of these (0821) was of post-medieval date. The other, pit 0566, was at the approximate centre of the enclosed area. It was sub-circular with a diameter of 1.2m and depth of about 0.30m deep, with a bowl-shaped profile. Its fill was light yellowish brown clay/silt with frequent small fragments of chalk, moderate small to medium fragments of flint and rare small fragments of charcoal, but no cultural material.

A shallow pit G1032 (0394) that truncated the backfilled ring ditch produced a moderate amount of middle Iron Age pottery and some worked flint (Section 10, Fig. 5).

Double ring ditch G1013/G1016

A double ring ditch was located about 11m east of the single ring ditch G1022 (Figs. 3 & 6; Pl. 4). The double ditches were not quite concentric – they were abutting (intercutting?) to the south and had a maximum separation of 1.2m to the north. Unfortunately a substantial ditch of relatively recent date (G1017) was dug through the middle of the feature, destroyed much of the evidence for its original form.

Inner ditch G1016 varied in width between 0.60m and 1.20m and was up to about 0.9m deep with a steep, V-shaped profile (Sections 12 & 13, Fig. 6). In its original form the ditch was penannular, with an opening of at least 2.5m wide to the southeast. Ultimately this entrance was closed off by another short stretch of ditch. The inner ring ditch enclosed a circular area of approximately 10.5m in diameter.

Outer ditch G1013 varied in width from 0.70m to 1.40m and was up to 0.90m deep (Sections 14 & 15, Fig. 6). Its profile varied from almost V-shaped to U-shaped with a broad base and it appeared to have been segmented originally, as shown by a number of low ridges in its base. The outer ditch was penannular also, with a causeway of at least 1.7m to the southeast. Unlike the causeway for the inner ditch, the break in the outer ditch was not blocked by a later ditch.

The inner and outer ditches both contained sequences of fills suggesting gradual infilling. On the south side of the monument, where the ditches were contiguous, they

appeared to share a common upper fill; this suggests that they were open at the same time (Section 16, Fig. 6; Pl. 5). Both ditches produced moderate amounts of middle Iron Age pottery and lesser quantities of fired clay and other cultural material, notably one complete loomweight and a fragment of another in the outer ditch and a second loomweight fragment in the inner ditch. Moderate amounts of animal bone, some displaying butchery marks, were recovered also. Although the distribution of finds has not been analysed in detail it is clear that the inner and outer ditches contained roughly the same quantities of pottery sherds but that the combined weight of pottery from the inner ditch was 50% greater than that from the outer ditch. The significance of this will need to be addressed by further analysis.

Evidence for activity within the enclosed area was inconclusive. No structural remains were identified (other that one probable post hole), and although a few pits were found most of them could not be dated. The exception was pit G1039 (0678) which, although shallow, produced a moderate quantity of middle Iron Age pottery and much charcoal and fired clay.

Significant amounts of middle Iron Age pottery were recovered also from a group of intercutting pits (G1033; 0262, 0264 & 0266) located just to the east of double ring ditch G1013/G1016, and from scattered pits located mainly to the east and south of that feature, notably G1009, G1037 and G1041. Another pit G1040 located just to the west of the double ring ditch was filled principally with heat-altered stones and is interpreted as a probable cooking pit or hearth; this contained two sherds of middle Iron Age pottery and a fragment of loomweight (Pl. 6).

Other possible ring ditches

Two curving ditches (G1023 & G1026) on the eastern edge of the site (extending beyond the limit of excavation) might also have been parts of ring ditch features. G1023 was a substantial ditch (Section 17, Fig. 7; located on Fig. 3) containing a significant amount of middle Iron Age pottery, while G1026 (just to the north of G1023) was smaller and produced fewer finds.

Part of another possible ring ditch (G1003) was identified in evaluation Trench 41 (Heard 2010b, 15). This substantial ditch measured 2.6m wide by 0.82m deep and

contained small amounts of middle Iron Age pottery, animal bone and heat-altered flint (Fig. 3).

Two curvilinear ditches/gullies (G1045; see 0471 on Fig. 5), shallow and presumably highly truncated, might have been part of a single ring ditch enclosing an area containing several post holes and a large pit G1029. One of the gullies produced two sherds of middle Iron Age pottery. Pit G1029 contained moderate amounts of pottery of the same date, together with animal bone, fired clay, worked flint and heat-altered flint.

4.5 Roman (AD 43–410)

No deposits or features of Roman date were identified. The field-walking produced only ten sherds of Roman pottery and these were distributed fairly evenly across the site. Another Roman sherd came from an upper fill of linear ditch G1002, but is considered insufficient to provide a firm date for a feature that otherwise produced only prehistoric material. Three more sherds of Roman pottery were found in the fills of prehistoric features and were clearly intrusive.

A small quantity of Roman ceramic building material (CBM) was recovered also, during field-walking and from excavated contexts. Generally the fragments are small and abraded and in all cases they are thought to have been either intrusive in prehistoric features or residual in post-medieval features.

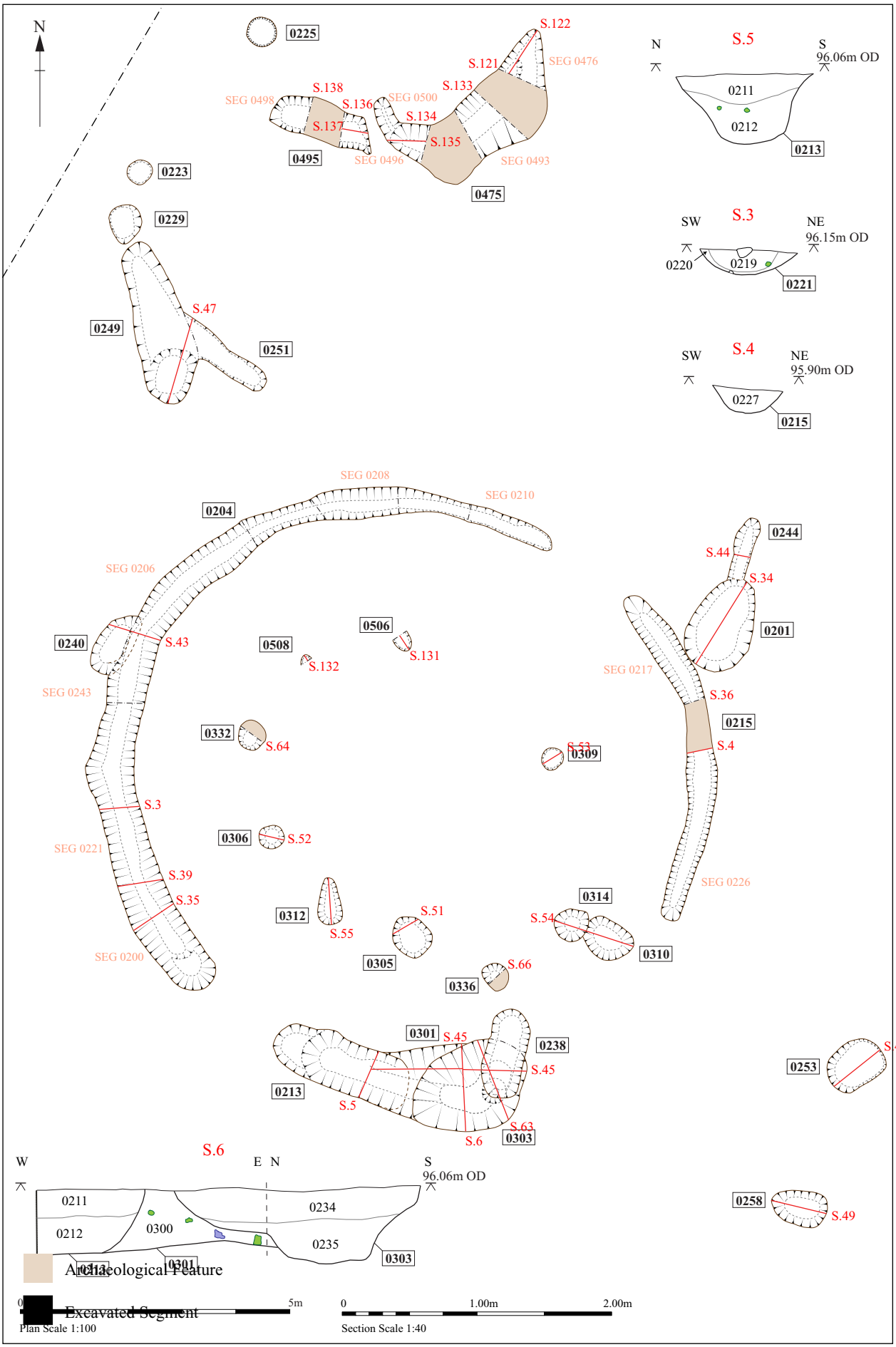


Figure 4. Probable roundhouse G1021/G1024 - detailed plan and selected sections

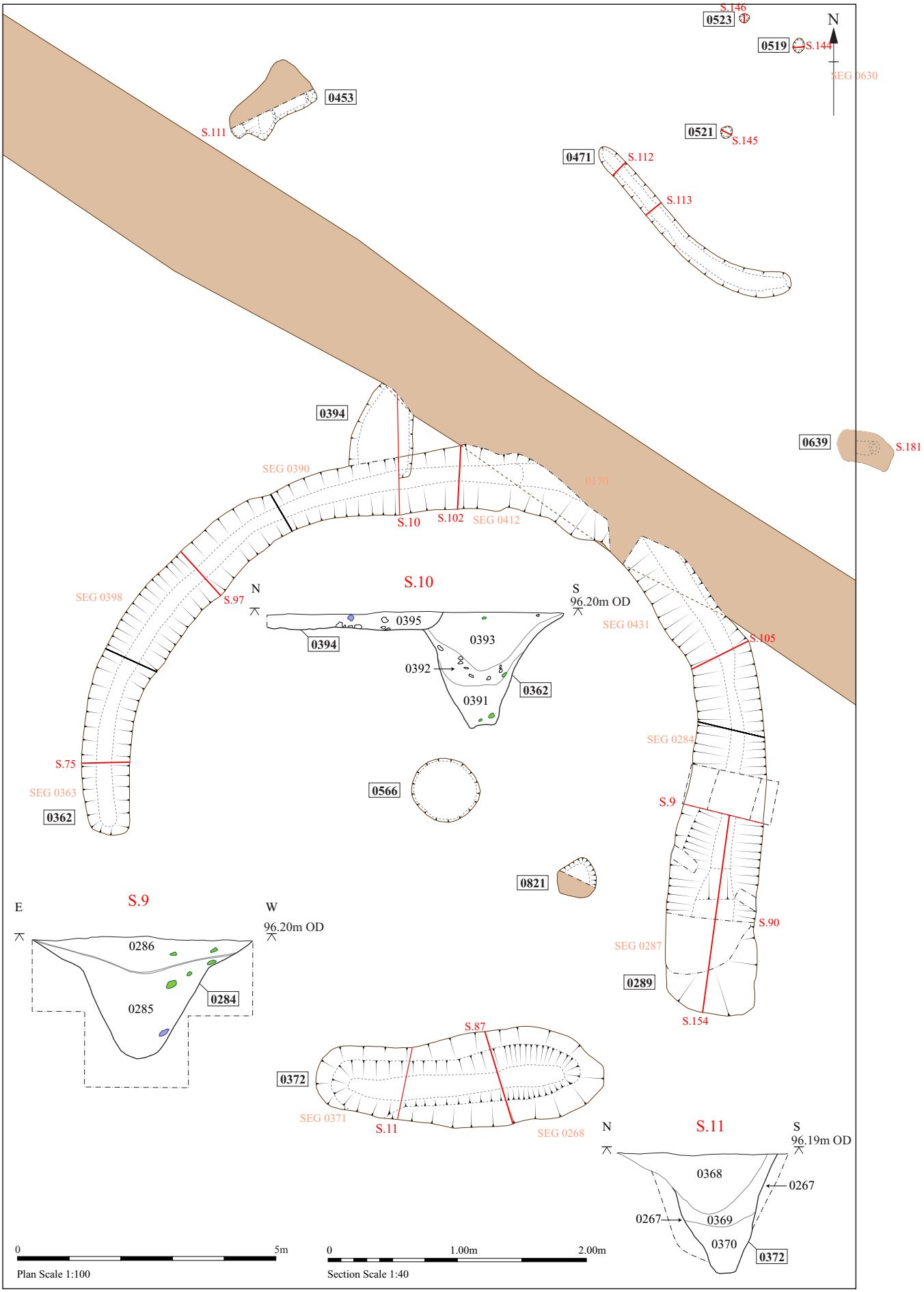


Figure 5. Ring ditch G1022 detailed plan and selected sections

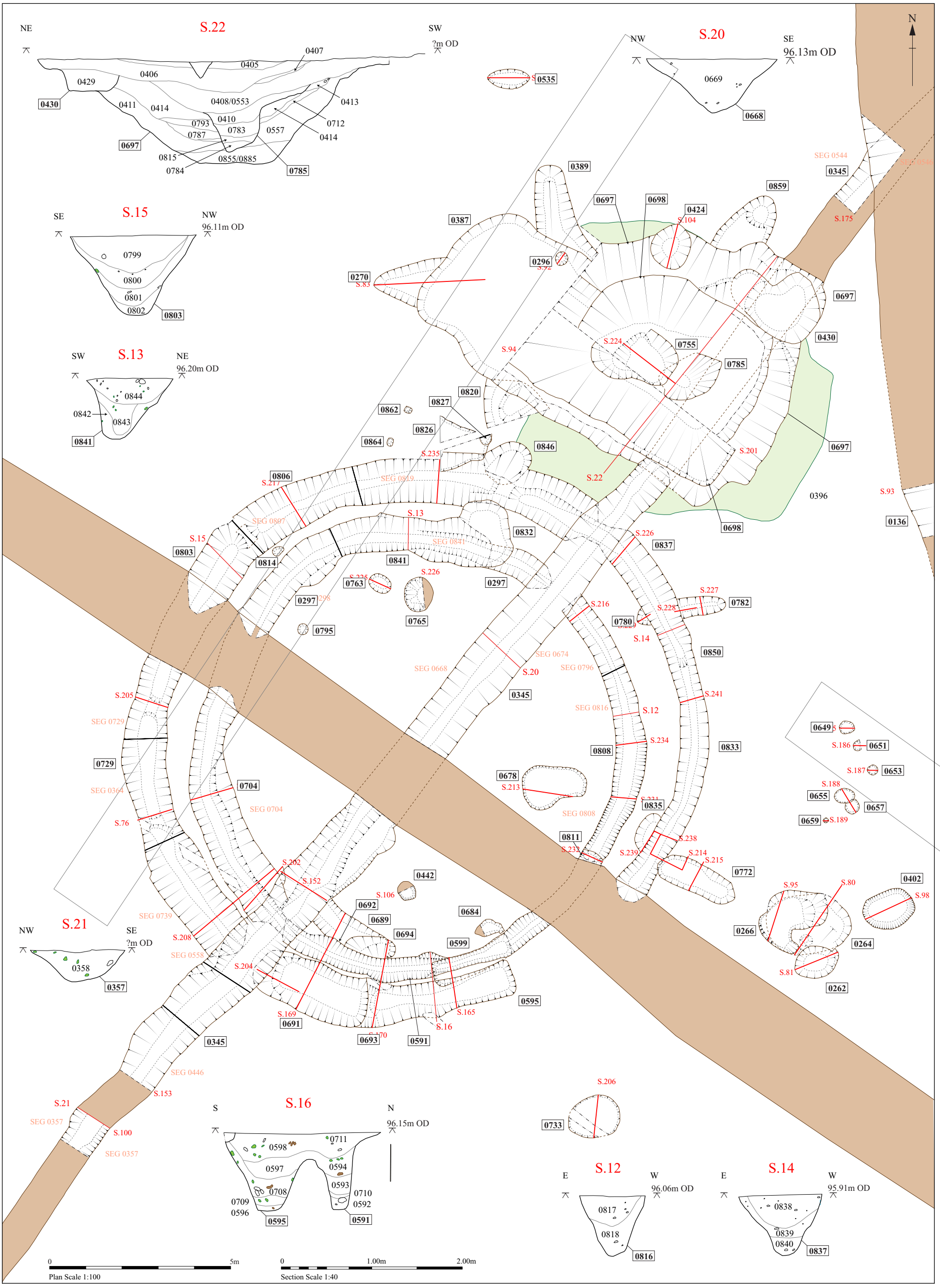


Figure 6. Double ring ditch G1013/G1016 and quarry/reservoir G1035 – detailed plan and selected sections

4.6 Medieval (1066–1500)

No medieval deposits or features were identified. Seven fragments of medieval pottery and a lead seal were found during the field-walking and a further three sherds of intrusive medieval pottery were found in features that can be dated firmly to the prehistoric period.

4.7 Post-medieval (1500–1900)

Boundary ditch G1017

A substantial ditch G1017 crossed the excavated area on a northwest–southeast orientation, following the crest of the ridge that bisected the site (Figs. 3, 5 & 6). The ditch was up to 2.60m wide and was generally about 1.0m deep with steep sides and a broad, uneven base. Its fills included 19th- and 20th-century material.

The ditch marked the boundary between the parishes of Haverhill (to the south) and Little Wratting (to the north), and is shown on early Ordnance Survey maps of the late 19th century. This boundary exists still and is shown on modern maps but is no longer marked on the ground. There was insufficient evidence to date the original excavation of the ditch although it is assumed to have been medieval or later. It is understood that the ditch was not backfilled until after the Second World War (former landowner, *pers comm*).

Drainage ditch G1012

Ditch G1012 was also located to the south of parish boundary ditch G1017. It extended across the excavated area, on a west-northwest–east-northeast orientation. The ditch was up to 1.50m wide and 0.65m deep, with steep sides and a narrow, rounded base, and its fills produced small amounts of post-medieval material.

This ditch was possibly associated with a footpath shown on the same orientation on the First Edition Ordnance Survey map of *c*. 1880, although it should be noted that the footpath appears to have been about 20m south of ditch G1012. The footpath is not shown on the Second Edition Ordnance Survey map of *c.* 1890.

Drainage ditch G1011

Ditch G1011 was oriented west-southwest–east-southeast and drained into ditch G1012. It was 1.50m wide and up to 0.55m deep, with steep sides and a broad, flat base. Its fills contained small amounts of post-medieval material. This ditch truncated earlier ditch G1043.

4.8 Modern (1900–present)

Agricultural ditch G1043

A relatively insubstantial ditch G1043 was located approximately 18m south of the parish boundary ditch, on a similar orientation. The ditch was up to 1.0m wide and 0.40m deep, with moderately steep sides and a rounded base. It was excavated at three locations but produced only a single fragment of post-medieval brick. It is assumed to have had an agricultural function, as a field boundary or a drainage feature.

Agricultural feature G1044

This linear feature was located to the north of parish boundary G1017 and was oriented northwest–southeast. It was approximately 0.65m wide and 0.40m deep, with steep to vertical sides and a flat base; it had a rounded terminus at its southeast end. Its fill produced three fragments of post-medieval or modern brick. The function of this feature is uncertain; it did not have a typical ditch profile and might therefore have been dug originally to hold a land drain, although no evidence for this was found.

Land drains and topsoil

There were numerous cylindrical, ceramic land drains running across the site, most of which were laid after the Second World War. The insertion of the land drains probably accounts for most of the intrusive material (of Roman, medieval and post-medieval date) recovered from prehistoric features.

Heavy clay topsoil G1020 extended site-wide and was up to 0.30m thick. Plough marks in the underlying natural stratum indicated clearly that modern ploughing had been deep enough to truncate all archaeological features and remove any evidence that might have existed for former land surfaces.

4.9 Unknown date

Linear ditch G1025

Following the disuse and infilling of the double ring ditch feature G1013/G1016 it was bisected by an extensive linear ditch G1025 (0345; Figs. 3 & 6; Pl. 7). The ditch was oriented south-southwest–north-northeast and extended the length of the excavated area. It was >116m long x up to 1.35m wide x up to about 0.60m deep, with moderately steep sides and a concave base (Sections 18 & 19, Fig. 7; Sections 20 & 21, Fig. 6). Several 'segments' were excavated, each revealing a single fill of (generally) mid greyish brown silty clay containing occasional to moderate fragments of middle Iron Age pottery. Although the distribution of pottery within the ditch has not been analysed in detail it is believed that most of it came from areas where ditch G1025 truncated the earlier double ring ditch. This raises the possibility that at least some of the pottery from ditch G1025 might have been residual, and also that the ditch was of later (maybe even post-prehistoric) date.

Quarry/reservoir G1035 and associated activity

A sequence of intercutting pits was dug immediately to the north of the double ring ditch feature G1013/G1016, and the earliest (and largest) of these pits truncated linear ditch G1025; this provided clear stratigraphic evidence that the pits were not contemporary with the double ring ditch, and suggests that they might have been considerably later in date. The following is a highly simplified and provisional account of the pit sequence; considerably more work would be required in order to understand the sequence fully.

Initially a large, irregular pit G1035 was dug (Fig. 6; Pl. 8), possibly for the extraction of clay although it might also have been intended as a reservoir (0697 on Section 22, Fig. 6). It measured at least 10.3m northwest–southeast by 7.0m southwest–northeast and was at least 2.2m deep with moderately steep or stepped sides and a flat base. Several shallow and sloping 'lobes' around the periphery of the pit (see Fig. 6) might have been dug deliberately to facilitate access to the pit or were eroded by surface water draining into the pit.

The pit contained a basal fill (0855) of probably water-laid silt (devoid of finds) that was sealed by a thick deposit of slumped boulder clay (0411) representing the weathering

and collapse of the sides of the pit; the latter fill produced a few sherds of middle Iron Age pottery.

Following the partial infilling of pit G1035 a smaller, oval pit G1042 (0755) was dug within it. This measured approximately 2.2m x 1.7m and was at least 0.70m deep, with under-cut sides. It contained a sequence of distinct fills, the lowest of which produced a large quantity of pottery fragments of possible middle Iron Age date – the uncertainty is due to the fact that most of the fragments were retrieved from soil samples and are therefore small and abraded.

Once pit G1042 had been filled completely further infilling of larger pit G1035 occurred. This phase of activity was represented by a vertical sequence of deposits derived from both natural accumulation and deliberate dumping – the latter demonstrated by the presence of large amounts of heat-altered flint and charcoal. Small amounts of middle Iron Age pottery were present also.

Another relatively small oval pit G1034 (0785) was dug through these infill deposits. It measured approximately 1.8m x 1.1m and was at least 1.0m deep with steep sides and an irregular base. It contained a sequence of fills that contained small amounts of middle Iron Age and undiagnostic prehistoric pottery as well as animal bone, worked flint and heat-altered flint.

Following the infilling of pit G1034 further deposition occurred until the original quarry/reservoir G1035 was filled completely. Small amounts of middle Iron Age pottery were recovered from this later sequence of fills. At least one of these upper fills extended beyond the apparent limits of pit G1035 and overlaid the outer ditch G1013 of the double ring ditch feature.

Linear ditch G1002

Linear ditch G1002 (0136; Figs. 3 & 6) was oriented approximately north–south. It was at least 100m long x up to 2.60m wide x 0.36m deep, with (generally) gently sloping sides breaking imperceptibly into a flat or slightly concave base. This wide, shallow profile made G1002 unlike any of the other ditches on the site; it is unlikely to have been an efficient drainage feature, and is interpreted therefore as a possible boundary marker (Sections 23–25, Fig. 7).

Generally the ditch contained a single fill of firm, mid brownish grey clayey silt containing fragments of chalk and flint but little cultural material; a few sherds of highly abraded middle Iron Age pottery, a Roman sherd and some heat-altered flint were the only finds.

Given the paucity of finds and the possibility of their being either residual or intrusive it is difficult to assign a date to ditch G1002. Stratigraphically it was later than linear ditch G1025 (and by implication later than the middle Iron Age double ring ditch G1013/G1016). However, at the northern edge of the open-area excavation there was a suggestion that the ditch was sealed by a layer of subsoil (below topsoil G1020), implying that it must have been of some antiquity.

Other features

A number of features are undated, because they produced either no finds or no datable material. Some of them are likely to have been of geological origin or produced by animals, while others (by virtue of their proximity to dated features) were probably of middle Iron Age or earlier date.

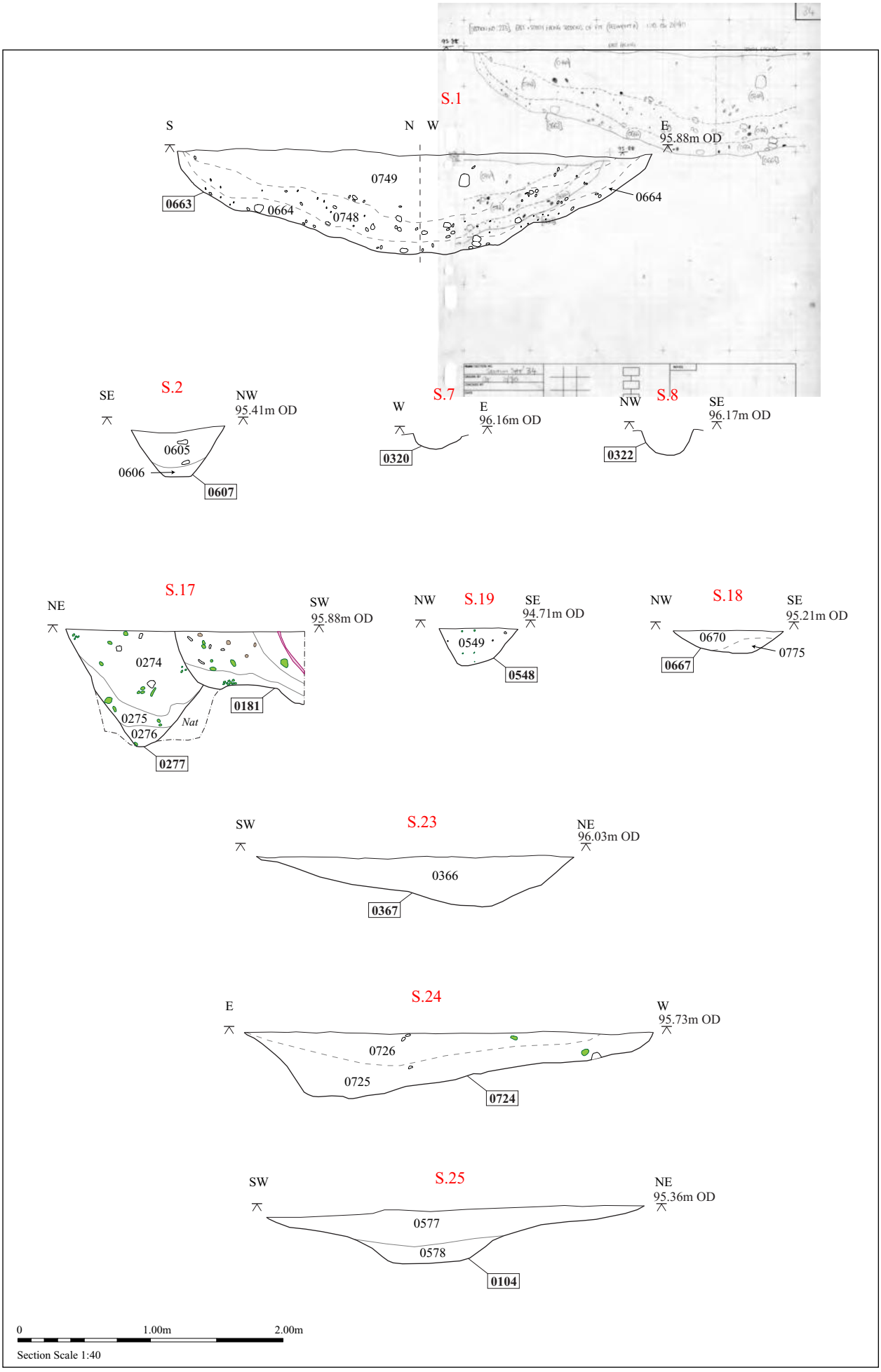


Figure 7. Selected sections

Plate 1. Elevated view of probable round house G1021/G1024, looking north (2m scale)

Plate 2. Elevated view of ring ditch G1022, looking north (2m scale)

Plate 3. Typical section through ring ditch G1022, looking east (1m scale)

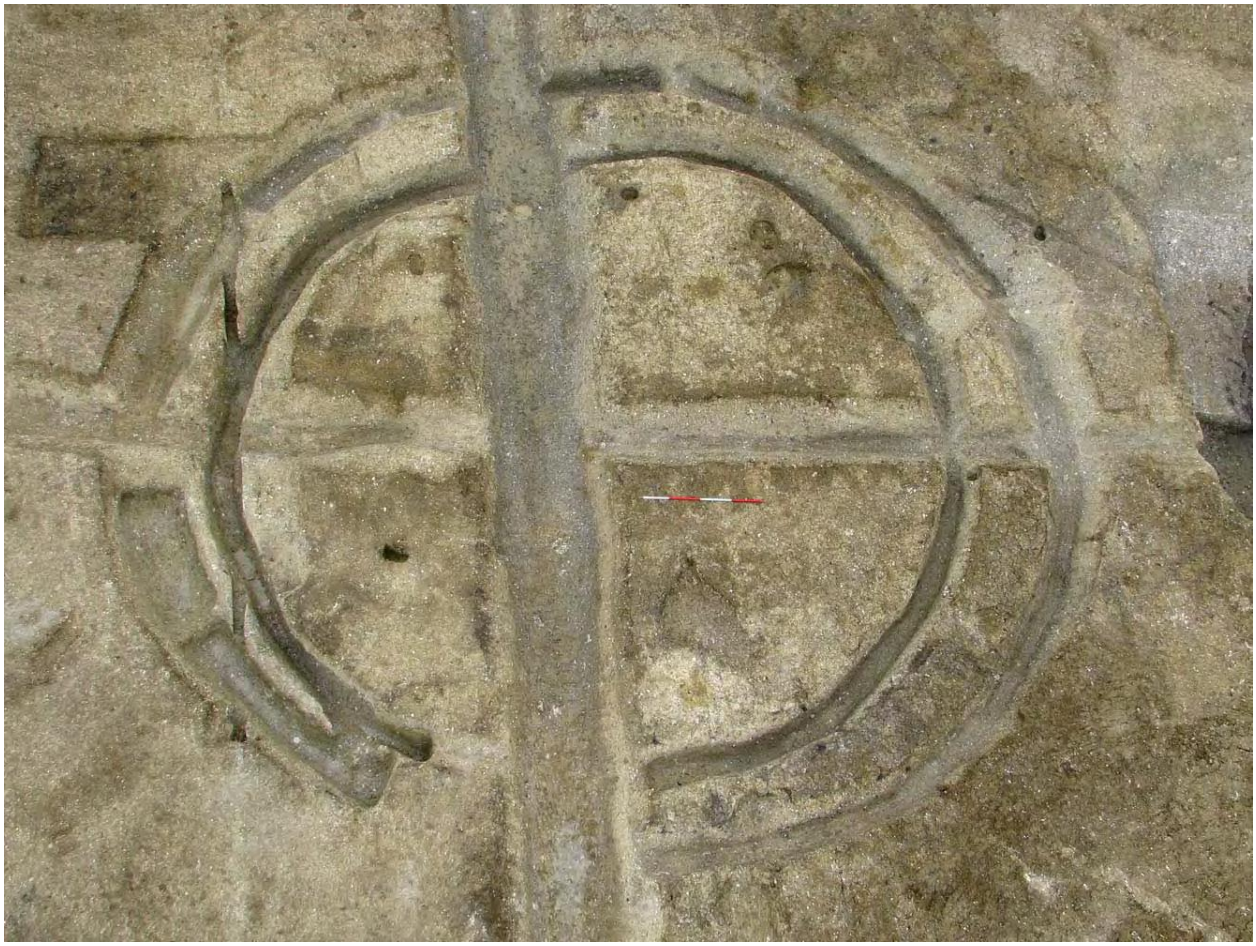


Plate 4. Elevated view of double ring ditch G1013/G1016, looking northwest (2m scale)

Plate 5. Section through double ring ditches G1013/G1016, looking west (1m scale)

Plate 6. Cooking pit G1040, looking north (0.4m scale)

Plate 7. Typical section through ditch G1025, looking north (0.5m scale)

Plate 8. General view of quarry/reservoir G1035, looking east (2m scale)

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 images
Task 06: Selected contexts allocated to provisional groups
Task 07: Provisional group description/discussion text
Task 08: Selection of samples for assessment
Task 09: GPS survey data converted to MapInfo tables
Task 10: Scanning (security copy) of plans and sections
Task 11: Plans digitised and integrated with GPS survey data
Task 12: Processing, dating and assessment of finds
Task 13: Assessment of environmental samples

5.2 Quantification of the stratigraphic archive

The stratigraphic archive for both phases of fieldwork (evaluation and excavation) is quantified in Table 1.

Type	Quantity	Format
Evaluation		
Context register sheets	2	A4 paper
Context sheets (numbered 0101–0187 (exc. 0152–0155)	83	A4 paper
Trench recording sheets	46	A4 paper
Small finds register	1	A4 paper
Digital image register	4	A4 paper
Environmental sample sheets	2	A4 paper
Plan/section drawing sheets	19	290 x 320mm drawing film
Plan/section drawing sheets	1	420 x 300mm drawing film
Digital images (HAB 001–064)	64	3008 x 2000 pixel JPGs
Evaluation report (SCCAS report no. 2010/049)	1	A4 wire-bound
Excavation		
Context register sheets	25	A4 paper
Context sheets (numbered 0188–0864	677	A4 paper
Small finds register	1	A4 paper
Section register sheets	7	A4 paper
Digital image register	25	A4 paper
Environmental sample sheets	11	A4 paper
Plan drawing sheets	265	290 x 320mm drawing film
Section drawing sheets	1	420 x 300mm drawing film
Section drawing sheets	45	290 x 320mm drawing film
Timber drawing sheets	5	420 x 300mm drawing film
Timber drawing sheets	1	290 x 320mm drawing film
Stratigraphic matrix	2	290 x 320mm drawing film
Digital images (HEA 001–100; HEB 001–100; HEC 001–100; HED 001–100; HEE 001–100; HEF 001–100; HEG 001–022	622	3008 x 2000 pixel JPGs
Elevated camera images (raw and processed, on three CDs)	431	3264 x 2448 pixel JPGs
Aerial photographs (raw images, on one CD, three copies)	22	6048 x 4032 pixel JPGs
Assessment report (SCCAS report no. 2011/084)	1	A4 wire-bound

Table 1. Quantification of the stratigraphic archive

5.3 Quantification of the finds and environmental archives

Andy Fawcett (with contributions by Sue Anderson, Sarah Bates, Andrew Brown, Julie Curl, Lisa Gray & Sarah Percival)

Introduction

Finds were recovered from three stages of archaeological investigation (field-walking, trial trenching and open-area excavation). The quantities and range of finds from each of these are summarised in Table 2 and a full breakdown by context can be found in the site archive. Additional tables can be found in the specialist reports in the site archive.

As Table 2 shows, most of the finds were recovered during the excavation. It should be noted that some of the totals for material from the excavation do not match those shown in certain specialist reports. This is because some finds recovered from environmental samples were quantified after the specialist reports were written. Any further work required on this additional material will be noted in the relevant section.

Finds type	Field walking		Evaluation		Excavation		Totals	
	Number	Weight g	Number	Weight g	Number	Weight g	Number	Weight g
Pottery	110	1019	126	616	2556	13606	2792	15241
CBM	545	7327	25	985	63	707	633	9019
Fired clay	17	159	5	25	989	7029	1011	7213
Worked flint	22	605	1	2	105	1922	128	2529
Heat-altered flint	224	5810	40	703	937	22177	1201	28690
Heat-altered stone	9	199	407	6823	487	11031	903	18053
Clay tobacco pipe	4	16	1	1	1	5	6	22
Post-med glass	3	20	2	230	1	1	6	251
Slag	9	312	-	-	-	-	9	312
Iron objects	4	29	4	38	3	11	11	78
Animal bone	2	4	71	205	3596	18595	3669	18804
Cremated bone	-	-	-	-	200	87	200	87
Shell	3	13	2	34	12	23	17	70
Charcoal	-	-	-	-	244	87	244	87
Other	2	31	-	-	-	-	2	31

Table 2. Finds quantities

Pottery

Prehistoric pottery

Sarah Percival

Introduction

A total of 2,376 sherds weighing 14,349g was collected from 146 excavated contexts and as surface finds. Unstratified pottery represents approximately 5% of the assemblage; the remainder was collected principally from ring ditches, pits and linear ditches. The assemblage contains small quantities of later Neolithic / earlier Bronze Age (Beaker period) pottery (2600–1800 BC) and earlier Bronze Age pottery (2500–1600 BC) but is predominantly of middle Iron Age date (*c.* 350–100 BC). It should be noted that the term 'middle Iron Age' is used here to define an assemblage that is chronologically later Iron Age but that lacks both the 'Romanising' characteristics of later Iron Age pottery and the formal traits of earlier Iron Age pottery. Approximately 1% of the sherds could be given only a broad prehistoric date. The prehistoric pottery is quantified by period in Table 3.

The pottery was moderately to poorly preserved; some sherds showed signs of considerable post-depositional attrition.

Spot date	Quantity	% quantity	Weight/g	% weight/g	Average sherd wt/g
Later Neolithic / earlier Bronze Age	40	2	129	1	3
Earlier Bronze Age	29	1	97	1	3
Middle Iron Age	291	96	14315	98	6
Not closely datable	16	1	34	0	2
Total	**2376**	**100**	**14349**	**100**	**6**

Table 3. Quantity and weight of prehistoric pottery by period

Methodology

The assemblage was analysed in accordance with the guidelines for analysis and publication laid down by the Prehistoric Ceramic Research Group (PCRG 1992; 1997). The total assemblage was studied and a full catalogue was prepared. The sherds were examined using a binocular microscope (10x magnification) and were divided into fabric groups defined on the basis of inclusion types. Fabric codes were prefixed by a letter code representing the main inclusion present (F = flint, G = grog and Q = quartz). Vessel form was recorded; R representing rim sherds, B base sherds, D decorated sherds and U undecorated body sherds. The sherds were counted and weighed to the nearest whole gram. Decoration and abrasion were noted also. A summary table is included in the site archive.

Later Neolithic / earlier Bronze Age (Beaker)

A total of forty sherds of later Neolithic / earlier Bronze Age pottery weighing 129g was collected from two fills (0748 and 0749) of pit 0663 (G1030). The sherds were found in two fabrics, one with moderate grog inclusions and the other flint-tempered. Fingertip impressed decoration on some of the sherds suggests that they were from rusticated domestic Beaker, dating to 2600 – 1800BC (Kinnes *et al*., 1991). The sherds were in poor condition with an average sherd weight of 3g.

Earlier Bronze Age

A small assemblage of twenty-nine sherds of earlier Bronze Age grog-tempered pottery weighing 97g was collected from three features. A total of twenty-four sherds weighing 79g were found in the fills of pit 0607. Included within the assemblage from pit 0607 were a number of sherds with possible fingertip impressed decoration. The remaining five sherds (18g) were found in gully 0270 and post hole 0336 (part of possible

roundhouse G1024). The sherds were all small and abraded with an average weight of 3g. It is possible that the sherds were domestic Beaker; however the poor condition of the sherds prohibits exact identification.

Middle Iron Age

A large assemblage of middle Iron Age pottery dating to around 350–100 BC was collected from a range of features, principally ring ditches, pits and post holes as well as later ditches and other features. A total of 2,291 sherds weighing 14,315g was recovered. The sherds are in varying states of preservation with an average sherd weight of 6g.

Fabric

A range of fabrics was identified in four main groups, as shown on Table 4. Quartz sand tempered sherds were the most abundant making up approximately 89% of the total assemblage. Within the sandy group a large variation in size, texture and additional inclusions was noted, with sand-tempered fabrics also containing flint, large, rounded quartz grains, elongated voids, mica or chalk/shell. Sherds containing flint as the principle inclusion make up 9% of the assemblage (1,290g). Sherds containing fossiliferous shell also make up a small component of the assemblage.

Fabric	Description	Quantity	Weight/g
F1	Moderate small to medium angular flint	162	477
F2	Dense small, angular flint	83	390
F3	Moderate coarse angular flint	222	409
F4	Dense coarse angular flint	3	14
Q1	Common dense quartz sand, occasional organic impressions	962	7248
Q2	Common dense quartz sand, occasional small angular flint	641	4317
Q3	Common dense quartz sand, occasional shell/chalk	161	1249
S1	Common shell and plate-like voids	32	58
S2	Pale orange sparse chalk or shell	25	153
Total		**2291**	**14315**

Table 4. Quantity and weight of Iron Age pottery by fabric

The dominance of sandy fabrics within the assemblage is consistent with a middle Iron Age date, seen locally at contemporary sites such as Liberty Village, Suffolk (site code ERL147; Percival, 2010) and further afield at Little Waltham, Essex (Drury, 1978).

Form

Seventy-nine vessels were present, based on rim count (Table 5). A range of vessel forms was present, principally medium jars with high, rounded shoulders and slack-shouldered jars with short, upright or slightly everted rims. A variety of vessels of similar

shape but smaller size were also found, along with small numbers of jars and bowls with neutral or closed profiles. Most of the vessels were undecorated. Where decoration occurs an assortment of techniques were employed, including fingertip and fingernail impressions, impressed-cable motif and nicks or slashes applied to the rim top. Some vessels had decoration to the body in the form of incised slashes or scoring.

The jars are similar to the large mid Iron Age assemblages from Little Waltham and St Osyth, Essex (Drury, 1978; Germany 2007) and from Liberty Village (ERL147), Suffolk (Percival, 2010) and suggest a range of domestic cooking and storage activities were taking place. Indeed, burnt food residues were found on nine sherds, indicating where cooking of food had taken place. The presence of the shell-tempered, incised scored vessels is of interest. Similar vessels occur in small numbers across Suffolk and Essex and may represent non-local trade or exchange between the regions and the north Cambridgeshire / East Midlands region where this form of pottery originated.

Form	**No. of vessels**
Storage jar	1
Small jar medium upright neck	1
Small jar	3
Jar/bowl N = no neck	2
Jar slack shouldered, jar short upright neck	1
Jar slack shouldered	1
Jar slack shoulder medium curved neck	1
Jar simple upright rim	3
Jar short upright neck	1
Jar short straight everted neck	1
Jar short out turned rim	1
Jar short out turned neck	5
Jar short everted rim	3
Jar short curved neck	5
Jar rounded shoulder medium curved neck	8
Jar no shoulder short upright neck	5
Jar no neck, very short everted rim	2
Jar medium upright neck	3
Jar medium out turned neck	7
Jar medium everted rim	1
Jar medium curved out turned neck	2
Jar medium curved neck	3
Jar high rounded shoulder concave neck	5
Globular bowl no neck, jar out turned rim	1
Globular bowl	1
Closed bowl	4
Bowl sinuous	3
Bowl cylinder-shaped with short concave neck	1
Uncertain	4
Total	**79**

Table 5. Number of Iron Age vessels by form

Deposition

The deposition of the pottery (Table 6) is slightly unusual as the majority of sherds were collected from ditches rather than from contemporary pits. The largest quantity of pottery by weight was recovered from ring ditches G1022 and G1013/1016. In these features the sherds were fairly large with an average sherd weight of 13g. This suggests that the pottery in the ditches was deposited soon after use and remained moderately undisturbed post-deposition. Pottery found in pits and post holes had small average weights suggesting that the sherds within these features had been subject to some wear and tear prior to deposition, and may represent domestic debris from a midden or surface deposit. It might be significant that the pottery from the pits, which is usually expected to be better-preserved than that from ditches, was frequently often abraded.

Feature Type	Quantity	% quantity	Weight/g	% weight	Av. sherd weight/g
Ring ditch	418	19	5500	37	13
Linear ditch	925	39	5060	35	5
Pit	576	26	2130	16	4
Unstratified finds	95	4	525	4	6
Layer	94	4	491	3	5
Post hole	101	4	207	2	2
Quarry pit	53	2	193	1	4
Unknown	11	0	164	1	15
Pit/tree throw	13	1	26	0	2
Gully	1	0	8	0	7
Large feature	2	0	6	0	3
Field walking	2	0	5	0	3
Total	**2291**	**99**	**14315**	**99**	**6**

Table 6. Iron Age pottery deposition

Roman pottery

A very small quantity of small and heavily abraded Roman body sherds was noted at the field-walking stage of the project (10 fragments @ 52g). None of the sherds were closely dated within the Roman period itself, and in every instance they occurred with post-medieval material. The collection was principally made up of sandy greywares (GX) and a small number of red coarsewares (RX).

A single sherd of wheel-thrown grog-tempered (GROG) pottery was found during trial trenching in ditch fill 0143 (outer ring ditch G1013). This was dated from the late 1st century BC to around AD 70, and therefore might have belonged to the pre-Roman Iron Age.

A further three small and abraded body sherds (11g) dated to the Roman period were found during the excavation phase. The sherds were recorded in three different ditch fills 0234 (ring ditch G1021), 0294 (linear ditch G1002) and 0358 (linear ditch G1025) and in the latter two, alongside middle Iron Age pottery. Two fabrics are represented by the sherds (GX and RX), however none are closely datable within the Roman period. The quantity, size and condition of the pottery suggest that they are not in their original place of deposition and are likely to have been intrusive.

Medieval pottery

A very small assemblage of abraded medieval pottery was noted at the field-walking stage of the project (7 fragments @ 70g). The collection is principally made up of body sherds of medieval coarseware (MCW), although two Hedingham coarsewares (HCW) were present also. The assemblage is dated from the late 12th to 14th century.

The excavation stage yielded another three sherds (4g) of medieval pottery from fills 0281 and 0439 of ring ditch G1022. In both contexts the medieval pottery was accompanied by middle Iron Age ceramics and is assumed to have been intrusive. Two sherds of UPG (Unprovenanced medieval glazed ware) were noted in 0281, and a single sherd of Hedingham fine ware (HFW 1) in 0439. The sherds are small and abraded and are dated overall from the late 12th to 14th century.

Post-medieval pottery

The field-walking stage of the project produced ninety sherds of (mostly) small and abraded post-medieval pottery (892g). The assemblage was made up chiefly of Glazed red earthenwares (GRE), with some English stonewares (ESW) and Iron glazed black ware (IGBW), and dated predominantly from the 16th to 18th centuries.

A single abraded body sherd of GRE was found in fill 0176 of parish boundary ditch G1017 during the trial trenched evaluation. The fabric is dated from the 16th to 18th century.

At the excavation stage, two fills (0368 and 0401) of ring ditch G1022 and fill 0820 of pit 0821 (located inside ring ditch G1022) contained post-medieval pottery (7 sherds @ 22g). All of the pieces are body sherds that were small and variably abraded, dated between the 16th and 18th century. Those from the ring ditch must have been intrusive,

while the pottery from the pit provides a possible date for that feature. Fabric types were Glazed red earthenwares (GRE), Iron glazed black ware (IGBW) and Staffordshire type slipware (STAF).

Ceramic Building Material (CBM)

A total of 633 fragments of CBM with a combined weight of 9019g was recovered from the three phases of investigation. A full contextual breakdown of the CBM forms part of the site archive.

The overwhelming majority of the CBM was noted at the field-walking stage (545 fragments @ 7,327g) and this assemblage was principally made up of abraded post-medieval roof tile (94%). Also present were small quantities of Roman and medieval roof tile, all of which material was considerably abraded and fragmented.

The CBM noted at the evaluation stage (25 fragments @ 985g) was also dominated by abraded post-medieval roof tile. Only a single tile fragment was likely to be dated to the Roman period.

A small quantity of CBM was recorded at the excavation phase of the project (63 fragments @ 707g). The entire assemblage is very fragmented and significantly abraded, suggesting that it is not in its original place of deposition. Thirteen of the fourteen contexts that contained CBM were ditch fills (0241, 0288, 0302, 0316, 0333, 0348, 0355, 0358, 0368, 0401, 0559, 0601 & 0737); the only exception was pit fill 0646.

A small collection of Roman CBM (9 fragments @ 34g) was noted in four of the contexts (0348, 0401, 0559 & 0646). However, as the average weight of 3.7g suggests, all of the pieces were very abraded and small; none could be allocated to a particular form type. The Roman fabrics were mostly fine and sandy (fs), occasionally containing iron ore (fsfe) but often displaying mica on bright orange surfaces. Nearly all of the Roman tile examples were noted alongside prehistoric pottery, and was clearly intrusive. The fragments in ditch fill 0348 were recorded with post-medieval tile and must have been residual; no other dating evidence was present within this context.

The remaining fifty-four fragments (673g) of CBM are all dated to the post-medieval period. With the exception of three brick fragments, in fills 0302, 0333 and 0348, the

remainder of the assemblage is composed of abraded roof tile pieces. These are generally in medium sandy fabrics with common black iron ores (msfe) or with sparse flint inclusions (msf). Only in ditch fill 0368 did post-medieval pottery occur alongside the tile, although both are clearly intrusive. Six of these contexts also contained prehistoric pottery and a further three contained no other dating evidence. Ditch fill 0348 contained the largest CBM assemblage (28 fragments @ 456g) as well as five very abraded Roman pieces.

Fired clay

A small quantity of fired clay was recorded at the field-walking stage of the project (17 fragments @ 159g), most of which was noted in transect 0051. None of the pieces display diagnostic features such as wattle impressions and the majority are in a medium sandy fabric (ms) with varying amounts of flint, calcite and organics.

A very small and abraded collection of fired clay was recovered during the trial trench evaluation. These were found mostly in ditch fills and are in a medium sandy fabric with calcite (msc).

A considerable assemblage of fired clay was recovered at the excavation stage (989 fragments @ 7029g); around a quarter of this figure (which represented new context data) was retrieved from environmental samples. A full breakdown of fired clay per context forms part of the site archive.

Generally the fired clay fragments are slightly or moderately abraded, and where they occurred in larger numbers within a particular context they are usually highly fragmented. However some contexts did contain a quantity of larger pieces, such as in ditch fill 0598 (outer ring ditch G1013) and pit fill 0758 (G1039), located within the double ring ditch G1013/G1016).

Of the eighty-six contexts that produced fired clay, fifty-nine contained middle Iron Age pottery, twenty-six held no other dating evidence and one contained post-medieval pottery as well as middle Iron Age pottery. As Table 7 indicates, the larger part of the fired clay assemblage was retrieved from the fills of ditches and pits.

Context type	Number of fragments
Ditch	55
Pit	26
Post hole	1
Gully	1
Layer	2
Unknown	1
Total	**86**

Table 7. Fired clay by context type

Four different fired clay fabric types were identified, all of which were medium sandy (ms) with either calcite (msc), clay pellets (mscp) or chalk (msch). However, it is the chalk-based fabric that dominates the assemblage. This is generally buff to orange, occasionally with reduced areas (or patches), and where surfaces are present they are often coloured beige or light grey. The chalk within the fabric is generally ill sorted and abundant, although some examples contain lesser amounts. Occasionally sparse large flint can also be seen within the fabric. Good examples of this fabric can be seen in ditch fills 0598 (outer ring ditch G1013) and pit fill 0758 (G1039), both of which were dated to the middle Iron Age.

Across all fabrics there were very few fragments that displayed surfaces and when they were observed they were generally of an irregular to flat nature. The few wattle impressions that were noted were all partial sections of linear rods and only the widths of these were measurable.

The greater part of the fired clay was recovered from ditch fills dated to the middle Iron Age and may represent some form of daub walling. Although several pieces displayed reduced areas and some of the surface fragments appeared convex, it is not certain if any of the fired clay had been used to line ovens or hearths. Certainly many of the fragments, although broken, only displayed slight abrasion suggesting that some elements were in their original place of deposition.

Worked flint

Sarah Bates

Introduction and methodology

Each piece of flint was examined and recorded by context in a Microsoft Access database, which forms part of the site archive. A summary of this data can be seen in

Appendix 3. The material was classified by category and type, with numbers of pieces and numbers of complete, corticated, patinated and hinge-fractured pieces being recorded. The condition of the flint was also commented on and additional descriptive comments were made as necessary. Non-struck flint was included in a separate column (*Non struck*) in the database but has now been discarded.

The assemblage

A total of 127 struck or shattered flints was recovered from the site. The flint is summarised by type in Table 8 and listed by context in Appendix 3. The flint varies quite a lot in colour from dark grey to white with over 44% (by number) being recorded as patinated (this patination varying from a slight grey 'misted' appearance to opaque white surfaces). Cortex, where present, is mostly off-white (pale cream or pale greyish cream) fine textured although slightly rough. Several pieces have been struck or are shattered directly from irregular cortical nodules, with cortex extending around the unprepared 'platform' area. The flint collected during field-walking, unsurprisingly, mostly had damaged edges. The excavated flint is mostly sharp or quite sharp although edge damaged material is present also.

Type	Number
Core/tool	1
Multi-platform flake core	1
Struck fragment	2
Shatter	16
Flake	67
Blade-like flake	2
Blade	4
Spall	8
Hammerstone flake	1
End scraper	1
Scraper	1
Piercer	2
Spurred piece	2
Notched flake	2
Retouched flake	4
Retouched blade	1
Retouched fragment	2
Utilised flake	3
Utilised blade	2
Utilised fragment	5
Total	**127**

Table 8. Summary of the flint assemblage

One small multi-platform flake core was found in the poorly-stratified context 0409. Although irregular, it had been quite well used and had only a small area of cortex surviving.

A very irregular cortical fragment (in layer 0552), fractured from a nodule, had one side tested for use as a core, or was crudely retouched as an irregular scraper-like edge.

Two small, chunky struck fragments came from field-walking contexts, and sixteen irregular shatter pieces were noted also.

Sixty-seven unmodified flakes were present. These were predominantly small and irregular and several flakes had wide, obtuse platforms or hinged distal terminations. 70% of the flakes (by number) had some cortex and 9% were primary flakes. 15% of the flakes had cortex on their platforms and none showed any sign of deliberate platform edge preparation. One or two flakes, however, were clearly from cores that had been turned and struck from more than one platform, showing that although many of the flakes could have been struck haphazardly, some care was taken in the use of cores.

Four small blades were found. Two were neat pieces; one had its proximal end missing but the other (in post-medieval ditch fill 0182) had an abraded platform. Additionally, two small blade-like flakes (one with a cortical platform) and eight spalls were present.

One thick flake had a pitted surface around its proximal end and may be from a hammer stone.

There was a thick, chunky end scraper and an irregular scraper. Both of these were from quarry/reservoir fill 0384 and both were made on primary flakes. Another possible scraper was also on a primary flake but the flake may have been of thermal origin and was minimally 'retouched'; this piece, which came from field-walking transect 0026, may have been accidentally edge damaged rather than deliberately worked.

Two piercers were present. One was on a patinated blade (in the fill of linear ditch segment 0725; G1002) and had its proximal end missing. Retouch along the right side accentuated its protruding distal point. The other, on a small curving patinated blade-like flake had slight possible use-related damage to its distal point that post-dated the

patination. It may represent the reuse of an older flake; it was located in ditch fill 0597 (outer ring ditch G1013). Two irregular, spurred pieces were found, both on possible thermal fragments. One, from field-walking transect 0060, had retouch on two sides and on one of these it formed a blunt rounded spur. The other, from field-walking transect 0056, is a retouched primary fragment.

A small fragment from a patinated blade type piece, from layer 0396, had a neatly retouched notch (also patinated) in its right cortical side. Another more irregular flake with a possible notch was from the field-walking transect 0027.

Seven miscellaneous retouched pieces and nine possibly utilised pieces were also present. The proximal part of a patinated blade, in ditch fill 0629, had an abraded platform. It was edge damaged but had some retouch of its left side and was probably used as a knife. Four small flakes and two fragments were also retouched. One thick fragment, in ditch fill 0276, had some very coarse denticulations on one edge. The other, in field-walking transect 0026, may be a fragment from the edge of a tool. A small curving blade was damaged (probably by use) on one side. Three flakes, all quite thick, and four thermal fragments were probably utilised.

Flint by context

Flint from field-walking

Twenty-two flints were recorded in field-walking transects. Apart from one small shattered fragment (possibly accidental) they were all edge damaged. Two probable spurred pieces, a possible scraper, a possible notched flake and three other retouched pieces were found. They were not closely datable but along with the mainly small and irregular pieces, the flakes recovered were probably of Late Neolithic or later prehistoric date.

Flint from excavated contexts

Contexts with middle Iron Age pottery

Much of the flint was found along with middle Iron Age pottery in the fills of ditches (linear and ring ditches), pits, a post hole and a layer.

A small, neat blade was recovered from ditch fill 0182 (inner ring ditch G1016) during the evaluation and a piercer made on a blade, an abraded small blade-like flake and a spall were found in fill 0124 of linear ditch G1002. Ten flakes, two shattered fragments and a retouched thick fragment came from possible ring ditch G1023. The flakes included were small or irregular hard hammer-struck pieces and four were from a lower fill, which were of a similar flint and could be from the same core. The flint is almost all sharp or quite sharp. Two quite sharp irregular flakes, two shatter pieces and an abraded retouched blade fragment were located in ditch 0599 (G1027 – the ditch closing the entrance to inner ring ditch G1016) and a patinated primary 'blade' was found in linear ditch 0345 (G1025).

Seven flints were found in ring ditch segment 0289 (G1022). They included four flakes (two of them retouched) two small blade type pieces (one of them utilised) and a spall. Seven flakes, some edge damaged, were found in outer ring ditch segment 0729 (G1013). They included two primary flakes with the same cortex and three squat or broad flakes, two of which had cortical platforms. Two small sharp flakes, a blade fragment and a possibly utilised thermal flake came from ring ditch segment 0362 (G1022). Four small sharp flakes from ring ditch segment 0372 (G1022) were irregular or thick and one had a wide obtuse platform. A possible piercer on a reused blade-like flake and a quite sharp irregular flake fragment were found in ring ditch segment 0595 (outer ring ditch G1013).

Six small, irregular flakes and two utilised thermal fragments were located in pit 0456. Both sharp and edge damaged pieces were present. A small, sharp flake and two utilised pieces (a thick blade-like flake and a shattered very irregular fragment) came from pit 0785.

Eight small, sharp flakes and spalls, for example, were found with quantities of pottery in possible pit 0394 (G1032). They were similar in flint type and may represent contemporary knapping.

Three similar sharp shatter pieces from pit or post hole 0540 had the same rough-textured cortex and could be from the same parent lump. A small ovate primary flake came from post hole 0305.

A possible tested piece or irregular scraper, a slightly edge damaged flake and a shatter piece were found with pottery in layer/fill 0552.

Flint from other contexts

A total of thirty-five flints were found in small amounts (up to three pieces) in otherwise undated deposits. They were mostly unmodified and shatter flakes, but a small number of utilised or retouched pieces included two scrapers and a utilised flake from pit 0387. A notched, blade-like fragment from a probable subsoil deposit 0396 and a likely utilised thermal fragment from ditch 0837 were noted also.

Discussion of the worked flint

There are some pieces that are likely to be residual and relate to earlier (probably earlier Neolithic period) activity at the site. These comprise a few small blade types including two pieces with abraded platforms that have come from prepared cores. The irregular hard hammer-struck nature of most of the material, however, is such that it could be contemporary with the Iron Age activity at the site and the relative sharpness of much of the flint is also consistent with this possibility.

Heat-altered flint/stone

A total of 1,201 pieces of heat-altered flint with a combined weight of 28,690g was retrieved from the three phases of archaeological work. As Table 2 indicates, a considerable quantity of heat-altered flint was recovered at the field-walking stage (224 fragments @ 5810g) and thereafter, only a small number of pieces were collected during the evaluation (40 fragments @ 703g). There is also a heat-altered stone assemblage amounting to 903 fragments with a weight of 18053g. The majority of this collection was noted at the evaluation and excavation stages.

The heat-altered flint from field-walking was variable in size and colour and was usually noted alongside artefacts of all periods. Only nine pieces of heat-altered stone were present within this assemblage (199g).

Although less heat-altered flint was recorded at the evaluation stage, it was more consistent in colour (mostly white to grey), as well as in its occurrence alongside prehistoric pottery. A large collection of heat-altered stone was noted also during the

evaluation (407 fragments @ 6823g). Unfortunately the larger part of the heat-altered stone was present in a series of pit fills (and mostly derived through the system of sample collection) that contained no dating evidence, such as pottery.

In total 937 pieces of heat-altered flint with a weight of 22,177g was collected during the excavation stage. The assemblage was retrieved from 102 contexts (this figure includes the heat-altered flint retrieved from samples) and may be described as variable in size. Overall the majority of the heat-altered flint is coloured between white and grey, with only smaller amounts being in the orange to red range. A further 487 fragments of heat-altered stone with a weight of 11,031g were recorded; however these were noted chiefly in samples taken from pit fills 0753 and 0754 (G1042), which produced 267 fragments weighing 7,209g.

The larger part of the heat-altered flint/stone assemblage was recovered from forty-nine ditch fills and forty-two pit fills, six post holes, two linear features, a layer and two unstratified contexts. Of these fills, seventy contained pottery, one each were dated to the later Neolithic / earlier Bronze Age and the earlier Bronze Age, sixty-two to the middle Iron Age, five to the general prehistoric period and finally one had no clear date. A further thirty-two contexts contained no ceramic evidence.

A large proportion of the heat-altered flint was coloured in the range of white to grey and may indicate that it had been used in the so called ‘pot-boiling’ process. Interestingly 61% of the heat-altered flint occurs in middle Iron Age contexts, and although a further 32% is without dating evidence, it could be argued that a large proportion of these may also be dated to the same period. The mix of heat-altered flint and stone is not significant, and merely demonstrates that the most abundant materials to hand had been used.

Clay tobacco pipe

Clay tobacco pipe fragments, all small pieces of stem, were recorded in all three phases of the archaeological investigation (six fragments @ 22g). A single 5g fragment with part of the heel attached was recovered during the excavation phase; it came from fill 0851 of outer ring ditch G1013, and was clearly intrusive.

Post-medieval glass

A small quantity of post-medieval window and bottle glass (5 pieces @ 250g) was identified at both the field-walking and evaluation stages of the project. During the excavation stage a further small fragment of green bottle glass (dated to the same period) was noted on the surface of ditch fill 0366 (G1002).

Slag

As Table 2 demonstrates all of the slag was recorded during the field-walking part of the project (9 fragments @ 312g). The pieces were non-magnetic, fuel ash examples and were mostly noted alongside post-medieval CBM.

Iron objects

A few iron objects were recovered from the three phases of archaeological work (11 fragments @ 78g). Iron objects from field walking and the evaluation were mostly nails, a single rivet and fragments of agricultural machinery, all of which are dated to the post-medieval period and were not allocated small find numbers. Three nail fragments were also noted at the excavation stage (11g). The first was recovered from the surface of ditch fill 0366 (G1002), alongside post-medieval bottle glass. The remaining two were present in context 0721 (possible re-cut G1028 of inner ring ditch G1013) and are presumably intrusive.

Small finds

Identifications by Andrew Brown & Sarah Percival

Introduction

A total of seventeen small finds were recorded; the first four were found during field-walking and the remainder during the open-area excavation. Some groups of pottery fragments were given small find numbers at the fieldwork stage (SF5005, SF5006, SF5007 & SF5008) because they were thought to possibly represent ‘placed deposits’; the sherds have been incorporated (though not discussed specifically) in the prehistoric pottery assessment. A summary of these pottery small finds appears below, alongside the rest of the assemblage.

Small finds from field-walking

Medieval

1. This is a personal lead seal for letters, with a diameter of 21mm. It is dated from the late 12th to 13th century. The seal is too worn and bent to allow further interpretation. SF5001 (unstratified).

Post-medieval

2. An extremely worn copper-alloy token, bent in half, with a diameter of around 18mm. The token has no legible lettering, but is likely to be dated to the 17th century. SF5002 (unstratified).
3. An extremely worn copper-alloy token, with no visible lettering; it is entirely covered in corrosion products. It has a diameter of 19mm and like the previous example is dated to the 17th century. SF5003 (unstratified).
4. A George II copper halfpenny (1727–60) with a diameter of 28mm. Although partially covered by corrosion products the bust of George II can be seen on the obverse and Britannia on the reverse. SF5004 (0186).

Small finds from the excavation

Prehistoric

5. Fifty-nine fragments of middle Iron Age pottery from at least two vessels (290g). They were found near the base of ditch segment 0371 – the western terminus of the short length of ditch on the south side of discontinuous ring ditch G1022. SF5005 (0370).
6. Thirty-nine fragments of middle Iron Age pottery from the same vessel (636g). They were found near the base of ditch segment 0268 – the eastern terminus of the short length of ditch on the south side of discontinuous ring ditch G1022. SF5006 (0273).
7. A total of 201 sherds of middle Iron Age pottery with a weight of 299g that are almost all from the same vessel. They were found in pit 0264 (G1033) near the entrance to the double ring ditch G1013/G1016. SF5007 (0263).
8. Forty-four fragments of pottery (453g) from the same jar, dated to the middle Iron Age. They were found in ditch segment 0692, on the south side of inner ring ditch G1016. SF5008 (0619).
9. Loomweight (see below). SF1010 (0737).
10. Loomweight (see below). SF1012 (0737).
11. Loomweight (see below). SF1014 (0598).
12. Loomweight (see below). SF5015 (0629).
13. Loomweight (see below). SF5016 (0701).
14. Spindle whorl (see below). SF5017 (0748).
15. Loomweight (see below). SF5018 (0853)

Spindle whorl and loomweights

Sarah Percival

A semi complete spherical ceramic spindle whorl (SF5017) was found in pit fill 0748 (G1030). The spindle whorl is hard-fired and is made of a flint-tempered fabric. A single perforation has been pierced through the central axis and there is some use wear to the lower surface. Similar spindle whorls have been found at Danebury where they have been dated to the Mid Iron Age (Cunliffe & Poole 1991, fig. 7.43, 7.91).

A complete (but fragmented) triangular ceramic loomweight and the remains of four or more others were collected from five contexts. The complete weight (SF5010/12) was found in fill 0737 of outer ring ditch G1013. The partial/fragmented examples came from the following contexts:

Fill 0598 of outer ring ditch segment 0595 (G1013; SF5014)
Fill 0629 of inner ring ditch G1013 (SF5015)
Lower fill 0701 of possible cooking pit 0699 (G1040; SF5016)
Fill 0748 of pit 0663 (G1030; SF5017)
Fill 0853 of outer ring ditch G1013 (SF5018)
Fill 0146 of pit 0147 (G1014)

The loomweights are made of a poorly-fired sandy fabric with numerous chalk and occasional large flint inclusions. They are from a vertical, warp-weighted loom and are similar to Mid to Later Iron Age examples found at Danebury (Cunliffe and Poole 1991, fig 7.44). The complete weight has three perforations, one across each apex (Danebury type A1). These have been roughly pushed through the weight before it was fired. Differential colouring suggests that the weight was fired laying flat on one side, leaving this surface reduced whilst the remainder of the weight is oxidised orange/pink.

Post-medieval

16. A copper-alloy button with an attachment loop that is likely to be dated to the 18th/19th century. It has a diameter of 30mm and is accompanied by middle Iron Age pottery. SF5011 (0737).

17. An iron nail fragment with a length of 50mm and width of 5mm. The nail is snapped, heavily

corroded and occurs alongside prehistoric pottery, Roman CBM, animal bone, worked and heat-altered flint. SF5009 (0646).

Animal bone

Julie Curl

Introduction

A total of 18,804g of faunal remains was recovered. The bulk of the material appears to be derived from domestic stock and general waste, with some evidence for utilisation of wild species and this includes possible antler working waste.

Methodology

The assessment was carried out following a modified version of guidelines by English Heritage (Davis, 1992). All of the bone was scanned to determine range of species and elements present. Where species identification was not possible, an attempt was made to determine if the remains were those of large mammals, small to medium mammals, small mammals or birds, and more detailed counts of these fragments that are not identifiable to species are in the digital archive. A note was also made of butchering and any indications of skinning, horn or antler working and other modifications. When possible a record was made of ages and any other relevant information, such as pathologies. Counts and weights were noted for each context with additional counts for each species identified, counts were also taken of bone classed as 'countable' (Davis, 1992) and measureable bone (following Von Den Driesch, 1976). All information was recorded directly into a Microsoft Excel database for quantification and assessment. A basic catalogue is included in this written report and the full assessment database, with more detailed counts, is available in the site archive.

The faunal assemblage

Quantification, provenance and preservation

A total of 18,804g of faunal remains, consisting of 3,395 pieces, was recovered. All of the bone in this assemblage was hand collected, with the vast majority recovered from excavation (18,529g, from 141 contexts) and a small proportion (275g, from nine contexts) found during field-walking.

The assemblage was derived from a variety of features, with a larger quantity of bone (74% of the assemblage) produced from ditch fills. Pit fills yielded just over 6% of the remains, with the remaining 20% of the assemblage distributed through various layers, linear features, gullies, post holes, and quarry pits. Nearly 84% of the assemblage was found in association with prehistoric ceramics, mostly of middle Iron Age date. Just over 16% of the bone is undated at the time of this assessment and small quantities (amounting to less than one percent of the faunal assemblage) were recovered with finds of Roman, medieval and 19th-century date. Full quantification by weight, feature type and period can be seen in Appendix 4.

Generally the faunal remains are in quite poor condition and are highly fragmented. Some fragmentation has occurred from butchering, but a good deal is as a result of wear and poor condition. In terms of the number of pieces of bone, just under 2% are countable (Davis, 1992) and less than 1% are measurable (Von Den Driesch, 1976); however, these remains can still provide some indication of species, stature and breeds, and counts can provide an estimation of proportional representation.

Small amounts of bone from the fills of ditches, pits and quarries show signs of burning, but there are no larger concentrations of burnt remains. Gnawing was noted on a few fragments of bone during the assessment, although this does not rule out scavenging as bone gnawing by dogs can completely destroy bone and they may even remove it from site for burial and later consumption. One bone from pit fill 0730 (dated to the middle Iron Age) showed some rodent gnawing, suggesting that these remains may have been accessible to small scavengers for a time before complete burial.

Species range, modifications and other observations

At least seven species were identified during the assessment. The bulk of the remains that were identifiable to species were from the main domestic stock of cattle and sheep/goat. Smaller numbers of equid and pig/boar were recorded, along with sparse amounts of bird and small mammal; remains of deer were seen in four fills. The greatest range of species was seen in prehistoric contexts, with the presence of some species, such as deer and bird, only represented in these prehistoric features. Quantification of the number of elements of each species by date can be seen in Appendix 4, and further quantification of the species by feature type is presented in Table 9. An additional breakdown of the bone classified as ‘mammal’, but not identifiable to species during the

assessment scan, into groups such as ‘large mammal’ and ‘small mammal’ is available in the digital archive.

There is a greater variety of species in the ditch, layer and pit fills, with prehistoric ditch fills producing the bulk of the cattle and sheep/goat. Quantification of the species by feature type can be seen in Table 9.

Species	Quarry	Ditch	Finds	Gully	Layer	Linear	Pit	Post	Root	Stake	Unk	Total
Bird		1										1
Cattle	3	207	19	3	4		23	3	1		12	275
Red deer		4			9							13
Equid		7	10		2							19
Mammal	33	2322	267	9	73	3	131	21		2	82	2943
Pig/boar	1	35			1		1					38
Sheep/goat		78	9		9		2	1			5	104
Sml mammal							2					2
Total	**37**	**2654**	**305**	**12**	**98**	**3**	**159**	**25**	**1**	**2**	**99**	**3395**

Table 9. Quantification (NISP) of species by feature type

Butchering was noted frequently and some bones appear to be smashed for accessing the marrow, although some evidence for butchering has been lost due to the poor condition of some of the remains. An equid metacarpal from ditch fill 0817 (inner ring ditch G1016) showed fine knife cuts that demonstrate the animal was at least skinned.

Some pathological conditions were noted, including a small equid metatarsal from ditch fill 0824 (outer ring ditch G1013) that has some distortion at the distal end – this might indicate a traction animal under some strain.

Thirteen pieces of deer were also identified from four contexts. Fragments of a young red deer antlers were seen in layer 0408, the fragments appear to be naturally shed; the size of the antlers suggests a first- or second-year stag. Other fragments of deer include pieces of a large (mature) stag where the antler is still attached to part of the skull, clearly showing this is from a butchered animal and not a naturally shed antler that has been shed in the spring.

The number of small mammal and bird bones in this assemblage is low; this may be due to a recovery bias since it is understood that excavated soil was not sieved on site, but might also be due to poor soil conditions.

Conclusions

This is a relatively small assemblage of animal bone that is in quite poor condition and highly fragmented. The remains appear to be of mixed origin, with the bulk of the bone derived from butchering and food waste, and some evidence of probable antler working. The remains seen in the assessment would suggest a site that is largely dependant on domestic stock with some hunting to supplement the diet and to provide material for industrial or craft activities.

Cremated/burnt bone

Sue Anderson

Introduction

This report examines the cremated bone collected from two cremation burials (G1046) of possible middle Iron Age date. Bone was recovered under two context numbers, 0319 (sample <28>) and 0321 (sample <29>).

Methodology

Bone was collected as bulk samples and sieved, the entire residue being retained as a single group for each context. The bone was sorted into six categories: skull, axial, upper limb, lower limb, unidentified long bone, and unidentified. All fragment groups were weighed to the nearest 0.1g. Measurements of maximum skull and long bone fragment sizes were recorded also. 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 & 2004).

Quantification, identification, collection and survival

Table 10 shows the bone weights and percentages of identified bone from the burials, and the proportions of bone identified from the four areas of the skeleton (skull, axial, upper limb, lower limb). Expected proportions are shown, based on McKinley (1994, 6).

Context	Total wt/g	% identified	% Skull	% Axial	% Upper limb	% Lower limb
0319	108.0	61.6	37.4	-	12.9	49.6
0321	337.8	46.7	28.3	2.5	8.9	50.1
Expected			18.2	20.6	23.1	38.1

Table 10. Percentages of identified fragments out of total identified by area of skeleton

In both burials, skull and leg fragments were over-represented amongst the identifiable material, and other areas of the skeleton were under-represented. This is probably due to the small size of the fragments and lack of diagnostic pieces, suggesting a bias in preservation and/or identification, rather than to any bias in collection following the cremation ritual. However, it is likely that many of the small fragments recorded as 'unidentified' were pieces of limbs rather than the torso, suggesting that this area of the body was genuinely under-represented in both burials. These figures therefore provide only a rough guide to what was collected originally.

The total weights of both burials are very low. Mays (1998, table 11.2) notes that the combusted weight of an adult skeleton has a mean of around 1,500g for females and 2,300g for males. The quantity of bone in this assemblage therefore represents only a small proportion of the combusted weight of an average adult skeleton.

The cremation burials

The burials are summarised in Table 11, and are quantified and catalogued in greater detail in Appendix 5.

Burial	Age	Sex	Notes
0319	Mature	-	Fair condition but very fragmented; cranial remains include four tooth roots; cranial sutures closed; bones of medium size and no other sex indicators identified; possible porotic hyperostosis. Unburnt animal bone present.
0321	Adult	-	Fair condition but very fragmented; cranial remains include twenty-three tooth root fragments (tips fully formed); a few vertebral facets but no evidence of degeneration; bones of medium size and no other sex indicators identified. Possible animal bone present.

Table 11. Summary of cremation burials

Identifiable pieces in this group included cranial vault, tooth root fragments, pieces of vertebral facet, finger phalanges, pieces of shaft of the major limb bones, and distal and intermediate phalanges of the toes. The pieces of tooth root were generally small and not identifiable, although one complete root of a canine or premolar was found in 0321.

The fragments were certainly adult as toe joint fragments showed that epiphyses were fully fused. There was some evidence of new bone formation at muscle attachments in 0321, possibly suggesting that this individual was also a mature or older adult. One fragment of occipital was identified in 0321, but unfortunately the external crest was lost.

There was no evidence to suggest that the bone from these burials represented more than one individual each, although a few pieces appeared to show signs of abrasion. Some, but not all, of these may be animal bone. There was no duplication and the possibility that the two burials were part of a single individual cannot be ignored.

The identification rate of 61.6% for 0319 is relatively high despite the small size of the fragments, whilst 46.7% for 0321 is lower but compares favourably with other un-urned cremation burials. The largest fragment of skull was 22mm long and the largest piece of long bone 34mm long, from 0321 and 0319 respectively. Much of the unidentified fraction in both burials was less than 10mm in length.

The majority of bone in this group was fully oxidised and cream to white in colour, although a few inner fragments of thicker long bones were grey-blue in colour. A relatively high proportion of the lower limb bones (particularly the femur) in 0321 were grey-black, reflecting the thickness of the cortical bone in this individual. The presence of a high proportion of white bone indicates firing temperatures in excess of *c.* 600°C (McKinley 2004, 11).

The outer table of the cranial vault of 0319 was thicker than would be expected and some fragments showed signs of pitting and porosity. This may have been caused by porotic hyperostosis in childhood, which later healed. This condition is thought to be related to iron deficiency.

Summary and discussion

The burials contained the fragmented remains of at least one and probably two individuals, both mature adults of unknown sex. The total weight of bone indicates that both were very incomplete. This may be due to poor collection following the cremation ritual, poor preservation of incompletely cremated material following burial, the token collection of remains for burial, or (as was certainly the case) truncation of the deposit.

A small quantity of un-urned bone, if not truncated, is typical of later prehistoric cremation deposits in Suffolk, which concurs with the middle Iron Age date suggested by pottery evidence for the occupation of this site. Two other recently-excavated cremations from Haverhill (HVH 069) have produced Late Bronze Age dates and contained very much smaller quantities of bone (Anderson 2009; 2010).

A sample of each burial has been selected for radiocarbon dating if required.

All of the associated finds with the cremated bone were derived from samples. Fill 0319 contained prehistoric pottery, fired clay and heat-altered flint, whereas fill 0321 held only fired clay and heat-altered flint. Without exception all of these finds are considerably fragmented.

Shell

As Table 2 indicates, a very small quantity of fragmented oyster shell was recorded at the field-walking and evaluation stages of the project (five fragments @ 47g). A further twelve fragmentary pieces of shell were noted at the excavation phase (23g). Most of these were also oyster fragments, although terrestrial snail shell fragments were noted too, in ditch fill 0622 and pit fill 0748. With the exception of ditch fill 0348, all of the shell fragments were accompanied by prehistoric pottery, principally of a middle Iron Age date. However the terrestrial shell in pit fill 0748 occurred alongside later Neolithic / earlier Bronze Age pottery.

Plant macrofossils and other remains

Lisa Gray

Introduction: aims and objectives

Thirty-six samples were presented for assessment, from a total of ninety-eight samples recovered from the site. The samples selected for assessment were chosen as being representative of the range of features found, and were taken from pits and ditches, many of which have been dated to the middle Iron Age.

This report will assess the type and quality of preservation of organic (mainly botanical) remains and any inorganic materials in these samples and consider their potential and significance for further analysis.

Sampling and processing methods

Sampling, flotation and residue sorting was carried out by SCCAS before being sent to the writer for assessment. The sampling strategy was to take bulk samples from dateable deposits. Processing was carried out by using a flotation tank with a 300 micron mesh sieve (Anna West, *pers.comm)*.

The flots were scanned under a low-powered stereo microscope with a magnification range of 10x to 40x. The whole flots were examined. The abundance, diversity and state of preservation of ecofacts and artefacts in each sample were recorded. A magnet was passed across each flot to record the presence or absence of magnetised material or hammerscale. All data was recorded onto paper record sheets for tabulation; these sheets are kept with the author's archive and copies available on request. In addition, digital versions of these tables are contained within the specialist report section of the site archive. The most significant samples (those containing charred plant remains, other than charcoal) are summarised in Table 12.

Identifications were made using modern reference material and reference manuals (such as Beijerinck 1947; Cappers *et al.* 2006; Charles, 1984; Fuller, 2007; Hillman, 1976; Jacomet, 2006). Nomenclature for plants is taken from Stace (Stace, 2010) and for mollusca from Kerney and Cameron (Kerney & Cameron, 1979). Latin names are given once and the common names used thereafter. Due to the low number of non-charcoal charred plant remains these were counted. Uncharred plant remains, fauna and magnetic fragments were given estimate levels of abundance.

Results

Quality and type of preservation of the plant macrofossils

Charred and uncharred (not waterlogged and un-mineralised) plant remains were recorded. Charring occurs when plant material is heated under reducing conditions where oxygen is largely excluded (Boardman & Jones 1990, 2; English Heritage 2002, 12). These conditions can occur in a charcoal clamp, the centre of a bonfire or pit, in an oven or when a building burns down with the roof excluding the oxygen from the fire

(Reynolds 1979, 57). Charring leaves a carbon skeleton resistant to biological and chemical decay (English Heritage 2002, 12).

The uncharred seeds are accompanied by uncharred rootlet fragments, grass (*Poaceae*) stem fragments and molluscs. The presence of uncharred rootlets and terrestrial snail shells, particularly those of the subterranean snail *Ceciliodes acicula* indicates that the soils was probably aerated and bioturbation was taking place. Therefore this plant material is likely to be intrusive.

The charred plant remains

Charred wood/charcoal fragments were present in every sample. Identifiable charcoal was recovered from samples from cremation pit 0322 (G1046), pit 0456/0630 (G1029), pit 0510 (G1037), quarry/reservoir 0698 (G1035), pit 0755 (G1042), pit 0785 (G1034), ring ditch segments 0289 and 0362 (G1022), inner ring ditch segments 0591 and 0808 (G1013), and post hole 0795.

Other charred plant remains (Table 12) were found in samples from eight features. A poorly preserved possible barley (*Hordeum* sp.) grain was found in Sample 50 (pit 0678; G1039, inside the double ring ditch). A poorly preserved wheat (*Triticum* sp.) grain was found in Sample 82 (ditch segment 0595; outer ring ditch G1013). A grain with morphology resembling that of spelt (*T.spelta* L.) was found in Sample 35 (ditch segment 0362; ring ditch G1022); this sample also produced three grains with the morphology of free-threshing type wheat (*T.aestivum*) grains. A grain with morphology resembling einkorn or distorted emmer (*T.monococcum*/*dicoccum* L.) and an indeterminate cereal grain was found in Sample 77 (pit 0560; G1038). Non-cereal charred plant remains consisted of one grass (*Poaceae*) seed in Sample 35, one grass seed fragment and a buttercup-type (*Ranunculus* sp.) seed in Sample 45 (pit 0456; G1029), two sloe stones (*Prunus spinosa* L.) from Sample 55 (pit 0785; G1034) and one fragment of hazelnut shell (*Corylus avellana* L.) from Sample 77 (pit 0560; G1038).

The low number of these charred remains, their generally poor preservation and lack of cereal chaff suggest that they are general background waste rather than any evidence of cereal storage or processing in the area of the excavation. The cereals observed are typical of Iron Age samples in southern and eastern England (Jones, 1981).

Faunal material in the flots

These were dominated by terrestrial molluscs. The writer is not a mollusc specialist so this is a rudimentary account of the molluscs in the samples. Species preferring shade and open ground were present. A lower number of freshwater molluscs were found in Sample 44 (pit 0510; G1037), Samples 53 and 55 (pit 0785; G1034) and possibly in Sample 75 (ditch segment 0289; ring ditch G1022). Other faunal remains consisted of fragments of beetle, earthworm egg cases, *puparia* and uncharred bone fragments were present in very low numbers in most samples.

Inorganic material

Magnetic fragments had been extracted during processing and each flot was scanned for hammerscale. Only one sample, sample 29 (cremation pit 0322; G1046) contained a fragment of spheroidal hammerscale, the type produced form the solidification of droplets of liquid slag during primary smithing (Starley, 1995). The other magnetised fragments appeared to be more geological than metallic.

Discussion of the plant macrofossils

The plant remains in these samples were very thinly spread with a low (<1) number of items per litre of sampled soil. It is unlikely that they can provide any more information than that given in this assessment. No further work is recommended on the plant remains. There is no evidence (such as chaff) for cereal processing, cess disposal or large numbers of plant remains that could indicate plant food/craft waste. These plant remains appear to be general background waste incorporated incidentally.

Sample No.	29	35	45	46	50	55	77	82	92
Context No.	**0321**	**0359**	**0635**	**0636**	**0758**	**0815**	**0561**	**0709**	**0712**
Group No.	**G1046**	**G1022**	**G1029**	**G1029**	**G1039**	**G1034**	**G1038**	**G1013**	**G1035**
Feature type	**Cremation**	**Ditch**	**Pit**	**Pit**	**Pit**	**Pit**	**Pit**	**Ditch**	**Quarry**
Charred cereals									
cf. *Hordeum* sp. (grains)	-	-	-	-	+	-	-	-	-
Triticum sp. (grains)	-	-	-	-	-	-	-	+	-
Triticum cf. spelta L. (grains)	-	+	-	-	-	-	-	-	-
Triticum aestivum L. (grains)	-	+	-	-	-	-	-	-	-
cf.Triticum aestivum L. (grains)	-	-	-	+	-	-	-	-	-
cf. Triticum monococcum L. (grains)	-	-	-	-	-	-	+	-	-
Indeterminate (grains)	-	-	-	-	-	-	+	-	-
Charred Herbs									
Poaceae	-	+	-	-	-	-	-	-	-
Ranunculus sp.	-	-	+	-	-	-	-	-	-
Indeterminate (seeds)	+	-	-	-	-	-	-	-	+
Charred Shrubs/Trees									
Prunus spinosa L.	-	-	-	-	-	++	-	-	-
Corylus avellana L.	-	-	-	-	-	-	+	-	-
Other Plant Remains									
Charcoal >4mm^2	++	-	+	-	++	-	-	+++	++++
Charcoal <4mm^2	++++	+++	+++++	+++++	-	++	+	+++++	+++++

Key to Table 12: + = 1–10, ++ = 11–50, +++ = 51–150, ++++ = 151–250, +++++ = >250

Table 12. Samples with charred remains other than charcoal

Charcoal

A total of 244 fragments of charcoal (87g) are identified at the excavation stage of the project. The majority of these small fragments were noted in ditch fills (0286, 0288, 0391, 0441, 0565, 0597, 0598, 0619, 0708 and 0809) and thereafter a series of pit fills (0397, 0435, 0512, 0712 and 0834).

Most of the contexts only contained very small quantities of charcoal, often weighing less than one gram. The only exception to this was pit fill 0712 which contained around

200 fragments (87g). Unfortunately the context was undated, and only two other find types were noted within it – heat-altered flint and animal bone. Of the sixteen contexts that contained charcoal fragments thirteen of these contained middle Iron Age pottery (0286, 0288, 0397, 0441, 0512, 0565, 0597, 0598, 0619, 0629, 0708, 0809 and 0834).

Wood

Twenty-three fragments of waterlogged, non-structural timber (3,498g) were retrieved from four contexts, principally as four large fragments. They all came from the fills of a sequence of intercutting pits (quarry/reservoir G1035 etc) and were found in association with middle Iron Age pottery.

Two fragments (0759 and 0760) were found in the base of pit 0755 (G1042), fragment 0761 was recovered from between two fills (0411 and 0855) of quarry/reservoir 0697 (G1035), and fragment 0762 was retrieved from the base of pit 0785 (G1034). This fragment appeared on excavation to be partially burnt, although this has yet to be confirmed.

The timber fragments were interpreted on site as scrap/waste, possibly pieces of planking; they have not been assessed by an appropriate specialist.

6. Potential of the data

6.1 Realisation of the Original Research Aims

ORA 1: *What are the extent, form, function and date of ditch G1003, identified in Trench 41?*

Realisation: This ORA could not be addressed fully as ditch G1003 was outside the area of excavation. The continuation of the ditch was not seen in the attenuation tank trench, approximately 6m to the west.

ORA 2: *Is there any evidence for contemporary activity in the vicinity of ditch G1003?*

Realisation: This ORA could not be addressed fully as that part of the site was outside the area of excavation. No features were seen in the attenuation tank trench, approximately 6m to the west of the known position of ditch G1003.

ORA 3: *What are the extent, form, function and date of the postulated double-ditched enclosure G1013/G1016, identified in Trench 49?*

Realisation: The double-ditched enclosure / ring ditch identified provisionally in evaluation trench 49 was confirmed by full excavation. Its extent, form and date are described above (4.4) and its function is discussed below (6.2).

ORA 4: *What is the evidence for activity inside enclosure G1013/G1016?*

Realisation: There was limited evidence for activity within enclosure / double ring ditch G1013/G1016. No structural remains were found (apart from a single post hole) and although a few pits were found only one (G1039) could be dated (middle Iron Age). There was no stratigraphic evidence to confirm that any of these features were contemporary with the encircling double ditches.

ORA 5: *Is there any further evidence for contemporary activity in the area outside of enclosure G1013/1016?*

Realisation: Evidence for activity outside of enclosure / double ring ditch G1013/G1016 was widespread and much of this has been shown to have been contemporary with that feature, dating to the middle Iron Age. The evidence includes a postulated roundhouse and associated ring ditch (G1021/G1024) and a single ring ditch G1022. These and other features are discussed further below (6.2).

ORA 6: *What are the extent, date and likely origin of soil horizon G1019 in Trench 49?*

Realisation: This soil horizon, identified originally as layer 0185 in Trench 49, occurred below the modern topsoil and sealed all archaeological features/deposits, including double ring ditch G1013/G1016. It was recorded during the excavation as 0396 and was seen to extend over an area of approximately 9.0m x 8.6m, coinciding approximately with underlying quarry/reservoir G1035 etc. The deposit contained a small amount of middle Iron Age pottery, but probably not enough to provide an accurate date. It is interpreted provisionally as naturally formed ‘subsoil’ or a deliberate infilling/levelling deposit.

ORA 7: *What are the extent, date and function of ditch G1002? Was it contemporary with the postulated ditched enclosure G1003 (to the east) and the double-ditched enclosure G1013 / G1016 (to the west)?*

Realisation: The evaluation showed that north–south linear ditch G1002 was at least 90m in length, running between Trenches 36 and 55, and it was excavated at five locations. Further work revealed that it continued to the south for an additional 10m or so beyond Trench 55, before running beyond the limits of excavation. Its continuation to the north, beyond Trench 36, was not traced because that area of the site was outside the area of excavation. Several additional ‘segments’ of the ditch were excavated, produced only small quantities of middle Iron Age pottery, a fragment of Roman pottery and some heat-altered flint, such that its date (and function) remain uncertain pending further analysis.

6.2 General discussion of potential

The site archive has the potential to address research objectives dependant on topography and environment, land use, settlement, funerary/ritual monuments and artefact studies, with particular relevance to the middle Iron Age.

Two features (a pit and part of a possible curvilinear ditch or gully) were dated by pottery to the later Neolithic / earlier Bronze Age, and probably represent a low level of occupation on the site during that period.

In the middle Iron Age the site became a focus of activity, seemingly concentrated on the ridge of higher ground crossing the central part of the site. This activity undoubtedly extended beyond the limits of excavation to the east, but the lack of evidence from the Samuel Ward Extension site (Heard, 2010b) suggests that it petered out to the west of the site. Notable features of this period included a probable roundhouse and associated ring ditch (though other interpretations, such as a funerary/ritual monument might be considered), another ring ditch encircling a central pit (perhaps a round barrow, although nothing was found in the pit) and a double ring ditch with several phases of construction and modification that hint at a funerary/ritual function. Two un-urned cremations found near the possible roundhouse provide further evidence for funerary activity, although their dating is uncertain. Possible Iron Age funerary monuments have been identified in Norfolk (Medlycott & Brown 2011, 35) and it is understood that other examples have been identified in Essex, though none are known in Suffolk (Edward Martin, *pers comm*).

By contrast the artefactual evidence, derived mainly from the ring ditches, is suggestive of domestic activity – the pottery assemblage is dominated by cooking and storage vessels and these were found in association with loomweights and a spindle whorl, a range of flint tools and the bones of domesticated and wild animals.

Potential of the stratigraphic archive

For the purposes of this assessment a low level of interpretation has been applied to the stratigraphic archive and this has allowed a provisional site sequence to be determined (see section 4). So far, only selected deposits/features have been assigned to provisional *Groups* of related contexts. Further analysis of the site records,

incorporating the results of existing and proposed work on the finds and environmental archives, would lead to a fuller understanding of the site sequence and its local and regional significance.

In particular, there is considerable potential for further analysis and reporting of the middle Iron Age activity on the site. Locally, this could be considered in terms of its landscape setting and its possible relationship with other later prehistoric sites in the immediate area. On a regional scale the evidence could be compared and contrasted with that from contemporary sites elsewhere in East Anglia. The presence of a number of ring ditch features, and their possible identification as funerary/ritual monuments, is of particular significance. Another important aspect of the site sequence is the degree of inter-cutting of features, notably into the area of the double ring ditch G1013/G1016; after this feature went out of use it was bisected by linear ditch G1025, which in turn was cut by the postulated quarry/reservoir G1035 and subsequent pits. The analysis of these and other stratigraphic relationships would be central to the understanding of changing patterns of land use on the site.

Potential of the finds archive

Introduction

The finds have been quantified and recorded by count and weight and additional detailed catalogues have been made of the pottery, CBM, fired clay, worked flint, small finds, animal bone and cremated human remains. Some categories of finds have been recorded and described adequately in the site archive and in this report, and the following have no potential for further analysis or reporting:

Neolithic / Bronze Age, Roman, medieval and post-medieval pottery
Ceramic building material
Heat-altered flint and other stone
Clay tobacco pipes
Glass
Slag
Iron objects
Medieval and later small finds
Shell

Other categories of finds have varying degrees of potential for further analysis, and these are discussed below.

Middle Iron Age pottery

The site has produced a large assemblage of middle Iron Age pottery, principally domestic vessels associated with cooking and storage and derived mostly from the fills of ring ditches. Analysis of its stratigraphic and spatial distribution, (taking account of the group/land use data arising from the stratigraphic analysis described above) and the identification of joining sherds between contexts/features would be crucial to the interpretation of the site sequence. Detailed analysis of the pottery (including further comparison with contemporary groups in East Anglia) would help to place the evidence for Iron Age activity on the site in its regional context.

Ten sherds of Iron Age pottery (representing diagnostic vessel or rim forms) have been recommendation for illustration, should further analysis and reporting of the pottery be undertaken. Also, a small amount of prehistoric pottery was recovered from environmental samples but was not included in this assessment; these sherds should be assessed and incorporated in any further analysis of the pottery.

Fired clay

The fired clay assemblage has been fully identified and recorded and none of the material has been recommended for illustration. The distinctive chalk-based fabric could be compared with fired clay assemblages from contemporary sites in the region, and analysis of the stratigraphic and spatial distribution of the fired clay assemblage as a whole might help to clarify its potential use.

Worked flint

Further analysis of the worked flint, in relation to its stratigraphic and spatial distribution and its association with middle Iron Age pottery, would contribute towards the better understanding of the nature of occupation on the site. The worked flint could also be compared with contemporary assemblages within the East Anglian region.

Prehistoric small finds

Four pottery small finds, identified provisionally as ‘placed deposits’, require more detailed reporting by an appropriate specialist, and the prehistoric loomweights and the spindle whorl will need to be discussed in any subsequent site report since they provide important evidence for the nature of occupation on the site. The complete loomweight SF5010 and the spindle whorl SF5017 are of particular interest and have been recommended for illustration.

Animal bone

Although the animal bone assemblage is small compared to the ceramic assemblage it provides important information on the nature of occupation on the site in the middle Iron Age. Further analysis of the animal bone would include the selection of suitable material for measurement to determine age, stature and breed. Bone that cannot be identified to species should be separated more fully to determine groups such as ‘large mammal’ and ‘small mammal’ for estimation of stock at this site. Material should be examined further for butchering evidence, noting locations of butchering and types. The pathologies already observed and any additional indicators of pathology discovered as a result of further analysis need to be examined in more detail to determine their cause; this should provide some additional information on health and husbandry of the stock at this site.

The antler in this assemblage should be examined to determine species and to record any modifications that have occurred; the remains should be recorded in the small finds system if necessary. The assemblage should be compared with those from contemporary sites, regionally and nationally.

Analysis of the animal bone should be carried out in the light of updated stratigraphic information (group and land use data) as little temporal and spatial analysis was undertaken at assessment level. Any relevant material from sieved samples that was not available for the assessment should be considered as part of the analysis.

Charcoal

The charcoal assemblage has been recorded in full and no further work on the material is required unless fragments are required for radiocarbon dating; this cannot be determined until further stratigraphic analysis has been undertaken.

Wood

The wood fragments from the sequence of large pits (G1035 etc) need to be assessed by a timber specialist – for species identification, evidence of use, tool marks, etc. They might be suitable for radiocarbon dating or dendrochronology; this would be particularly useful given that the ceramic dating evidence for the pit sequence is not conclusive.

Potential of the environmental archive

Plant macrofossils and associated evidence from selected samples have been quantified and described adequately in this assessment and no further analysis of this material is recommended.

The assessment has indicated that the survival of organic remains on the site is poor, and it is proposed that the processing and assessment of the remaining samples is (generally) not appropriate. The exceptions to this would be those samples that, in the light of further stratigraphic analysis, might provide additional evidence for cremated human remains and/or material (such as charcoal) with potential for radiocarbon dating. Also, there are nine pot sherds with carbonised residues that might be suitable for radiocarbon dating,

7. Significance of the data

In this section the significance of the results of the fieldwork is considered in terms of the East Anglian Regional Research Framework (Glazebrook, 1997; Brown & Glazebrook, 2000); reference is made also to the recently published update of that document – the Revised Framework for the East of England (Medlycott & Brown, 2011).

Stewart Bryant (in Brown & Glazebrook 2000, 14) points out that the Iron Age in East Anglia has received much less attention than in other areas of southern England, such as Wessex and the Thames valley, and stresses the need to encourage further research in this part of the country. He identifies several gaps in our knowledge of the period, including the following that are considered pertinent to this site:

Chronology: a clear chronological framework for the Iron Age in East Anglia is absent, due largely to a relative lack of closely datable artefacts and of deposits with absolute dates derived from, for example, radiocarbon dating.

Location and distribution of settlements: known Iron Age settlements in the region are thought to represent only a small proportion of the true figure, due largely to the difficulty of identifying sites on aerial photographs (especially in areas with clay soils) and the relative lack of excavated sites in those same clay-land areas.

Full analysis and publication of pottery assemblages: there are few published examples of Iron Age pottery assemblages in East Anglia that have been subject to full analysis and quantification.

Bryant goes on to propose a number of Research Topics for the East Anglian Iron Age, of which the following might usefully be addressed by the evidence from this site:

Chronology**:** the application of absolute dates derived from radiocarbon analysis and dendrochronology to pottery assemblages that have a low proportion of residual forms.

Social organisation and settlement form and function in the Early and Middle Iron Age: in particular, the recognition of patterns of differing social organisation that are linked to settlement form should be considered.

Artefact production and distribution: this includes the role of flint manufacturing during the Iron Age.

The Revised Framework for the East of England (Medlycott & Brown, 2011) reviews the progress that has been made in addressing Bryant's list of proposed Research Topics, and suggests a number of Specific Themes for future Iron Age research. Of these, the following have particular relevance to this site:

Dating and chronology: this continues to be a central concern, and the need to finalise the dating of the appearance of middle Iron Age pottery is highlighted, as is the necessity of applying absolute dating evidence (radiocarbon and dendrochronology) to middle Iron Age pottery assemblages.

Finds studies: the development of regional pottery sequences and the establishment of a chronology for pottery assemblages are still important areas of research that need to be addressed. The role of flint working in the Iron Age continues to be understood poorly.

Settlement types, distribution, density and dynamics: in particular, land use within and around settlements, the importance of geology and topography and the way in which settlements relate to natural resources and lines of communication.

The chronology, distribution and range of types of Iron Age burial evidence: this topic includes the need to better understand how and why inhumation and cremation practices were employed, and the use of funerary monuments such as barrows and mortuary enclosures.

8. Analysis and reporting: aims and objectives

8.1 Revised Research Aims

RRA 1: Can further analysis of the stratigraphic archive provide a better understanding of the temporal and spatial development of the site, particularly during the middle Iron Age? Also, can the undated features be understood more fully through further analysis?

RRA 2: An oval arrangement of post holes and an associated ring ditch have been interpreted as a possible middle Iron Age roundhouse. Can this interpretation be confirmed by comparison with similar structures elsewhere in the region?

RRA 3: At least two other middle Iron Age ring ditches were found. What functions did they serve, and how do they compare with similar features elsewhere in the region?

RRA 4: What were the date and functions of the large, intercutting pits (G1035 etc) adjacent to the double ring ditch?

RRA 5: Several fragments of wood were recovered from the fills of these pits. What species were they, do they show any evidence of working, and are they suitable for dendrochronology that might help to date the pits?

RRA 6: How are the middle Iron Age pottery and associated finds (particularly worked flint and fired clay) distributed across the site, and can the patterns of distribution provide further information on land use?

RRA 7: How do the middle Iron Age pottery and flint assemblages compare to others in the East Anglian region?

RRA 8: The animal bone assessment suggests that during the middle Iron Age the occupants of the site were dependant on domestic stock, with wild animals supplementing their needs. How does the animal bone assemblage compare to those from contemporary sites in the region?

RRA 9: How is the animal bone distributed across the site, and can the patterns of distribution provide further information on land use?

RRA 10: Two un-urned cremations have been identified during the assessment. Are there any other features that might contain cremated human remains?

RRA 11: Can radiocarbon dating provide absolute dates to help refine the chronological sequence and to more accurately date features for which the artefactual evidence is inconclusive, such as the two cremations?

RRA 12: How can the evidence from this site contribute to a wider discussion on the nature of prehistoric settlement in the Stour valley and beyond?

8.2 Analytical report synopsis

It is proposed that following the post-excavation analysis of the stratigraphic, finds and environmental archives the results of the fieldwork should be described in greater detail in an analytical report, to be made available as a 'grey literature' report *via* the OASIS on-line archaeological database.

The report would include a phase- and period-based account of the site sequence, integrated with finds and environmental evidence; it would concentrate on the evidence for the middle Iron Age occupation of the site. The Revised Research Aims stated above (8.1) would be used to place the evidence in its broader context.

The text would be accompanied by relevant maps and plans, representative photographs, section drawings and finds illustrations.

Depending on the significance of the results of the analysis it is possible that the Curatorial Officer will require a further stage of reporting, such as a summary in the county journal *Proceedings of the Suffolk Institute of Archaeology and History* or as part of a more thematic publication incorporating the results from several sites in the county.

9. Analysis and reporting: task sequence

The following tasks are proposed in order to complete the stratigraphic, finds and environmental analysis, leading to the production of a full analytical report:

9.1 Stratigraphic method statement

Task 1: Analyse the stratigraphic archive, with particular reference to finds and environmental data, in order to define groups, phases and periods.

Task 2: Write descriptions of stratigraphic groups, phases and periods.

Task 3: Carry out research in relation to middle Iron Age settlement and land use in East Anglia.

9.2 Finds and environmental method statement

Task 4: Prehistoric pottery – full analysis, research and draft report text; catalogue of illustrated sherds.

Task 5: Fired clay – spatial and temporal analysis; summary report preparation.

Task 6: Worked flint – full analysis and draft report text.

Task 7: Prehistoric small finds (pottery, spindle whorl and loomweights – research and draft report text.

Task 8: Animal bone – full analysis, research and draft report text.

Task 9: Wood – assessment and reporting.

Task 10: Environmental samples – possible further processing for the recovery of cremated bone.

Task 11: Cremated human remains – possible further assessment and reporting.

Task 12: Compile/edit specialist finds reports, catalogues and appendices.

Task 13: General tasks (ordering work, preparation of finds and liaison with specialists, illustrators etc., archiving).

9.3 Graphics method statement

Task 14: Production of draft plans for stratigraphic phases and periods.

Task 15: Production of draft section drawings.

Task 16: Production of final plans and sections for report.

Task 17: Pottery illustration (ten sherds).

Task 18: Small finds (loomweight & spindle whorl) illustration.

9.4 Radiocarbon dating method statement

Task 19: Selection of samples with greatest potential for analysis.

Task 20: Radiocarbon dating procedure.

Task 21: Integration of results with stratigraphic and finds archives.

9.5 Photographic method statement

Task 22: Selection of images for analytical report.

Task 23: Preparation/manipulation of images for analytical report.

9.6 Analytical report text method statement

Task 24: Production of draft report.

Task 25: Copy editing of report.

Task 26: Specialist edit and corrections.

9.7 Project management method statement

Task 27: General project management.

Task 28: External reader.

Task 29: Subsequent corrections.

Task 30: Proof reading and indexing.

Task 31: Archiving.

9.8 Summary of tasks

No.	Description of task	Staff	Days	Cost
Stratigraphic				
1	Stratigraphic analysis	KH	20	
2	Phase/period descriptions	KH	5	
3	Research	KH	10	
Finds				
4	Pottery – analysis, report & catalogue	SP	3	
5	Fired clay – analysis & report	AF	1	
6	Worked flint – analysis & report	SB	2	
7	Small finds – research, report & catalogue	SP	0.25	
8	Animal bone – analysis, research & report	JC	2	
9	Wood – assessment and reporting	RD	1	
10	Environmental – possible further processing	AW	0.5	
11	Cremated bone – possible further assessment/reporting	SA	0.5	
12	Compile/edit specialist finds reports etc	AF	3	
13	General finds tasks (ordering, etc)	AF	1	
	Consumables (archive boxes, transport etc)			
Graphics				
14	Draft phase/period plans	KH	3	
15	Draft section drawings	KH	3	
16	Report plans & sections	CB	10	
17	Pottery illustration	SH	1.25	
18	Small finds illustration	SH	0.25	
Radiocarbon dating				
19	Selection of samples for C14 dating	KH	0.25	
20	C14 dating (up to ten @ £290 each)	SUERC	n/a	
21	Integration of C14 results	KH	0.5	
Photographic				
22	Selection of photographs for report	KH	0.5	
23	Preparation of photographs for report	CB	0.5	
Publication text				
24	Production of draft analytical report	KH	15	
25	Internal editing of report	RG	1	
26	Specialist edit & corrections	SB/SP	0.5	
Project management				
27	General project management	RG	3	
28	External reader	?	1	
29	Subsequent corrections	KH	1	
30	Proof reading & indexing	RG	2	
31	Archiving	KH	1	
		Total cost		

Table 13. Summary of tasks

KH = Kieron Heard (Project officer and principal author, SCCAS)

RG = Richenda Goffin (Post-excavation manager, SCCAS)

CB = Crane Begg (Graphics manager, SCCAS)

AF = Andy Fawcett (Finds officer, SCCAS)

SA = Sue Anderson (External specialist – Cremated human remains)

RD = Richard Darrah (External specialist – Wood)

JC = Julie Curl (External specialist – Animal bone)

SH = Sue Holden (External specialist – Illustrator)

SP = Sarah Percival (External specialist – Prehistoric pottery)

SB = Sarah Bates (External specialist – Worked flint)

SUERC = Scottish Universities Environmental Research Centre

10. Acknowledgements

The fieldwork and post-excavation assessment were commissioned and funded by Suffolk County Council (Corporate Property).

Jess Tipper (SCCAS, Conservation Team) provided the Brief and Specification and monitored the fieldwork. Rhodri Gardner (SCCAS, Acting Contracts Manager) managed the project.

Kieron Heard directed the fieldwork and was assisted by Andy Beverton, Rob Brooks, Bill Brookes, Tim Browne, Phil Camps, Simon Cass, Roy Damant, Mike Feider, Mike Fisk, Steve Manthorpe, Simon Picard, John Sims, Duncan Stirk, Adam Yates (SCCAS, Field Team); Preston Boyles, Tony Blowers, Ian Cropper, Trevor Ennis, John Hewitt, Andy Letch, Pippa Sparrow, Henry Springett (Essex County Council Field Archaeology Unit); Ben Carroll, Catherine Godsiffe, Clare Lockwood, Tom Mahoney, Gary Manning, (Albion Archaeology).

Jonathan Van Jennians processed the finds and Andy Fawcett assessed and reported on the finds and environmental evidence, with contributions by Sue Anderson (cremated human remains), Sarah Bates (worked flint), Andrew Brown (small finds), Julie Curl (animal bone), Lisa Gray (plant macrofossils and other remains) and Sarah Percival (prehistoric pottery and small finds). The environmental samples were processed by Anna West. Graphics are by Crane Begg.

Derek Ashman of Higher View Aerial Photography Ltd took the elevated camera photographs and Commission Air took the aerial photographs.

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Appendix 1. Brief and specification

Brief and Specification for Excavation

SCC WESTFIELD REPLACEMENT, CHALKSTONE WAY, HAVERHILL, SUFFOLK

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

1. The nature of the development and archaeological requirements

1.1 A planning application has been made to Suffolk County Council for the erection of a new school complex on land to the north of Chalkstone Way, Haverhill, Suffolk (TL 6810 4598).Please contact the applicant for an accurate plan of the site.

The Planning Authority has been advised that any consent should be conditional upon an agreed programme of work taking place before development begins, in accordance with Policy HE12.3 of PPS 5 to record and advance understanding of the significance of the heritage asset before it is damaged or destroyed.

1.2 The site is located at *c*.95.00m OD (max.). The underlying dominant geology of the site comprises deep clay soils of the Hanslope series derived from the underlying chalky till.

1.3 The proposed development lies in an area of archaeological importance recorded in the County Historic Environment Record. A trenched archaeological evaluation of the application area has been undertaken in February 2010 by Suffolk County Council Archaeological Service/Field Team. The evaluation defined prehistoric occupation features, in the form of ditches, pits, post-holes and finds (HER no. HVH 072; SCCAS Report 2010/049).

1.4 Any works causing significant ground disturbance have the potential to damage any archaeological deposit that exists.

1.5 The Conservation Team of the Archaeological Service of Suffolk County Council (SCCAS/CT) has been requested to provide a brief and specification for the archaeological recording of archaeological deposits that will be affected by development – archaeological mitigation in the form of preservation by record. An outline specification, which defines certain minimum criteria, is set out below.

1.7 Failure to comply with the agreed methodology may lead to enforcement action by the LPA, if planning permission is approved with a condition relating to archaeological investigation.

2. Brief for Archaeological Investigation

2.1 An archaeological excavation, as specified in Section 3, is to be carried out prior to development:

An archaeological excavation, as specified in Section 3, is to be carried out prior to the development, in an area which measures *c*.10,200m2 in area.

2.2 All other groundworks must be subject to archaeological monitoring and recording. Opportunity must be given to the contracted archaeologist to hand excavate any discrete archaeological features which appear during earth moving operations, retrieve finds and make measured records as necessary. Where it is necessary to see archaeological detail one of the soil faces is to be trowelled clean.

2.3 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 the consent. Adequate time is to be allowed for archaeological recording of archaeological deposits during excavation.

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 and publication. 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 Written Scheme of Investigation (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 SCCAS/CT (9-10 The Churchyard, Shire Hall, Bury St Edmunds IP33 2AR; telephone/fax: 01284 352443) for approval by the Planning Authority (assuming this work is undertaken as a condition of the planning permission). The work must not commence until this office has approved both the archaeological contractor as suitable to undertake the work, and the WSI as satisfactory.

2.6 The 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 WSI will be an assessment of the project in relation to the Regional Research Framework (*E 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').

2.7 Before any archaeological site work can commence it is the responsibility of the developer to provide the archaeological contractor with either the contaminated land report for the site or a written statement that there is no contamination. The developer should be aware that investigative sampling to test for contamination is likely to have an impact on any archaeological deposit which exists; proposals for sampling should be discussed with SCCAS/CT before execution.

2.8 The responsibility for identifying any restraints on archaeological field-work (e.g. Scheduled Monument status, Listed Building status, public utilities or other services, tree preservation orders, SSSIs, wildlife sites &c.) rests with the commissioning body and its archaeological contractor. The existence and content of the archaeological brief does not over-ride such restraints or imply that the target area is freely available.

2.9 All arrangements for the excavation of the site, the timing of the work, access to the site, the definition of the precise area of landholding and area for proposed development are to be defined and negotiated with the commissioning body.

2.10 The developer or his archaeologist will give SCCAS/CT ten 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

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

3.1 Topsoil and subsoil deposits must be removed to the top of the first archaeological level by an appropriate machine with a back-acting arm fitted with a toothless bucket. All machine excavation is to be under the direct control and supervision of an archaeologist.

3.2 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. Full construction work must not begin until excavation has been completed and formally confirmed by SCCAS/CT.

3.3 The top of the first archaeological deposit may be cleared by machine, but must then be cleaned off by hand. There is a presumption that excavation of all archaeological deposits will be done by hand unless it can be shown there will not be a loss of evidence by using a machine. The decision as to the proper method of further excavation will be made by the senior project archaeologist with regard to the nature of the deposit.

3.4 All features which are, or could be interpreted as, structural must be fully excavated. Post-holes and pits 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 SCCAS/CT, and must be confirmed in writing.

3.5 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 (in some instances 100% may be requested).

b) 10% of the fills of substantial linear features (ditches, etc) are to be excavated (min.). 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. For linear features, 1.00m wide slots (min.) should be excavated across their width.

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

3.7 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 WSI must provide details of a comprehensive sampling strategy for retrieving and processing biological remains (for palaeoenvironmental and palaeoeconomic investigations and also for absolute dating), 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 Dr Helen Chappell, 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.

3.8 A finds recovery policy is to be agreed before the project commences. It should be addressed by the WSI. Sieving of occupation levels and building fills will be expected.

3.9 Use of a metal detector will form an essential part of finds recovery. Metal detector searches must take place at all stages of the excavation by an experienced metal detector user.

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

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

3.12 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 four weeks of excavation.

3.13 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 WSI.

3.14 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 SCCAS/CT.

3.15 A photographic record of the work is to be made, consisting of both monochrome photographs and colour transparencies/high resolution digital images, and documented in a photographic archive.

3.16 Excavation record keeping is to be consistent with the requirements the County Historic Environment Record and compatible with its archive. Methods must be agreed with SCCAS/CT.

4. General Management

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

4.2 Monitoring of the archaeological work will be undertaken by SCCAS/CT. A decision on the monitoring required will be made by SCCAS/CT on submission of the accepted WSI.

4.3 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 evaluation there must also be a statement of their responsibilities or a CV for post-excavation work on other archaeological sites and publication record. Ceramic specialists, in particular, must have relevant experience from this region, including knowledge of local ceramic sequences.

4.4 Provision should be included in the WSI for outreach activities, for example, in the form of an open day and/or local public lecture and/or presentation to local schools.

4.5 It is the archaeological contractor's responsibility to ensure that adequate resources are available to fulfill the Specification.

4.6 A detailed risk assessment and management strategy must be presented for this particular site.

4.7 The WSI must include proposed security measures to protect the site and both excavated and unexcavated finds from vandalism and theft.

4.8 Provision for the reinstatement of the ground and filling of dangerous holes must be detailed in the WSI. However, trenches should not be backfilled without the approval of SCCAS/CT.

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

4.10 Detailed standards, information and advice to supplement this specification are to be found in *Standards for Field Archaeology in the East of England*, East Anglian Archaeology Occasional Papers 14, 2003. The Institute of Field Archaeologists' *Standard and Guidance for Archaeological Excavation* (revised 2001) should be used for additional guidance in the execution of the project and in drawing up the report.

5. Archive Requirements

5.1 Within four weeks of the end of field-work a written timetable for post-excavation work must be produced, which must be approved by SCCAS/CT. 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.

5.2 The project manager must consult the County Historic Environment Record Officer (Dr Colin Pendleton) to obtain a Historic Environment Record number for the work. This number will be unique for the site and must be clearly marked on any documentation relating to the work.

5.3 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 Historic Environment Record (The County Store) or museum in Suffolk.

5.4 A complete copy of the site record archive must be deposited with the County Historic Environment Record within 12 months of the completion of fieldwork. It will then become publicly accessible.

5.5 The data recording methods and conventions used must be consistent with, and approved by, the County Historic Environment 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.

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

5.7 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).

5.8 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).

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

5.10 Every effort must be made to get the agreement of the landowner/developer to the deposition of the full site archive, and transfer of title, with the intended archive depository before the fieldwork commences. 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, scientific analysis) as appropriate.

5.11 The project manager should consult the intended archive depository before the archive is prepared regarding the specific requirements for the archive deposition and curation, and regarding any specific cost implications of deposition.

5.12 If the County Store is the intended location of the archive, the project manager should consult the SCCAS Archive Guidelines 2010 and also the County Historic Environment Record Officer regarding the requirements for the deposition of the archive (conservation, ordering, organisation, labelling, marking and storage) of excavated material and the archive. 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 WSI.

5.13 The WSI should state proposals for the deposition of the digital archive relating to this project with the Archaeology Data Service (ADS), and allowance should be made for costs incurred to ensure proper deposition (http://ads.ahds.ac.uk/project/policy.html).

5.14 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 SCCAS/CT by the end of the calendar year in which the evaluation work takes place, whichever is the sooner.

5.15 Where appropriate, a digital vector trench plan should be included with the report, which must be compatible with MapInfo GIS software, for integration in the County Historic Environment Record. AutoCAD files should be also exported and saved into a format that can be can be imported into MapInfo (for example, as a Drawing Interchange File or .dxf) or already transferred to .TAB files.

5.16 At the start of work (immediately before fieldwork commences) an OASIS online record http://ads.ahds.ac.uk/project/oasis/ must be initiated and key fields completed on Details, Location and Creators forms.

5.17 All parts of the OASIS online form must be completed for submission to the County Historic Environment Record. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).

6. Report Requirements

6.1 An assessment 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.

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

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

6.4 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.

6.5 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.

6.6 The results should be related to the relevant known archaeological information held in the County Historic Environment Record.

6.7 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 nor costed in detail until this brief and specification is satisfied. However, the developer should be aware that there is a responsibility to provide a publication of the results of the programme of work.

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

6.9 The involvement of SCCAS/CT should be acknowledged in any report or publication generated by this project.

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Date: 7 July 2010

Reference: / Westfield-Haverhill2010

Appendix 2. Worked flint summary

Context	Type	Quantity	Non-struck
0013	shatter	1	0
0017	flake	1	0
0026	retouched fragment	1	0
0026	scraper	1	0
0027	notched flake	1	0
0034	flake	1	0
0034	non-struck fragment	0	1
0036	flake	1	0
0041	flake	1	0
0045	flake	1	0
0050	retouched flake	1	0
0051	struck fragment	1	0
0052	flake	1	0
0053	flake	1	0
0053	non-struck fragment	0	1
0056	spurred piece	1	0
0056	retouched flake	1	0
0060	flake	1	0
0060	spurred piece	1	0
0062	struck fragment	1	0
0063	flake	2	0
0066	flake	1	0
0070	flake	1	0
0182	blade	1	0
0235	flake	1	0
0235	shatter	1	0
0274	flake	3	0
0274	shatter	2	0
0276	retouched fragment	1	0
0283	flake	1	0
0285	blade	1	0
0286	flake	1	0
0286	spall	1	0
0290	flake	1	0
0304	flake	1	0
0346	blade	1	0
0361	blade	1	0
0370	flake	1	0
0379	flake	2	0
0379	non-struck fragment	0	1
0384	end scraper	1	0
0384	scraper	1	0
0384	utilised flake	1	0
0391	non-struck fragment	0	1
0391	utilised fragment	1	0
0395	flake	3	0
0395	spall	5	0
0396	notched flake	1	0
0397	utilised flake	1	0
0409	multi platform flake core	1	0
0410	utilised flake	1	0
0414	shatter	1	0
0417	flake	2	0
0437	flake	2	0
0439	retouched flake	1	0
0440	utilised blade	1	0

Context	Type	Quantity	Non-struck
0441	flake	1	0
0441	retouched flake	1	0
0477	flake	1	0
0488	flake	1	0
0512	flake	1	0
0539	shatter	1	0
0541	shatter	3	0
0552	core/tool	1	0
0552	flake	1	0
0552	shatter	1	0
0552	non-struck fragment	0	1
0557	flake	2	0
0557	spall	1	0
0564	flake	4	0
0597	piercer	1	0
0598	non-struck fragment	0	1
0605	flake	1	0
0605	shatter	2	0
0622	non-struck fragment	0	1
0628	flake	2	0
0629	shatter	2	0
0629	retouched blade	1	0
0632	flake	1	0
0633	burnt fragment	3	0
0633	flake	4	0
0633	shatter	2	0
0633	non-struck fragment	0	1
0634	flake	1	0
0634	non-struck fragment	0	1
0634	utilised fragment	2	0
0646	flake	2	0
0679	flake	2	0
0711	blade-like flake	1	0
0718	flake	1	0
0718	non-struck fragment	0	1
0725	blade-like flake	1	0
0725	piercer	1	0
0726	spall	1	0
0727	flake	7	0
0730	flake	2	0
0752	hammerstone flake	1	0
0784	utilised fragment	1	0
0793	flake	1	0
0809	flake	1	0
0815	flake	1	0
0834	non-struck fragment	0	1
0838	utilised fragment	1	0
0845	burnt fragment	1	0
0845	non-struck fragment	0	1

Appendix 3. Animal bone quantifications

Type	Date							
	?Prehistoric	Prehistoric	Roman /Prehistoric	Roman	Medieval & Prehistoric	E19th	Undated	Feature Type Total
Quarry		135g					162g	297g
Ditch	7g	11879g	11g		19g		2023g	13939g
Finds		1651g					57g	1708g
Gully		139g					49g	188g
Layer		669g					11g	680g
Linear		5g					11g	16g
Pit		767g		3g			435g	1205g
Post hole		193g					63g	256g
Roots disturbance							3g	3
Stake hole							1g	1g
Unspecified		251g				6g	254g	511
Total by Date	**7g**	**15689g**	**11g**	**3g**	**19g**	**6g**	**3069g**	**18804g**

Quantification of the faunal assemblage by weight, feature type and period

Type	Date							
	?Prehistoric	Prehistoric	Roman /Prehistoric	Roman	Medieval & Prehistoric	E19th	Undated	Species Total
Bird		1						1
Cattle		231				2	42	275
Deer -Red		13						13
Equid		18					1	19
Mammal	3	2445	28	1	8		458	2943
Pig/boar		34					4	38
Sheep/goat	1	89					14	104
Small Mammal							2	2
Total by date	**4**	**2831**	**28**	**1**	**8**	**2**	**521**	**3395**

Quantification (NISP) of species by date

Appendix 4. Cremated human remains: Quantification, measurement and catalogues

Context	Skull			Axial			Upper limb			Lower limb			Unident long bone			Unident	Totals	max skull	max l.b.
	No.	Wt/g	Ave. wt	No.	Wt/g	Ave. wt	No.	Wt/g	Ave. wt	No.	Wt/g	Ave. wt	No.	Wt/g	Ave. wt	Wt/g	Wt/g	(mm)	(mm)
0319	101	24.9	0.25	0	0	0	29	8.6	0.30	58	33.0	0.57	23	3.2	0.14	38.3	108.0	17	34
0321	274	44.7	0.16	25	3.9	0.16	86	30.1	0.35	205	79.0	0.39	86	15.5	0.18	164.6	337.8	22	26

Quantification and measurement

Cremation burial 0319: mature adult

Quantification:	Total weight 108.0g: Skull 101 (24.9g), axial 0 (0g), upper limb 29 (8.6g), lower limb 58 (33.0g), unidentified long bone 23 (3.2g), unidentified (38.3g). 4.3g femur selected for radiocarbon dating.
Description:	Unurned cremation burial.
Condition:	Fair, mostly fairly small fragments. Some frags abraded.
Determination of age:	Size of bones, fusion of cranial sutures.
Determination of sex:	No evidence.
Identified elements:	Fragments of cranial vault, maxilla, 4 tooth roots, distal finger phalanx, femur shaft, tibia shaft, fibula shaft.
Measurements:	Max skull frag size 17mm, max long bone frag size 34mm.
Colours:	White and cream/buff. Occasionally grey inside thicker pieces.
Teeth:	4 root frags, unidentified.
Pathology:	Possible pitting and external thickening of some cranial vault fragments.
Animal bone:	3 frags (1.4g) unburnt bone & 5 frags burnt (1.0g), thick, probably animal.

Cremation burial 0321: adult

Quantification:	Total weight 337.8g: Skull 274 (44.7g), axial 25 (3.9g), upper limb 86 (30.1g), lower limb 205 (79.0g), unidentified long bone 86 (15.5g), unidentified (164.6g). 3.5g tibia selected for radiocarbon dating.
Description:	Unurned cremation burial.
Condition:	Fair, mostly small fragments, a few abraded.
Determination of age:	Size of bones, fusion of epiphyses, tooth roots fully formed.
Determination of sex:	No evidence.
Identified elements:	Fragments of cranial vault, tooth root, vertebral facets, ulna, humerus, distal finger phalanx, leg bone shafts, 2 intermediate toe phalanges.
Measurements:	Max skull frag size 22mm, max long bone frag size 26mm.
Colours:	White and cream/buff. High proportion of grey inside thicker pieces.
Teeth:	23 root frags, unidentified.
Animal bone:	A few frags recorded as unidentified limb and lower limb could be animal bone.

Catalogue of burials 0319 and 0321