Suffolk County Council

A RECORD OF ARCHAEOLOGICAL EVALUATION AND MONITORING

SCCAS REPORT No. 2008/168

Frith Cottage, Alderton
ADT 016

Robert Atfield, Stuart Boulter, Linzi Everett and Rhodri Gardner

www.suffolk.gov.uk/environment/archaeology

Lucy Robinson, **County Director of Economy, Skills and Environment**
Endeavour House, Russell Road, Ipswich, IP1 2BX.

HER Information

Planning Application:	**C/05/2185/FUL**
Date of Fieldwork:	**May 2006 and April 2007**
Grid Reference:	**TM 3416 4176**
Funding Body:	**Mr. & Mrs. Dorey**
Curatorial Officer:	**Jess Tipper**
Project Officers:	**Rob Atfield, Stuart Boulter, Linzi Everett and Rhodri Gardner**
OASIS ID:	**suffolkc1 - 114687**

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Summary

Monitoring of groundworks at Frith Cottage, Alderton, was carried out as a condition of the planning consent.

The earliest activity was represented by a single flint scraper, a residual find in a later feature, and was probably Neolithic in date.

The most significant archaeology encountered related to the previously known ring-ditch. A section through the feature in an excavation for a septic tank revealed a V-shaped profile, with a smaller, possible secondary ring internal to the first. The ring-ditch clearly functioned as a funerary monument as two urned cremations were uncovered during the excavation of footings. Each upturned urn was packed externally with selected stones; in one case these comprised flint pebbles/cobbles, while the other was packed with sandstone/quartzite pebbles/cobbles. The urns themselves have been identified as a regional development of the early to mid Bronze Age Deverel Rimbury tradition. Radiocarbon dating of the cremations provided results broadly consistent with a date in the mid 2nd millennium BC. One of the urns contained an adult female while the other comprised the less complete remains of an individual of indeterminate gender.

One possible medieval feature was recorded along with a few sherds of unstratified medieval pottery.

(Stuart Boulter for Suffolk County Council and Mr. & Mrs. Dorey)

1. Background

A planning application (C/06/2261/FUL) was submitted for the construction of a single dwelling adjacent to the existing Frith Cottage, Alderton (NGR TM 3416 4176) (Fig. 1). Subsequently, a condition placed on the planning consent required a programme of archaeological works to be undertaken and provided for by the applicant.

The site lies at a height of approximately 7m OD overlooking an area of marshland to the south-west. The underlying drift geology comprises glaciofluvial sands and gravels. The perceived archaeological potential for the site was due primarily to its location within a complex ritual landscape recorded in the County Historic Environment Record (HER). Of particular significance is a known ring-ditch of probable Bronze Age date (ADT 016) partially within the development area, the position of which has been extrapolated from rectified aerial photographs by Rog Palmer (Plate 1 and Fig. 2).

In addition, the proposed development lies within 100m of the medieval moated site of Alderton Hall (HER ADT 002) to the south and 150m from the medieval church of St. Andrew (HER ADT 012) to the south-east. There are also recorded scatters of Roman, Saxon and medieval finds in the immediate vicinity (HER ADT 033, 041 and 0042).

In order to mitigate against the damage/loss of archaeological information that would almost certainly occur due to the invasive nature of groundworks associated with the proposed development, a programme of archaeological works was detailed in a Brief and Specification document, dated 31st January 2006, prepared by Dr. Jess Tipper of Suffolk County Council Archaeological Service Conservation Team (hereafter SCCAS/CT) (Appendix I).

Subsequently, Suffolk County Council Archaeological Service Field Team (hereafter SCCAS/FT) were commissioned by the applicant (Mr and Mrs Dorey) to undertake the required archaeological works.

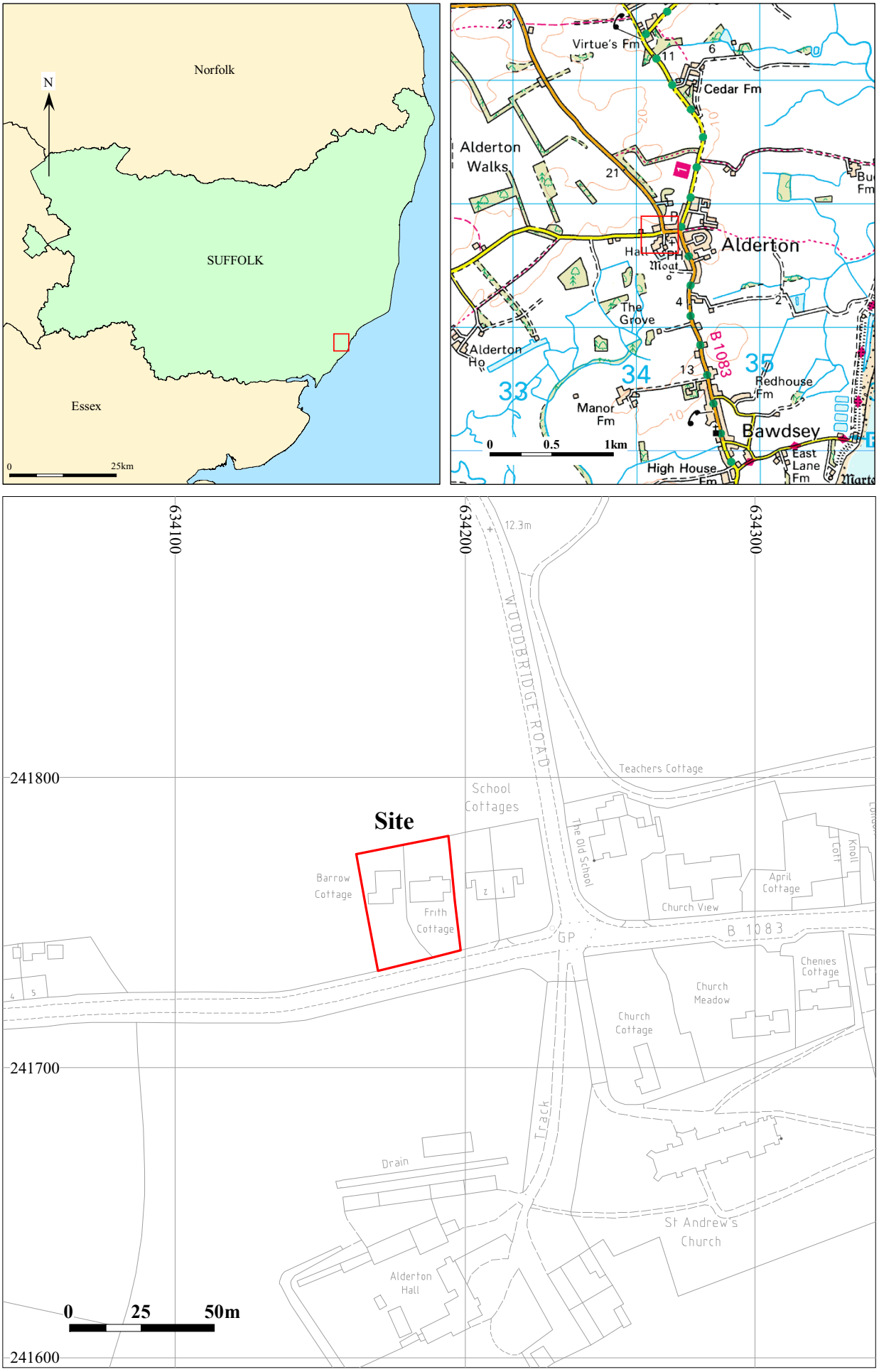

Figure 1. Site Location

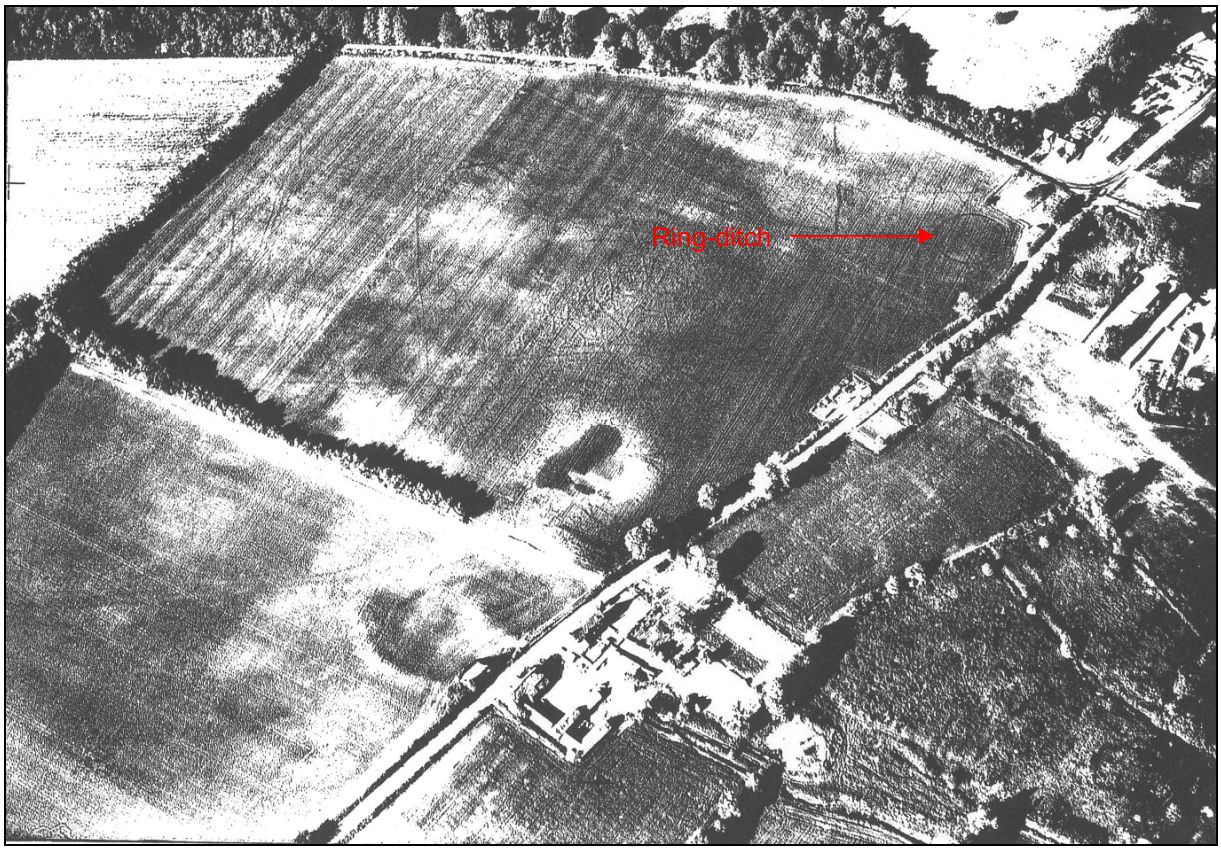

Plate 1 Aerial Photograph BPV34

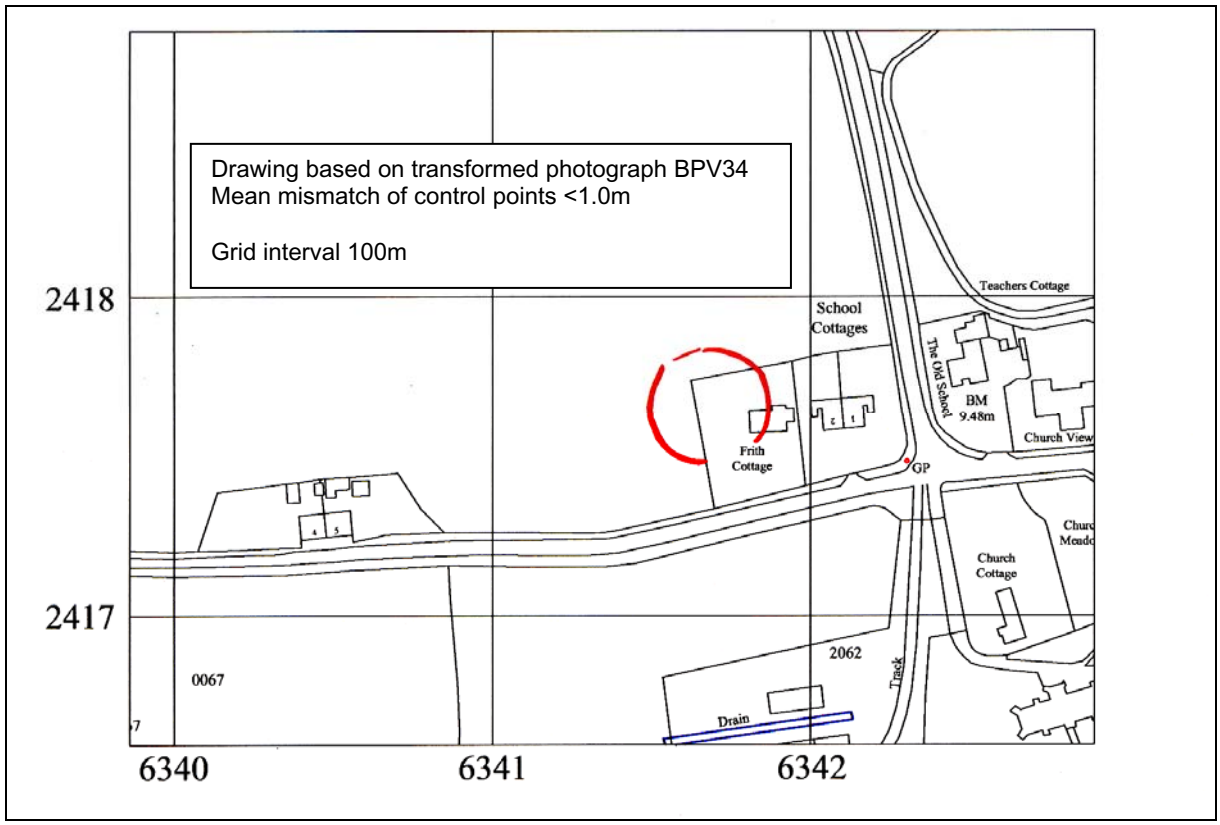

Figure 2. Air photograph rectification (Air Photo Services Cambridge, 2006)

2. Methodology

The archaeological work programme was undertaken in three stages:

1) Trial-trenching (9th May 2006)
2) Monitoring of footing excavations (15th and 16th May 2006)
3) Monitoring of excavations for a septic tank (10th April 2007)

The trial-trench was excavated using a small 360^0 tracked mechanical excavator (minidigger) fitted with a 1.5m wide flat-bladed ditching bucket. All mechanical excavation was carried out under close archaeological supervision until the top of the first undisturbed archaeological deposit or natural subsoil was revealed. Some hand cleaning of the upstanding sections and trench base was then carried out to further clarify the nature of the deposits and locate incised features. The trench was located by triangulation from existing boundaries and landscape features within the site.

All archaeological recording work on the site was carried out under the HER code ADT 016, previously allocated to the ring-ditch when it was identified on aerial photographs. Observed archaeological features and deposits were allocated OP (observable phenomena) numbers and recorded on *pro- forma* context sheets. The excavated features and their sections were recorded in a series of 1:50 scale plans and 1:20 scale section drawings executed in pencil of plastic drafting film.

Site levels were related to Ordnance Datum from a Benchmark of 7.07m OD located on the a buttress on the south-east corner of the chancel of St. Andrews Church. During post-excavation, finds were processed (washed and marked) and quantified by in-house staff, with the data input onto a Microsoft Access 2003 database along with the context records. Where required, specialist finds reports were commissioned and illustration of selected finds was undertaken.

Plans and section drawings were inked onto archive quality plastic drafting film or digitised. Site photographs were added to the SCCAS Photographic Archive held at Shire Hall, Bury St. Edmunds.

A site narrative bringing together all of the stratigraphic and artefactual evidence was prepared (this document).

3. Fieldwork Results

Trial-Trenching

The location of the excavated trial-trench in relation to the proposed new building is shown on Figure 3, along with the location of the only identified feature (ditch 0004) and the projected position of the ring-ditch (as rectified from the aerial photograph).

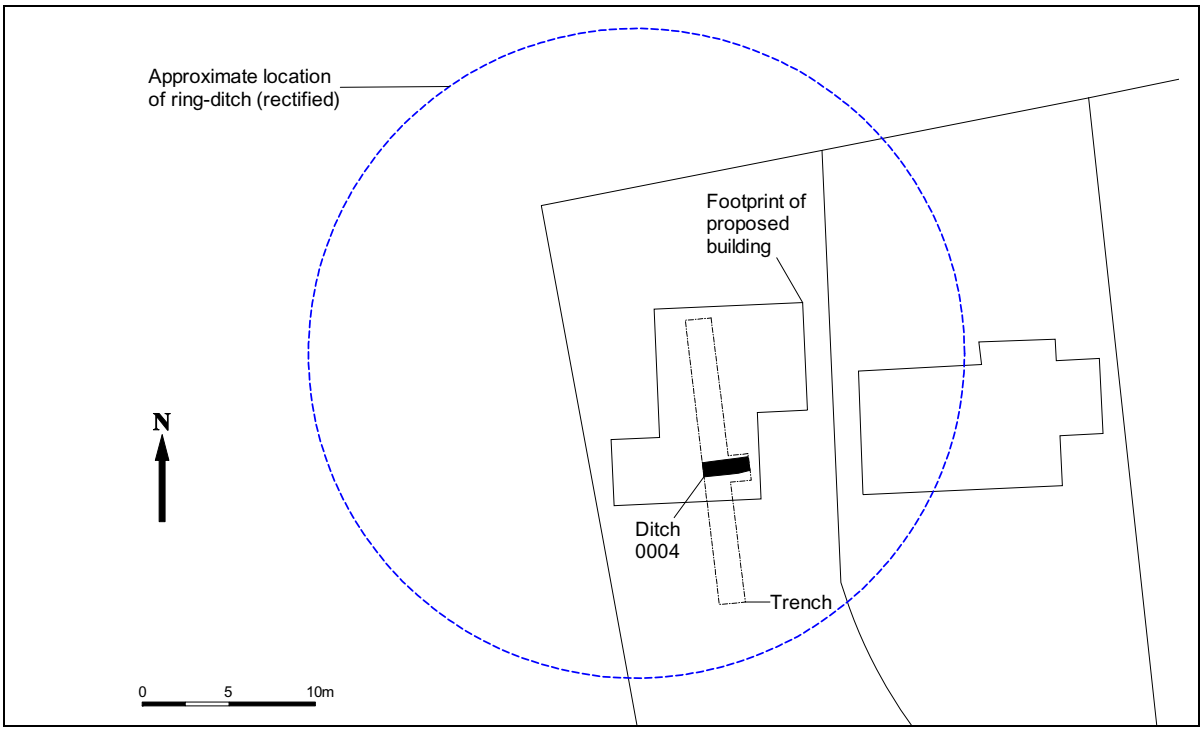

Figure 3. Location of the trial-trench and ditch 0004

A single incised feature was recorded during the evaluation. This was ditch 0004, which was in excess of 2.7m long, 0.8m wide and 0.36m deep. It was aligned east-north-east to west-south-west and appeared (from the limited length exposed) to be straight and parallel sided. It had near-vertical smooth sides with a sharp break to a flat base.

It contained a single fill (0003) of very soft mid greyish brown silty sand with rare oyster shell, pot and flint along with rare small flint pebbles. It had also been heavily affected by root disturbance. Four sherds of medieval pottery were recovered from the excavated section.

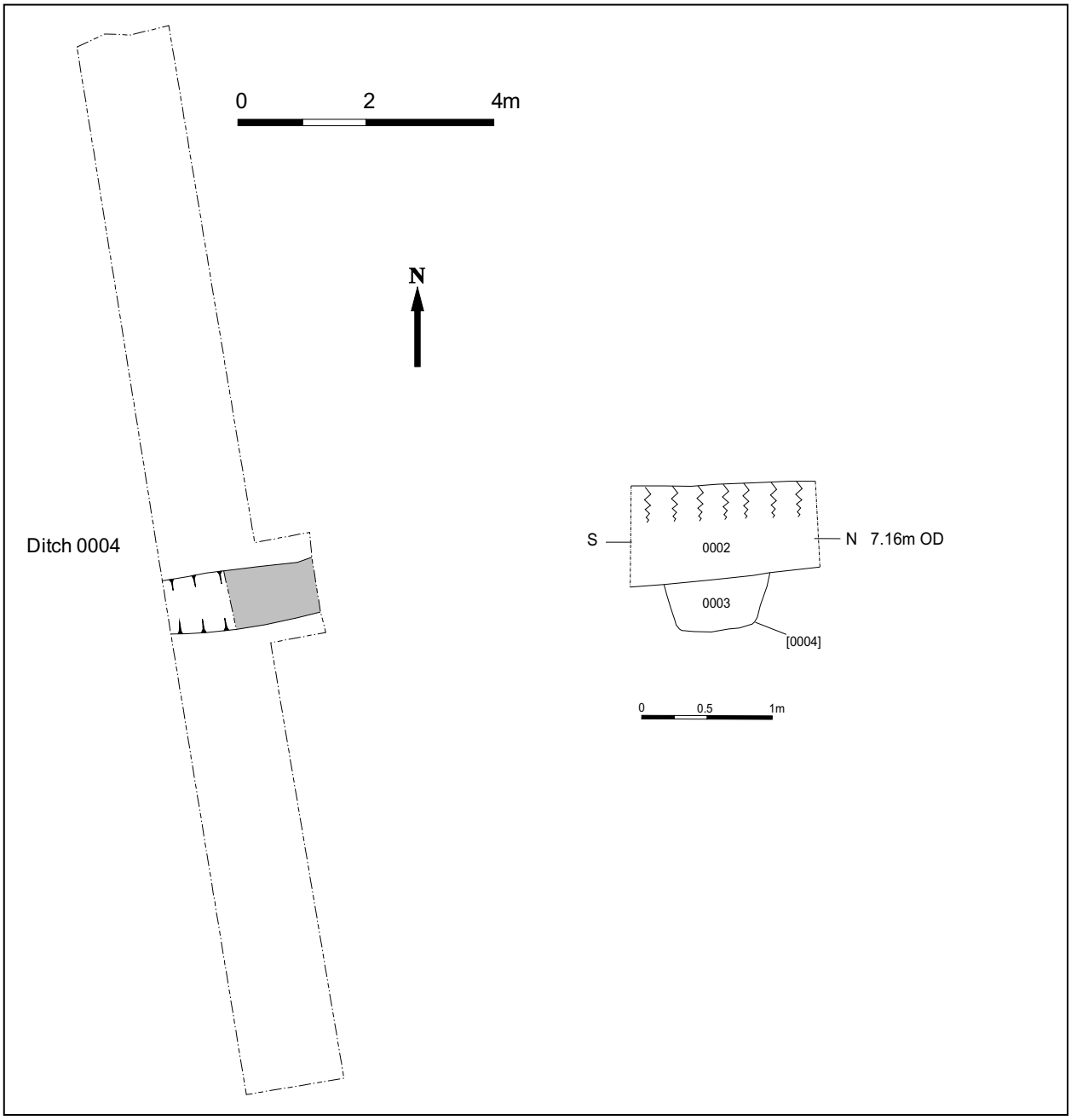

Figure 4. Trench plan and section drawing

Monitoring of footing excavations

Two site visits were made during the excavation of the footing trenches. Figure 5 shows the position of the excavated footings in relation to the earlier trial-trench and the identified features. Also shown is the subsequently monitored septic tank.

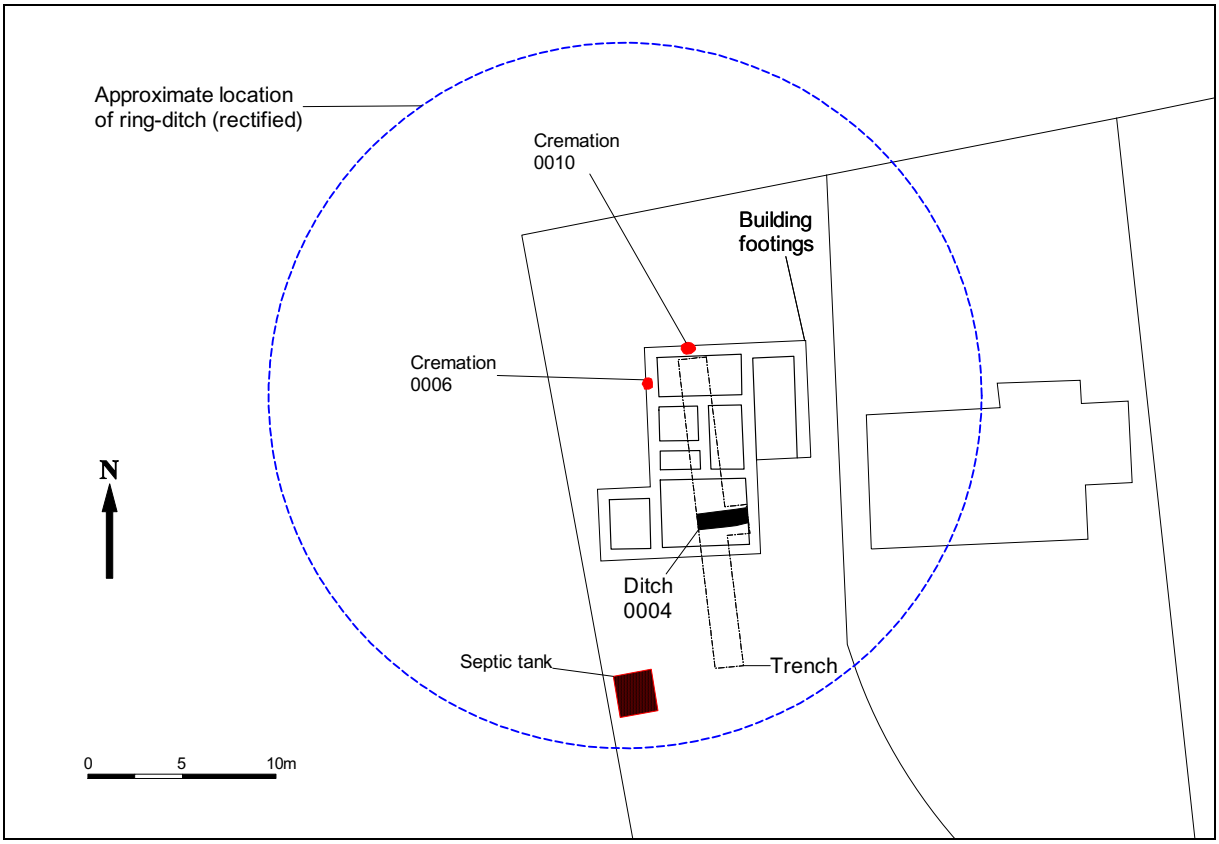

Figure 5. Monitored footing trenches and septic tank

Essentially, the stratigraphy seen throughout the footing trenches was similar to that seen in the trial-trench, comprising 0.4m of very soft mid greyish brown silty sandy loam with very rare small to medium sub-rounded flint pebbles and CBM flecks/lumps along with considerable root disturbance (0002). An underlying subsoil layer (0005) comprised up to 0.5m of soft light orange-brown slightly silty sand with rare small to medium sub-rounded flint pebbles. The naturally occuring geology was characterised by crag sand.

At the time of monitoring, the building footprint had been stripped of topsoil (0002), exposing subsoil 0005 throughout, with the footing trenches cut from this level.

Two features were recorded in the footing trenches, both urned cremations (0006 and 0010) (Fig. 5) located relatively central to the area enclosed by the ring-ditch. The continuation of ditch 0004 was not seen in any of the three north-south trench runs, where it could have been expected if projected on its previously recorded alignment.

Cremation 0006 was located towards the northern end of the western side of the proposed building, mainly within the footing trench, but just continuing under its western edge (Figs. 5 and 6; Plate 1).

While recorded as possibly cutting layer 0005, the cut itself was indistinct (Fig. 6) and the cremation was first seen in the base of the trench where its included urn (0008) and flint packing (0009) was disrupted by the mechanical excavator.

The cremation pit was an irregular oval in shape, measuring 0.7m from north to south and 0.6m from east to west (Fig. 6). While the inverted urn (0008) had been damaged during the excavation of the footings, enough remained intact for it and its contents (fill 0015 and calcined bone 0016) to be to be lifted as a block and processed off site.

The fill of the pit external to the urn (0007) comprised mid greyish brown silty sand. In its upper levels, above the urn, the fill included only rare small stones. However, around the urn itself, there was a deliberate packing of pebble to small cobble-sized stones, mainly flints, with approximately 20% heat-altered (Fig. 6; Plates 1 and 2). The base of the pit appeared to be lined with smaller stones than those encountered around the sides.

Cremation 0010 was uncovered in the northernmost east to west orientated footing run (Fig. 5). Similarly to cremation 0006, cremation 0010 was almost entirely within the footing trench, with only its northern edge beyond the confines of the excavated area (Fig. 7).

Similarly to cremation 0006, the pit was recorded as cutting subsoil layer 0005 although again, its edges were indisitinct above the level of the naturally occurring crag sand (Fig. 7).

The cremation pit was almost circular in plan with a diameter of 0.6m. The fill (0011) external to the included urn (0013) comprised mid-light brown silty sand with some shell derived from the underlying crag sand.

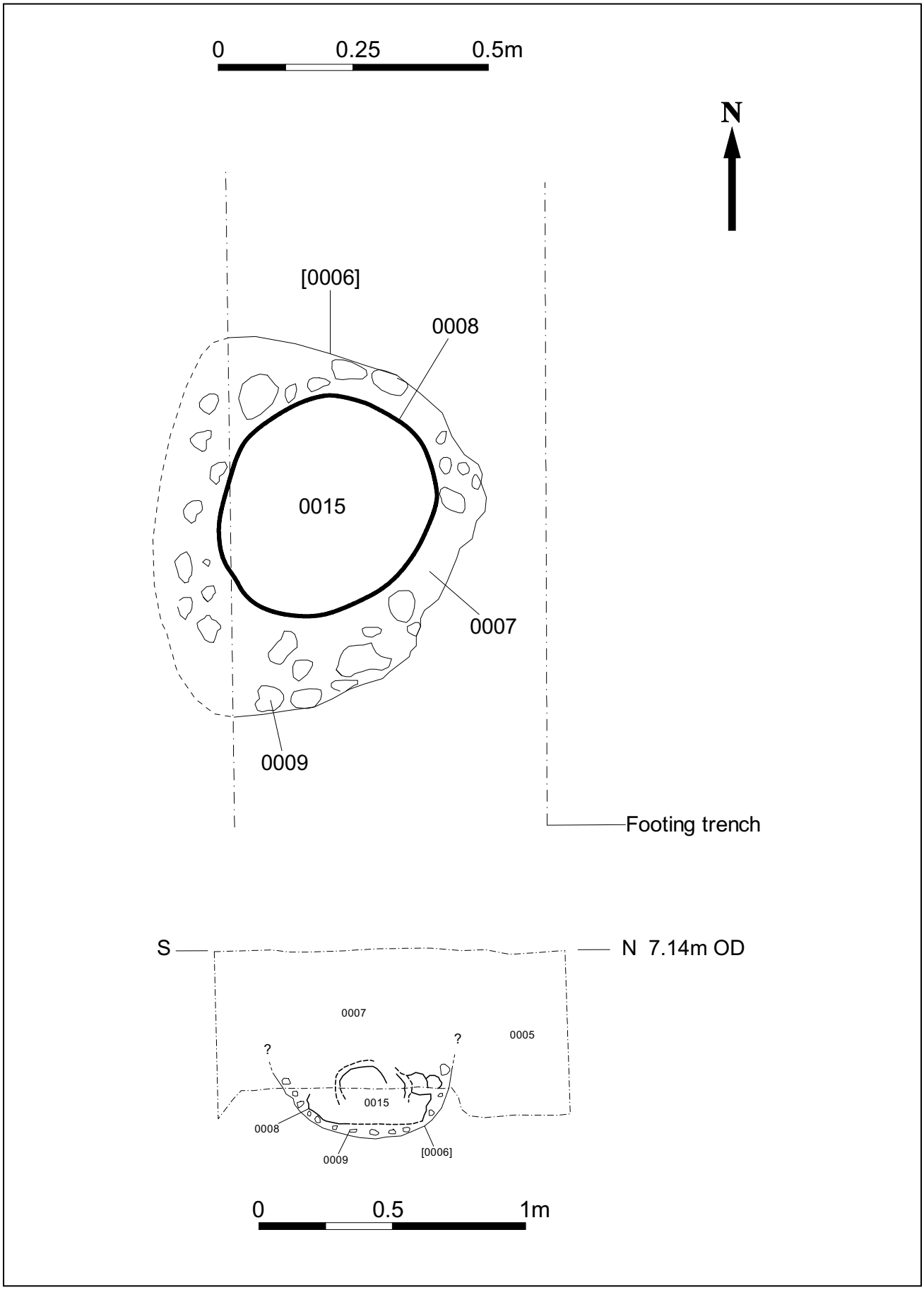

Figure 6. Cremation 0006: Plan at 1:10 and section at 1:20

Plate 2 Cremation 0006

Plate 3 Flint pebble/cobble packing 0009 from cremation 0006

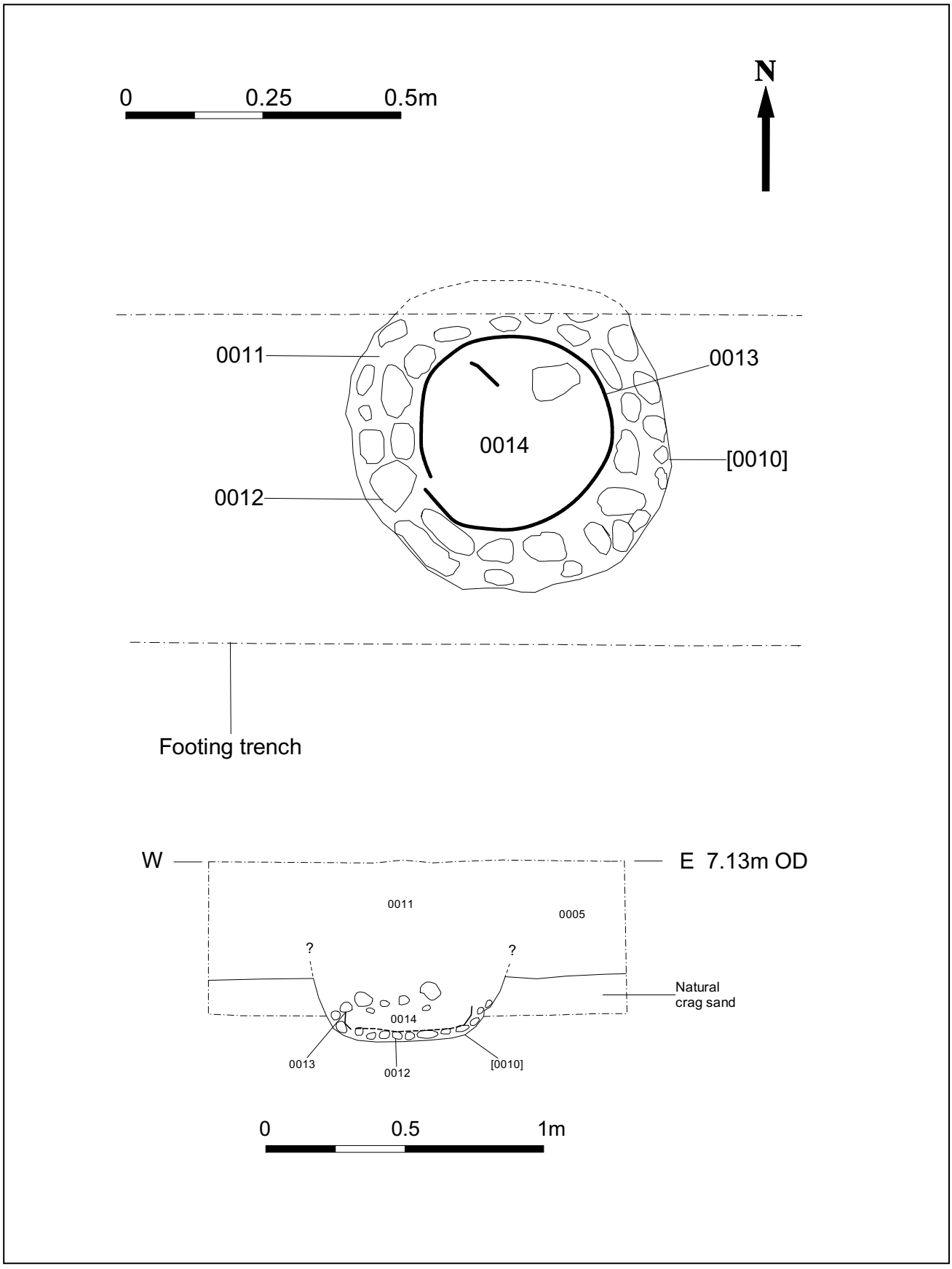

Figure 7. Cremation 0010: Plan at 1:10 and section at 1:20

Plate 4 Cremation 0010

Plate 5 Flint pebble/cobble packing 0012 from cremation 0010

Around the urn itself was a deliberate packing (0012) of stones, mainly quartzite and sandstone, that clearly performed a similar function to those in cremation 0006, but were markedly different in character. Rather than the mixed size and irregular shape exhibited by 0009 in 0006 (Plate 3), these were remarkably similar in size, all rounded in shape with at least 20% having been heat-altered (Plate 5).

The pottery urn (0013), while fractured in antiquity, was only subject to minimal further disruption during the mechanical excavation of the footing trenches. Urn 0013 and its contents (fill 0014 and calcined bone 0017) were lifted intact and processed off site.

Monitoring of excavations for a sceptic tank

A single visit was made to the site in order to monitor the excavation of a pit for a septic tank. Located against the western boundary of the site to the south of the new building (Fig. 5).

The excavated pit measured 2.2m by 1.9m with a depth of 1.9m. The sides of the pit were cleaned to reveal the ring-ditch clearly exposed in section (Fig. 8; Plate 6).

The full stratigraphic sequence comprised 0.4m of topsoil which, itself, was composed of two distinct layers: an upper dark greyish brown loamy sand component (0018) over a darker brown layer (0019), both containing rare small to medium sized sub-rounded pebbles, flecks of brick/tile and exhibiting considerable root disturbance.

Underlying the topsoil was *c*.0.4m of mid brown silty sand subsoil (0020) with occasional stones, chalk flecks and oyster shell. This layer reduced to only 0.2m in thickness towards the south-east corner of the pit.

A feature (0021) seen in three of the exposed pit faces was interpreted as the ring-ditch due to both its location and shape. The feature exhibited a marked V-shaped profile extending to 1m below the base of the subsoil with a secondary, shallower (0.4m below base of subsoil), component to the north (Fig. 8; Plate 6).

The bulk of the ditch fill (0022) comprised mid orangey brown silty sand with regular charcoal flecks with occasional concentrations of more craggy material. In addition, a distinct tip of crag sand (0023) was also recorded.

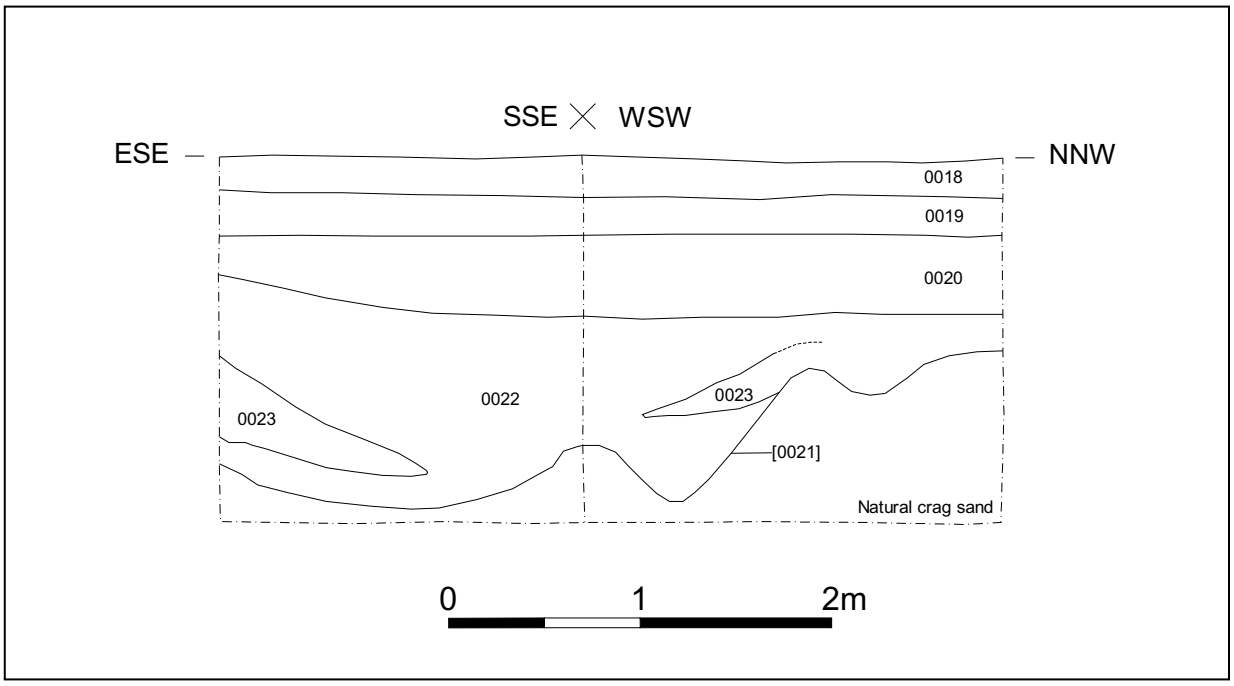

Figure 8. Septic tank sections

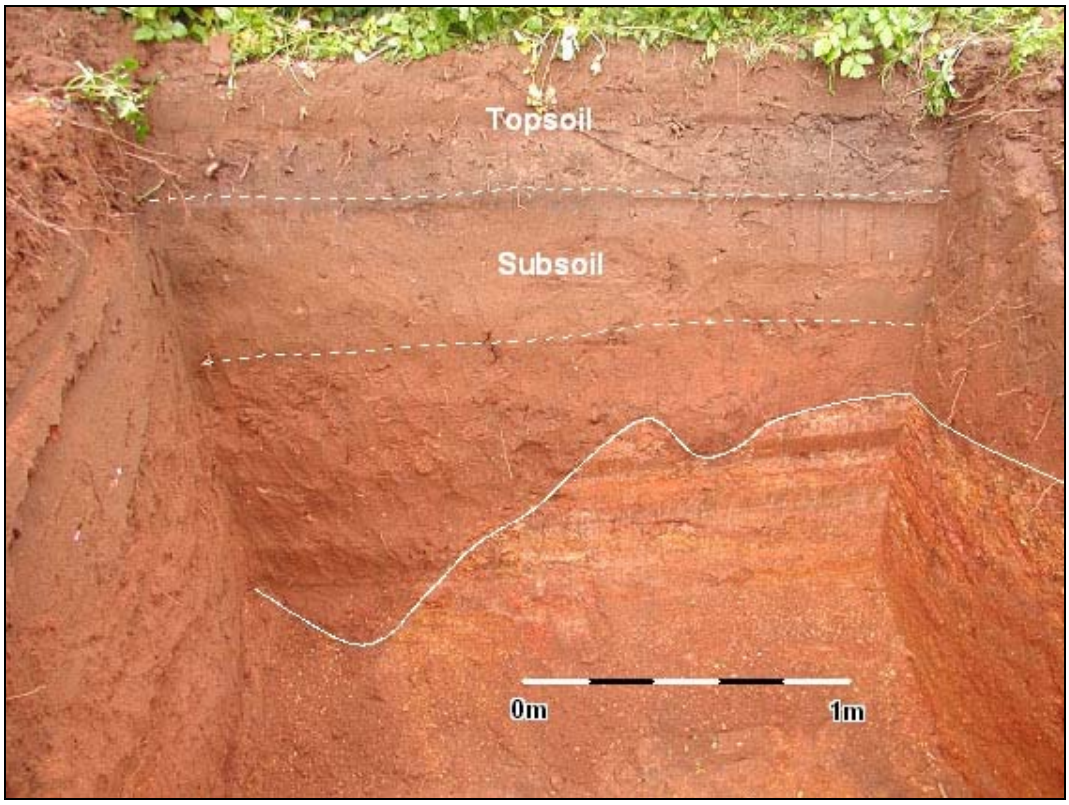

Plate 6 SSE-NNW orientated septic tank section

4. Finds Evidence

Cathy Tester, with contributions from Sue Anderson, Richenda Goffin, Colin Pendleton and Sarah Percival

Introduction

Finds were collected from seven contexts, as shown in the table below.

Context	Pottery		Animal bone		Oyster shell		Miscellaneous	Spotdate
	No.	Wt/g	No.	Wt/g	No.	Wt/g		
0001	4	149	5	24	2	39	CBM 1-13g	p-med, med
0003	4	34	1	1	3	45	Flint (1-21g)	late med
0008	147	3246						early/mid Bronze Age
0009							Stone sample: 5-2254g	
0012							Stone sample: 5-940g	
0013	80	3072						early/mid Bronze Age
0014							Heat-altered stone 11-80g	
Total	**235**	**6501**	**6**	**25**	**5**	**84**		

Table 1 Finds quantities

Pottery

Prehistoric Pottery (the cremation vessels)

by Sarah Percival

The incomplete remains of two biconical urns containing cremated human remains were recovered from two small pebble/cobble-lined pits. The urns have applied horseshoe handles and date to the mid second millennium BC (Percival 2000).

Fabric

Each of the two urns is made of distinctly different fabric. The first, urn 0008, is of a coarse soft-fired fabric (G1) which contains numerous pieces of sub-angular grog up to 7mm along with sparse quartz sand. The grog pieces can be clearly seen protruding from the smooth surfaces of the vessel.

The second urn, 0013 (Fig. 9), contains sparse pieces of grog up to 3mm in length, occasional rounded flint pieces and sparse quartz sand. This fabric (G2) is harder and denser than that used for urn 0008.

Form

The urns are both slab-built and of bipartite form, with a distinct change of angle at the shoulder enhanced with a pinched cordon. Both urns have been finished by wet hand-wiping which has produced a smoothed surface from which occasional inclusions protrude. Vertical finger-wiping is present on the lower half of vessel 0008 below the shoulder. Urn 0008 has a diameter at the rim of *c.*340mm. The rim is flat and internally bevelled giving a distinct ledge on the interior. Below the rim the neck is decorated with four applied horseshoe handles. From the shoulder the vessel slopes towards the base. The lower half of the urn and the base are missing due to truncation in antiquity. Urn 0013 is of similar form with a flattened protruding rim and four applied horseshoe handles (Fig. 9). The diameter at the rim is *c.*320mm. Again, the lower half of the vessel is missing.

Figure 9. Urn 0013, scale 1:3

Deposition

The two urns were both found inverted within separate small pits, one packed with irregular variable sized flint pebbles/cobbles, the other with more consistently sized and rounded pebbles/cobbles. Biconical urns of the type found at Alderton, have been found inverted over cremated remains on several sites in Suffolk and Norfolk (Wymer 1990). Bradley has suggested that such inverted vessels may represent 'houses for the dead' as the upturned pots bear some resemblance to the round houses occupied by the living during the Bronze Age (Bradley 1998, fig. 47). It is likely that the cremated remains were placed within an organic container to hold them whilst the urn was placed on top.

The association of biconical urns with flint pebbles or boulders is also reasonably common. Similar pebble/cobble packing was found surrounding urns in two pits at Flixton Park Quarry, Suffolk (Boulter 2009) while there is also an almost identical urn to the examples from Alderton at Bircham, Norfolk (Tomalin 1986, fig.97). A further example from Alpington, also in Norfolk had been placed on a bed of flint cobbles (Wymer 1990, 73). Pits packed with water-rounded quartzitic pebbles collected from glacial drift deposits are not uncommon associated with earlier Bronze Age pottery particularly Beakers (Percival 2004) and it is possible that the placement of such pebbles within a funerary context echoes a depositional practice frequently associated with domestic deposits.

Discussion

The biconical urns found at Alderton are amongst a number of similar vessels found in Suffolk and Norfolk (Tomalin 1986, Wymer, 1990, Percival 2000, 43) which represent a regional development of the early to mid Bronze Age Deverel Rimbury urn tradition (Lawson 1980). Examples from Suffolk of vessels with horseshoe handles include recently excavated biconical urns from Flixton Park Quarry (FLN 069; Boulter 2009) and Semer (SMR 001), both containing cremations with associated faience beads (C. Pendleton pers. com). The urns share some elements of fabric, form and design with the Ardleigh urn group of north east Essex and south east Suffolk with which they are broadly contemporary (Brown 1999, 78). The highly decorated Ardleigh urns commonly feature applied horseshoe shaped handles similar to those seen on the Alderton biconical urns. Fingertip impressed rustication, frequently and generously

applied on urns of the Ardleigh group, is not widely present within the biconical tradition of Norfolk and Suffolk though some examples do have limited use of fingernail impressions to the rim edge (Percival 2000, fig.37, P9).

A series of radiocarbon determinations associated with the Ardleigh urns suggest a broad date range from the middle of the 2nd millennium BC to the beginning of the 1st millennium BC (Brown 1995, 128). Brown has suggested that the urns from Ardleigh may be divided into two phases, the earlier vessels being highly decorated with developed rim forms and grog-tempered fabrics, the later being plainer and flint-tempered. It is with the earlier Ardleigh group that the northern East Anglian urns may be most closely aligned, both types being large in size and often biconical in form with expanded rims, applied horseshoe handles and heavily grog-tempered fabrics. The earlier Ardleigh vessels date to the first half of the 2nd millennium, around 2199-1510 BC (Brown 1999) and it is thought likely that northern East Anglian biconical urns may be of similar date. Finds of cremated remains and gold foil covered beads with Wessex II affinities within a horseshoe handled biconical urn from Great Bircham, Norfolk also confirm this date (Tomalin 1986, 112; Needham 1996, 132). The radiocarbon determinations from Alderton are broadly consistent with this scenario with one cremation falling in the middle of the range, with the other outside, but potentially close to the proposed end of range date of 1510 BC.

Catalogue

Biconical urn with horseshoe handles, fabric G1, context 0008, cremation pit 0006. (not illustrated)

Biconical urn with horseshoe handles, fabric G2, context 0013, cremation pit 0010. (Fig. 9)

Medieval pottery

By Richenda Goffin

Eight sherds of medieval and late medieval/early post-medieval pottery were collected from two contexts, one was unstratified (0001) and the other was the fill of ditch 0004 (0003). Details by context are shown in Table 2.

The material includes medieval coarsewares (MCW) of late 12th to 14th century date, Hollesley-type wares (HOLL) which are late 13th to 14th century and late medieval and transitional wares (LMT) which are 15th or 16th century.

Context	Fabric	No	Wt/g	Notes	Date
0001	MCW	1	107	Strap handle of a jug or pitcher decorated with deep impressed circles	L12th-14th C
	HOLL	1	6	Hollesley-type bodysherd	L13th-14th C
	LMT	1	8	Body sherd	15th-16th C
	LMT	1	28	Jug strap handle	15th-16th C
0003	MCW	1	23	Body sherd	L12th-14th C
	MCW	2	3	Joining body sherds, heavily rilled interior	
	MCW	1	8	Heavily sooted body sherd	L 12th-14th C
Total		**8**	**183**		

Table 2 Medieval and late-medieval pottery by context

Ceramic building material (CBM)

A fragment (13g) of post-medieval roof tile made in a coarse red sandy fabric with occasional larger grains of clear quartz was unstratified (0001).

Stone

Worked flint

By Colin Pendleton

An unpatinated end scraper was recovered from the fill of ditch 0004 (0003). The main part of the distal end is cortical with slight retouch to form the scraper edge and limited edge retouch on the two long sides. Parallel flake scars on the dorsal face suggest a certain amount of care in the manufacturing technique. The piece is later prehistoric, probably Neolithic in date.

Stone from cremation pit packing

A sample of the pebble/cobble packing (0009 and 0012) of both cremation pits was inadvertently ‘collected’ when the urns were lifted. The stones must have been part of the top layer upon which the urns were lying in the base of each pit. It is interesting to note how distinct the two groups are from each other. Lining 0009 consists of angular tabular fragments which are frost-pocked and weathered, as if collected from the ground surface, while 0012 comprises fairly uniform smooth flat rounded pebbles/cobbles and are more characteristic of beach deposits.

Heat-altered stone

Eleven small fragments of heat-altered sandstone weighing 80g and representing the broken pieces of a single pebble were found within the fill of urn 0013 (0014).

5. Biological evidence

The cremation burials

by Sue Anderson

Introduction

This report examines the cremated bone collected from two contexts, both within inverted urns which had been severely truncated.

Methodology

Contexts 0016 and 0017 were excavated from the two urns by finds staff and hand sorted. The resultant material was sieved into three fractions (>1mm, >2mm, >4mm). All non-osseous residue was removed prior to quantification. In the case of 0017 this included charcoal, shell and some fish bone, as well as modern roots.

The bone from each context was sorted into five categories: skull, axial, upper limb, lower limb, and unidentified. All fragments in the first four categories were counted and weighed to the nearest tenth of a gram, those in the fifth were weighed only. This allowed an average fragment weight to be calculated for identified material. Measurements of maximum skull and long bone fragment sizes were also recorded. These data are listed in Appendix 3a. Observations were made, where possible, concerning bone colour, age, sex, dental remains and pathology. Identifiable fragments were noted. Methods used follow the Workshop of European Anthropologists (WEA 1980) and McKinley (1994 and 2004). A catalogue of burials is included as Appendix 3b.

Quantification, identification, collection and survival

Table 3 shows the bone weights, percentages of identified bone from each burial, and the proportions of bone identified from the four areas of the skeleton (skull, axial, upper limb, lower limb). Expected proportions are provided in the first row.

Context	Total wt/g	% identified	% Skull	% Axial	% U limb	% L limb
*Expected**			*18.2*	*20.6*	*23.1*	*38.1*
0016	1116.8	55.8	25.9	20.4	18.2	35.4
0017	50.0	34.0	27.6	6.5	5.3	60.6

Table 3 Percentages of identified fragments out of total identified to area of skeleton. (*expected proportions from McKinley 1994, 6)

This shows that skull fragments are over-represented amongst the identifiable material in both burials and the lower limb is extremely over-represented in 0017; other areas of the skeleton are under-represented. However, 0016 is very close to the expected pattern. It has been suggested that 'it should be possible to recognise any bias in the collection of certain areas of the body after cremation' (McKinley 1994, 6). However there is also some bias inherent in the identification of elements. McKinley notes the ease with which even tiny fragments of skull can be recognised, and conversely the difficulty of identifying long bone fragments. These figures can therefore provide only a rough guide to what was originally collected.

Identifiable fragments in 0016 included fragments of occipital, left frontal and zygoma, mandibular ramus, maxilla, cervical vertebrae, clavicles, proximal humerus, distal humerus shaft, ulna shaft, proximal radius, ribs, thoracic vertebrae, lunate and greater multangular, S1 sacral segment, acetabulum, sacro-iliac joint (ilium), femoral shaft, tibial shaft, fibula, metacarpals, metatarsals, finger and toe phalanges. From 0017 there were pieces of cranial vault, ribs, humerus, femur, tibia, fibula and distal toe phalanges.

Mays (1998, Table 11.2) notes that the combusted weight of an adult skeleton has a mean of around 1500g for females and 2300g for males. The largest quantity of bone in this assemblage came from context 0016. Although quite large in comparison with many cremation burials from Suffolk, it is still below the combusted weight of an average adult skeleton. Burial 0017 is clearly very incomplete.

The cremation burials

The two groups consisted of fragments of skull and long bones of adults. The skull of 0016 is well-preserved and the occipital crest is fairly pronounced but not particularly robust. The distal phalanges are relatively small and the individual may be a female. The medial clavicle is fused and there are signs of degeneration, suggesting that the individual was middle aged or old at the time of death. The small quantity of material

from 0017 provides no clue to sex and there is no evidence to provide a closer estimate of age. No duplication was observed amongst the fragments within each context and there is no reason to suspect they represent parts of a single body, so the minimum number of individuals (MNI) for this group is two.

Fragments of maxilla and mandible in 0016 show that all teeth in the right maxilla and the molar region of the right mandible had been present at death. Nine molar, three premolar, two canine and three incisor roots were identified, and there were a few fragments of enamel, perhaps from an unerupted upper third molar.

Pathological conditions were observed in 0016. These consisted of small osteophytes at the margins of some joints, including the sacro-iliac joint of the pelvis, the acetabular rim of the hip, and at least one facet for a rib tubercle on a lower thoracic vertebra. Two lower thoracic vertebral bodies have large osteophytes at one side. A fragment of the left orbit was present but showed no signs of cribra orbitalia.

The degree of fragmentation, based on average fragment weight, was quite high in 0017 but less in 0016. The latter contained many large fragments, and some vertebral bodies and finger and toe bones were intact. The largest fragment, made up from two pieces of humerus, was 79mm long. The largest piece of long bone from 0017 was 24mm long. A few fragments in both groups had a chalky texture and show signs of abrasion.

The majority of bone in this group is fully oxidised and light brown or cream in colour, but some inner areas of larger bones are grey to black and reduced. This is particularly true of the leg bones in 0017. The presence of a high proportion of white bone indicates firing temperatures in excess of *c.*600°C (McKinley 2004, 11).

Radiocarbon dating

As part of the analysis, samples of bone from each urn (0016 and 0017) were submitted to Scotland Universities Environmental Research Centre's (SUERC) radiocarbon dating laboratory (Appendix IV.).

The results of the radiocarbon dating are as follows:

ADT 016 0016: 1770-1610 BC (SUERC-35897: 3400±30BP)

ADT 016 0017: 1500-1380 BC (SUERC-35898: 3150±30BP)

Summary and discussion

The two groups of bone represent a minimum of two adult individuals. One of these is probably a female in mature or old age who had suffered from a degree of degenerative disease.

The total weight of bone indicates that the entire skeletons were not present from either burial, although clearly 0016 is considerably more complete than 0017. The size of fragments present in 0016 shows that, in keeping with the practices observed in other contemporary groups, there was no deliberate crushing of the bone following cooling. Bone was simply collected from the pyre and placed in the vessel for burial. That the collection was careful and unhurried is shown by the presence in both burials of even the tiniest toe bones. Urned burials of this date would be expected to contain a high proportion of the cremated remains, so the missing material in this case is assumed to have been lost largely as a result of truncation.

Animal bone

A single sheep tooth came from the fill of ditch 0004 (0003) and a sheep ulna and other fragments were unstratified (0001). The material is undatable but was found with medieval and post-medieval finds.

Charred wood and other remains

Apart from cremated human bone, the fill of urn 0013 contained sixty-six small fragments of charcoal which probably derive from wood used as kindling/fuel for the cremation pyre. Three fragments of a ‘tarry’ substance are probably the residues of the combustion of organic material at extremely high temperature.

6. Archaeological Interpretation and Discussion

The significant archaeology recorded on the site can be placed securely in two chronological periods:

- early/middle Bronze Age (*c.*mid second millennium BC): The ring-ditch and two associated urned cremation burials
- medieval (12-16th century): A single possible ditch feature and unstratified ceramic finds

However, the earliest activity was represented by a single flint scraper of possible Neolithic date recovered as a residual find in feature 0004 which was recorded as a possible ditch of medieval or later date.

The ring-ditch feature had previously been identified from aerial photographs and was seen as one of the main reasons, along with the site's location close to known medieval archaeology, that prompted the need for archaeological work.

Ring-ditches are a relatively common monument type in the landscape, both as isolated examples and clusters/groups with a preference for the lighter sandy soils of the river valleys. While occasionally dating to the later Neolithic period, for example one recorded in the FLN 062 area of Flixton Park Quarry, Flixton, Suffolk, on the south side of the Waveney Valley (Boulter 2008), the majority are of earlier to middle Bronze Age in date. These are generally considered to be funerary monuments and many have associated burials, both inhumation and cremations. When first constructed, the area enclosed by the ditch would almost certainly be occupied by a mound, the soil for which would in some part have derived from the digging of the surrounding ditch. In many cases, that at Alderton being one, the mound would subsequently have become degraded, often simply by a combination of natural erosion and agricultural practices.

Rectification of the aerial photograph by Rog Palmer provided a plot (Fig. 2) that suggests a diameter of *c.*37m for the ring-ditch, which puts it towards the larger end of the scale, but is by no means exceptional. The apparent disparity between the aerial photograph plot and the position of the ring-ditch as seen on the ground in the septic

tank excavation can be explained for two reasons: firstly, the rectified aerial photograph plot has an accuracy of 1m± (Palmer *pers. comm.*) and, secondly, the fact that the full width of the ditch may not have shown as a cropmark.

The morphology of the ditch was also difficult to ascertain within the limited excavation and somewhat oblique sections. There was clearly a significant V-shaped component with a depth of *c.*1m below topsoil and an overall width which would have been in excess of 2m. However, its shallow, secondary component, recorded internal to the larger V-shaped element in the excavated section, is open to more than one interpretation. It is impossible to ascertain whether the secondary feature was integrally related to the ring-ditch, or just a minor intervention on the edge of the larger feature. There was no evidence for a separate cut, although with relatively uniform sandy soil, cuts are not always visible. Two other interpretations explore the possibilities that one of the two components represent a re-cut, or that the original monument comprised two concentric ring components. Both of these scenarios have local parallels. Recent excavations at Flixton Park Quarry, Flixton in Suffolk have revealed examples of both. In the spring of 2011, a ring-ditch forming part of the FLN 090 site was recorded with two overlapping rings which clearly represented successive phases of the same monument. In contrast, an earlier area of the quarry (FLN 061) excavated in 2002 (Boulter 2008) included a monument with two geometrically concentric rings which were almost certainly contemporary.

Also worthy of discussion is the possibility that the layer of subsoil recorded throughout the site could in some part represent the vestiges of the original mound that would have been raised within the area enclosed by the ring-ditch. Clearly, the layer of subsoil recorded sealing the ring-ditch itself could did not represent *in situ* mound material and must represent a later deposit, either derived from an adjacent mound, or a natural colluvial layer accumulated from the mass movement of soil down slope from the north of the site. The character of the subsoil seen in the footing trenches within the ring-ditch was similar to that seen in the septic tank, but unfortunately there was no excavation within the intervening area in which the continuity could be tested. However, given that the bases of the upturned cremation urns and any associated packing stones were missing above the level of the base of the subsoil and the cuts for the cremation pits could not be traced above that level with any degree of certainty

then, on balance, it seems likely that the subsoil layer represents a later colluvial deposit introduced naturally after the erosion or removal of the mound and truncation, presumably by ploughing, of the cremations themselves.

While it is highly likely that the ring-ditch and the two cremation burials were associated, it is uncertain whether the two urns represent insertions within the earlier, although probably broadly contemporaneous feature, or the primary focus for the monument. Only full excavation of the interior of the ring-ditch could have ascertained whether there were further cremations or inhumations present and deduce their stratigraphic and temporal relationship with the monument.

The urns themselves have been identified as a regional development of the early to mid Bronze Age Deverel Rimbury urn tradition and are consistent with a date in the mid 2nd millennium BC. The subsequent radiocarbon dating determinations of the contents of the two urns provided results broadly in keeping with this scenario, although one (0010/0017) was potentially up to 400 years later in date than the other (0006/0016). This disparity in date could not be explained by any sampling or processing considerations. However, given the way the results are presented statistically, the dates could actually be much closer together than this.

The practice of packing the cremation pit fill around the outside of the urn has been recognised at other sites, a number of which have been quoted by Sarah Percival in the finds report in this document. In some instances, for example Flixton Park Quarry (Boulter 2009), the naturally occurring subsoil itself comprises predominantly of stone, and it is a relatively easy job to collect suitable sized pieces for placement in the pit. However, at Alderton this would have been a more time consuming task as the material would not have been as readily available. In addition, there has been a clear selection choice made that was different for each of the cremations. In the case of cremation pit 0006, the probable female burial, the selected material was flint (0009), mostly angular pieces with some frost shatter. The fact that some of the pieces exhibited a degree of heat alteration suggests that they were collected from a context that had already been subject to human activity, not just picked randomly from the surrounding area. Packing 0012 in the second pit (0010) was characterised by rounded quartzite and sandstone pebbles/cobbles which also included approximately

20% with heat alteration. This material exhibits the classic features of prolonged attrition in a dynamic fluvial or marine environment. It is impossible to say why one material was considered suitable for one cremation and not the other; but could be a function of the dating difference, or even the gender of the burials (0016 was probably female, 0017 unknown). However, the deliberate selection of quartzite or sandstone rather than flint is not restricted to cremation pit packing. It has been recognised on sites with prehistoric occupation that the percentage of sandstone and quartzite over flint in certain heat-altered deposits, particularly cooking pits or hearths, does not reflect the local geology from which they were collected (for example, Flixton Park Quarry, Flixton and Shrubland Quarry, Coddenham). This has been interpreted as a preference for a material that does not shatter in the same way when subjected to abrupt changes in temperature. It is possible then, that sandstone and quartzite were being collected preferentially for other, more domestic tasks, and simply represents material that was readily available in an existing stockpile.

The evidence for medieval activity was limited to eight sherds of pottery: four unstratified, the remainder recovered during the evaluation from a section excavated through feature 0004, and fragments of animal bone. All four of the pottery sherds recovered from the feature were in a similar medieval coarseware fabric and, given the absence of other datable artefacts other than the prehistoric flint scraper, is suggestive of a medieval, 12th-14th century, date for the feature. Described as a ditch during the evaluation, 0004 was not identified during the subsequent monitoring where, provided it maintained its recorded alignment, it could have been expected to cross the excavated footing in three separate places (Fig. 5). This brings in to doubt its interpretation as a ditch and it may represent a less laterally persistent feature, possibly a trough-like pit.

As the site lies close to the medieval church of St. Andrews, a medieval finds scatter (HER ADT 042) and within an area that may have formed part of the medieval village, the presence of medieval finds and features is not surprising. However, the evidence was limited, and it seems unlikely that any medieval occupation was particularly intensive or prolonged with the site somewhat peripheral to the village core.

A single piece of post-medieval roof tile was recovered.

7. Conclusions

Given that the restricted nature of the excavations resulted in only a small part of the area enclosed by the ring-ditch to be exposed, and only one oblique section through the ditch itself to be recorded, then the project has provided significant archaeological information.

However, with large areas of the site not subject to archaeological scrutiny, some questions remain unanswered. These are presented below:

- What is the morphology of ring-ditch? Does it comprise a single ditch, continuous or otherwise? Does it have two components either concentric and contemporary, or phased with a re-cut.

- Are the two recorded urns the only burials associated with the monument, or were there others, either cremations or inhumations.

- Are one or both of the urns primary burials representing the reason the monument was constructed, or do they represent secondary insertions into the body of an existing feature erected to mark an earlier burial not encountered during the excavation.

The answers to the above cannot be determined without further excavation. Should any further building work subject to a planning application be submitted for the site, a planning condition should be attached that would cover provision for archaeological work.

8. Contributors and Acknowledgements

The fieldwork was carried out by a number of Project Officers, (Robert Atfield, Linzi Everett and Rhodri Gardner) all from Suffolk County Council Archaeological Service, Field Team.

The post-excavation was managed by Richenda Goffin while finds processing was carried out by Jonathan Van Jenniens and the overall finds report prepared by Cathy Tester, all from Suffolk County Council Archaeological Service, Field Team. Specialists finds reports were prepared by Sue Anderson (cremated human remains), Richenda Goffin (medieval pottery), Colin Pendleton (worked flint) and Sarah Percival (prehistoric pottery).

Stuart Boulter was the principal author of this report.

Thanks are extended to Mr and Mrs Dorey who funded the project.

9. Archive Deposition

The site archive has been deposited at the following locations:
Paper and photographic archive: SCCAS, Ford House, Bury St Edmunds
Finds archive: SCCAS Ford House, Bury St Edmunds
Digital archive: SCCAS Ipswich:R:\Environmental Protection\Conservation\Archaeology\Archive\Alderton\2008_168 ADT 016 Frith Cottage, Alderton

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Appendix I

S U F F O L K C O U N T Y C O U N C I L
A R C H A E O L O G I C A L S E R V I C E - C O N S E R V A T I O N T E A M

Brief and Specification for an Archaeological Excavation

PART SIDE GARDEN OF, FRITH COTTAGE, RAMSHOLT ROAD, ALDERTON, WOODBRIDGE IP12 3AQ

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

1. Background

1.1 Consent has been granted for the erection of a dwelling with garage, car parking and turning (C05/2185/FUL). The planning authority have applied a PPG 16, paragraph 30 condition to the consent.

1.2 The development lies within an area of high archaeological potential, part of a complex ritual landscape, recorded in the County Sites and Monuments Record. In particular, there is a known Bronze Age barrow (ADT 016) on the location of this development (TM 3417 4175). The proposed works will cause significant ground disturbance that has potential to damage any archaeological deposit that exists.

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

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

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

2. **Brief for Archaeological Project**

2.1 In the area defined on Figure 1, archaeological excavation, as specified in Section 4, is to be carried out prior to development in all areas causing ground disturbance. This area relates to an area measuring *c.* 18m N to S by 13m E to W, which relates to the footprint of the house and garage and the area of the drive and turning.

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

2.3 The academic objective will centre upon the high potential for this site to produce evidence for prehistoric, and possibly later, burial remains.

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

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

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

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

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

3.1 Plough soil and hillwash deposits can be removed using an appropriate machine with a back-acting arm and fitted with a toothless bucket to the top of the first archaeological level.

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

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

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

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

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

3.4 Collect and prepare environmental bulk samples (for flotation and analysis by an environmental specialist). The fills of all archaeological features should be bulk sampled for palaeoenvironmental remains and assessed by an appropriate specialist. The Project Design must provide details of a comprehensive sampling strategy for retrieving and processing biological remains (for palaeoenvironmental and palaeoeconomic investigations), and samples of sediments and/or soils (for micromorphological and other pedological/sedimentological analyses. All samples should be retained until their potential has been assessed. Advice on the appropriateness of the proposed strategies will be sought from J. Heathcote, English Heritage Regional Adviser in Archaeological Science (East of England). A guide to sampling archaeological deposits (Murphy, P.L. and Wiltshire, P.E.J., 1994, A guide to sampling archaeological deposits for environmental analysis) is available for viewing from SCCAS.

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

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

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

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

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

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

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

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

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

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

6. General Management

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

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

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

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

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

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

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

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

7. Archive Requirements

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

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

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

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

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

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

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

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

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

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

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

8. Report Requirements

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

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

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

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

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

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

Specification by: Dr Jess Tipper

Suffolk County Council
Archaeological Service Conservation Team
Environment and Transport Department
Shire Hall
Bury St Edmunds
Suffolk IP33 2AR Tel: 01284 352197

Date: 31 January 2006 Reference: /FrithCottageAlderton06

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

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

Appendix II ADT 016: Context List and Descriptions

OP	Context	Group	Identifier	Description	Date
0001	0001	0001	U/S	Unstratified finds.	
0002	0002	0002	Layer	Topsoil over whole site.	
0003	0004	0004	Ditch (Fill)	Mid greyish brown silty sand, similar to 0002, some oyster shell, pot, worked flint and rare small flint pebbles. Very soft.	Med
0004	0004	0004	Ditch (Cut)	Straight, parallel sided linear feature, near vertical sided with sharp base, orientated east – west.	Med
0005	0005	0005	Layer	Light orange-brown slightly silty sand, rare small to medium sub-rounded flint pebbles. Subsoil layer recorded throughout site.	
0006	0006	0006	Cremation (Cut)	Cremation pit, irregular oval in shape, U-shaped dished base.	EBA/MBA
0007	0006	0006	Cremation (Fill)	Mid greyish brown silty sand with rare stones, occasional shell from underlying crag.	EBA/MBA
0008	0007	0006	Cremation (Urn)	Inverted urn in cremation pit 0006. Base missing, slight damage by digger bucket. Lifted with contents.	EBA/MBA
0009	0007	0006	Cremation (Fill)	Packing external to urn in cremation pit 0006. Comprised irregular pebble-cobble sized flints, some frost shattering, *c*.20% heat-altered.	EBA/MBA
0010	0010	0010	Cremation (Cut)	Cremation pit, circular with U-shaped section, gently dished base.	EBA/MBA
0011	0010	0010	Cremation (Fill)	Mid-light greyish brown silty sand, disturbed by roots. Virtually stoneless, occasional crag shells.	EBA/MBA
0012	0010	0010	Cremation (Fill)	Packing external to urn in cremation pit 0010. Regular sized predominantly sandstone and quartzite pebbles/cobbles, *c*.20% heat-altered.	EBA/MBA
0013	0011	0010	Cremation (Urn)	Inverted urn in cremation pit 0010. Minimally disturbed during mechanical excavation, lifted in a block with contents.	EBA/MBA
0014	0013	0010	Cremation (Fill)	Contents of cremation urn 0013, fill and calcined bone 0016	EBA/MBA
0015	0008	0006	Cremation (Fill)	Contents of cremation urn 0008, fill and calcined bone 0017	EBA/MBA
0016	0008	0006	Cremation (bone)	Cremated bone.	EBA/MBA

OP	Context	Group	Identifier	Description	Date
0017	0013	0010	Cremation (bone)	Cremated bone.	EBA/MBA
0018	0002	0002	Layer	Upper component of topsoil seen in septic tank excavation, 0.2m thick, dark greyish brown loamy sand.	
0019	0002	0002	Layer	Lower component of topsoil seen in excavated septic tank, 0.2m thick, dark brown loamy sand.	
0020	0005	0005	Layer	Subsoil layer in septic tank excavation, mid brown silty sand + occasional stones, chalk flecks + oyster shell. Seals ditch 0021, equivalent to 0005.	
0021	0021	0021	Ring-ditch (Cut)	Cut of ring-ditch seen in side of septic tank, V-shaped, 1m deep with secondary, possibly contemporary component adjacent. In excess of 2m wide.	EBA/MBA
0022	0021	0021	Ring-ditch (Fill)	Main fill of ring-ditch in septic tank excavation. Mid orangey brown silty sand, regular charcoal flecks and crag sand locally.	EBA/MBA
0023	0022	0021	Ring-ditch (Fill)	Tip of more craggy material within ring-ditch fill 0022.	EBA/MBA

Appendix 3a: Quantification and measurements

Feature	Fill	Frac	Skull			Axial			Upper limb			Lower limb			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	Wt/g	Wt/g	(mm)	(mm)
0006	0016	>4mm	228	161.4	0.7	236	127.3	0.5	97	113.6	1.2	187	220.9	1.2	386.1	1009.3	55	79
		>2mm													95.3	95.3		
		>1mm													12.2	12.2		
Totals			**228**	**161.4**	**0.7**	**236**	**127.3**	**0.5**	**97**	**113.6**	**1.2**	**187**	**220.9**	**1.2**	**493.6**	**1116.8**		
0010	0017	>4mm	16	4.7	0.3	16	1.1	0.07	1	0.9	0.9	21	10.3	0.5	24.1	41.1	20	24
		>2mm													8.4	8.4		
		>1mm													0.5	0.5		
Totals			**16**	**4.7**	**0.3**	**16**	**1.1**	**0.07**	**1**	**0.9**	**0.9**	**21**	**10.3**	**0.5**	**33.0**	**50.0**		

Appendix 3b: Catalogue

Cremation burial 0016 (feature 0006): middle-aged or older female

Quantification:	Total weight 1116.8g: Skull 228 (161.4g), axial 236 (127.3g), upper limb 97 (113.6g), lower limb 187 (220.9g), unidentified (493.6g).
Description:	Urned, inverted.
Condition:	Very good, large fragments preserved.
Determination of age:	Medial clavicle fused, some degeneration.
Determination of sex:	Occipital crest fairly pronounced but not very robust, canine roots long, but distal phalanges seem small.
Identified elements:	Occipital, left frontal and zygoma, mandibular ramus, maxilla, cervical vertebrae, clavicles, humeri, ulna, proximal radius, ribs, thoracic vertebrae, lunate and greater multangular, S1 sacral segment, acetabulum, sacro-iliac joint of ilium, femoral shaft, tibial shaft, fibula, finger and toe phalanges.
Measurements:	Max skull frag size 55mm, max long bone frag size 79mm (two joining fragments).
Colours:	Pale brown, a few white/grey/black pieces.
Teeth:	All teeth present at death in R. maxilla and R. mandible (molar region only). Root fragments: 9 molar, 3 premolar, 2 canine, 1 upper incisor, 2 lower incisor. Fragments of enamel, possibly unerupted molar?
Pathology:	No cribra orbitalia L. Slight osteophytes SIJ, acetabulum, facet for rib tubercle on one T vertebra, two lower T vertebrae with large OPs on body.

Cremation burial 0017 (feature 0010): unsexed adult

Quantification:	Total weight 50.0g: Skull 16 (4.7g), axial 16 (1.1g), upper limb 1 (0.9g), lower limb 21 (10.30g), unidentified (33.0g).
Description:	Urned, inverted.
Condition:	Fair, but very incomplete and generally small fragments.
Determination of age:	Skull and long bone thickness.
Determination of sex:	No evidence.
Identified elements:	Cranial vault, ribs, humerus, femur, tibia, fibula, distal phalanx of small toe.
Measurements:	Max skull frag size 20mm, max long bone frag size 24mm.
Colours:	Mostly pale brown, some dark grey.
Teeth:	None
Pathology:	Nothing observed.

Appendix IV.Radiocarbon Dating Determination Results

Scottish Universities Environmental Research Centre
Director: Professor A B MacKenzie Director of Research: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE
20 September 2011

Laboratory Code	SUERC-35897 (GU-24749)
Submitter	Cathy Tester Suffolk County Council Archaeological Service 9-10 The Churchyard, Shirehall Bury, St Edmunds IP33 2AR
Site Reference	Frith Cottage Alderton
Sample Reference	ADT 016-0016
Material	Cremated human bone : lower limb fragment
$\delta^{13}C$ relative to VPDB	-20.7 ‰
Radiocarbon Age BP	3400 ± 30

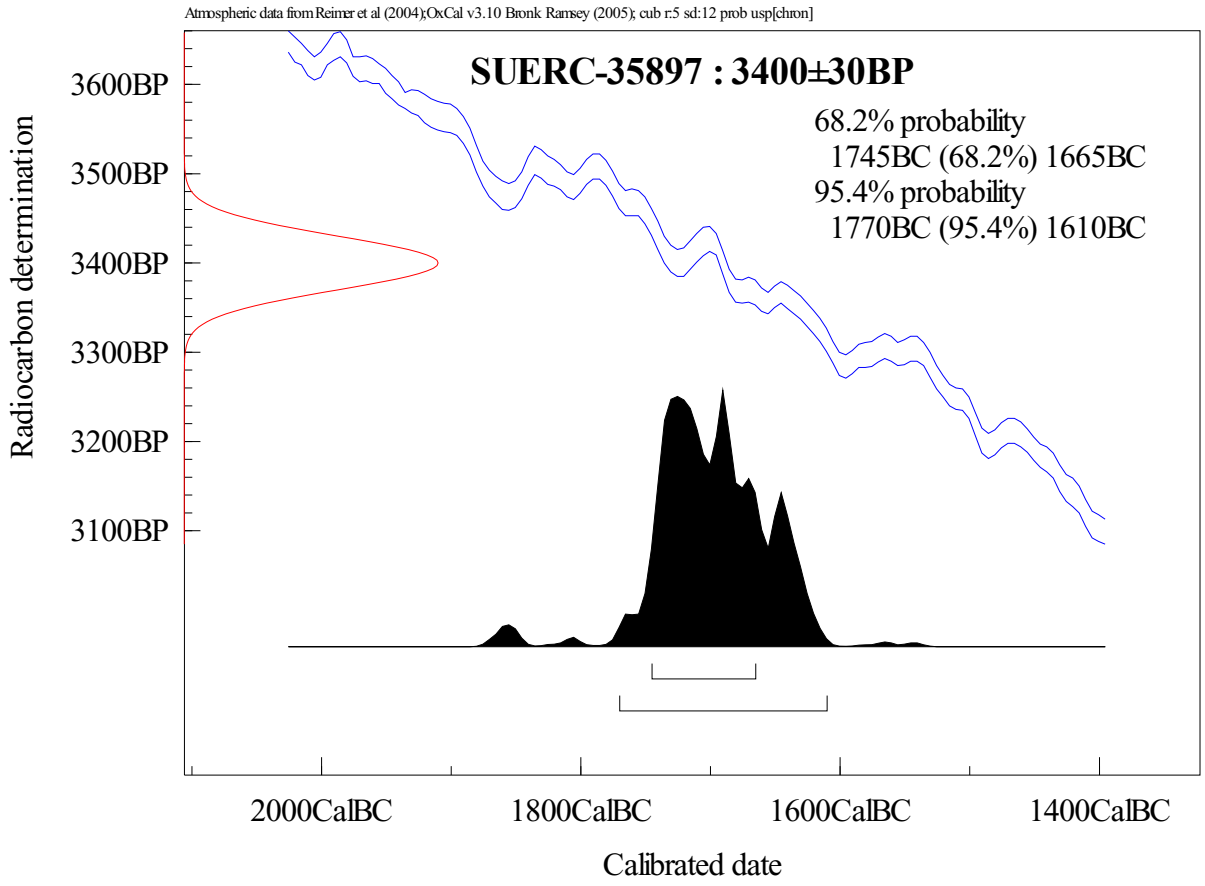
N.B.

1. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.
2. The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal3).
3. Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or Telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- Date :-

Checked and signed off by :- Date :-

Calibration Plot


Atmospheric data from Reimer et al (2004);OxCal v3.10 Bronk Ramsey (2005); cub r:5 sd:12 prob usp[chron]
SUERC-35897 : 3400±30BP
68.2% probability
1745BC (68.2%) 1665BC
95.4% probability
1770BC (95.4%) 1610BC
Radiocarbon determination
3600BP
3500BP
3400BP
3300BP
3200BP
3100BP
2000CalBC
1800CalBC
1600CalBC
1400CalBC
Calibrated date

Scottish Universities Environmental Research Centre
Director: Professor A B MacKenzie Director of Research: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

20 September 2011

Laboratory Code

SUERC-35898 (GU-24750)

Submitter

Cathy Tester
Suffolk County Council Archaeological Service
9-10 The Churchyard, Shirehall
Bury, St Edmunds
IP33 2AR

Site Reference
Frith Cottage Alderton

Sample Reference
ADT 016-0017

Material
Cremated human bone : upper limb fragment

$\delta^{13}C$ relative to VPDB
-20.0 ‰

Radiocarbon Age BP

3150 ± 30

N.B.

1. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

2. The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal3).

3. Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or Telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- Date :-

Checked and signed off by :- Date :-

Calibration Plot