

ARCHAEOLOGICAL EVALUATION REPORT

Cemex, Wangford Quarry Covert Extension (1st Phase) WNF 023 OASIS ID: suffolkc1- 35812

A REPORT ON THE ARCHAEOLOGICAL EVALUATION, 2007
(Planning app. no. W19531)



Figure 1: clay-lined pit [0032]

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Field Team

Suffolk C.C. Archaeological Service
© December 2007

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Summary

The evaluation revealed a scattering of archaeological features in two concentrations: one prehistoric group towards the north of the study area, while an undated series of ditches crossed the south of the site.

Towards the north of the site a group of prehistoric features (probably Bronze Age) appear to cluster around the location of a possible funerary monument suggested by a ?ring-ditch. Nearby post-holes and pits containing Early Bronze Age pottery and fire-cracked flint suggest that prehistoric settlement activity might also have taken place at this location.

Across the south of the study area a double set of undated ditches ran east to west before turning to the south. These linear features are on a similar alignment to the field boundaries recorded on the First Edition Ordnance Survey of 1880 and are thus possibly of post-medieval date

SMR information

Planning application no. W19531
Date of fieldwork: 29th October – 1st November 2007
Grid Reference: TM 4700 7758 (main concentration of datable features)
Funding body: Cemex

1.0 Introduction

The Planning Authority (Waveney District Council) has been advised by Edward Martin of the Conservation Team of Suffolk County Council Archaeological Service that an archaeological evaluation be conducted as a condition of planning consent (Appendix 1: Brief and Specification). In response to this a detailed Desk-Based Assessment was compiled (Havercroft 2004) and a Project Design for an evaluation produced (Boulter 2006). Figure 1 indicates the location of the study area.

An evaluation was therefore proposed to determine the archaeological potential of the study area. The site is divided into two with the eastern half still under crop. It was therefore decided that the first phase of trenching would be conducted in the western half of the field, at present an area of 'set-aside'.

In the first phase, an initial 4% sample by trial trenching was required (889m) with a contingency of another 1% (222m) to be used if necessary. A trench plan showed the proposed location of the trenches (Boulter 2006, Figure 2). Unfortunately a band of recent tree-planting across the south-west edge of the field reduced the extent of trenching that could be done in this area. In total 869m of trench was excavated, with a further 9m of trench added at the end of the project to target a ditch intersection (Trench 16b).

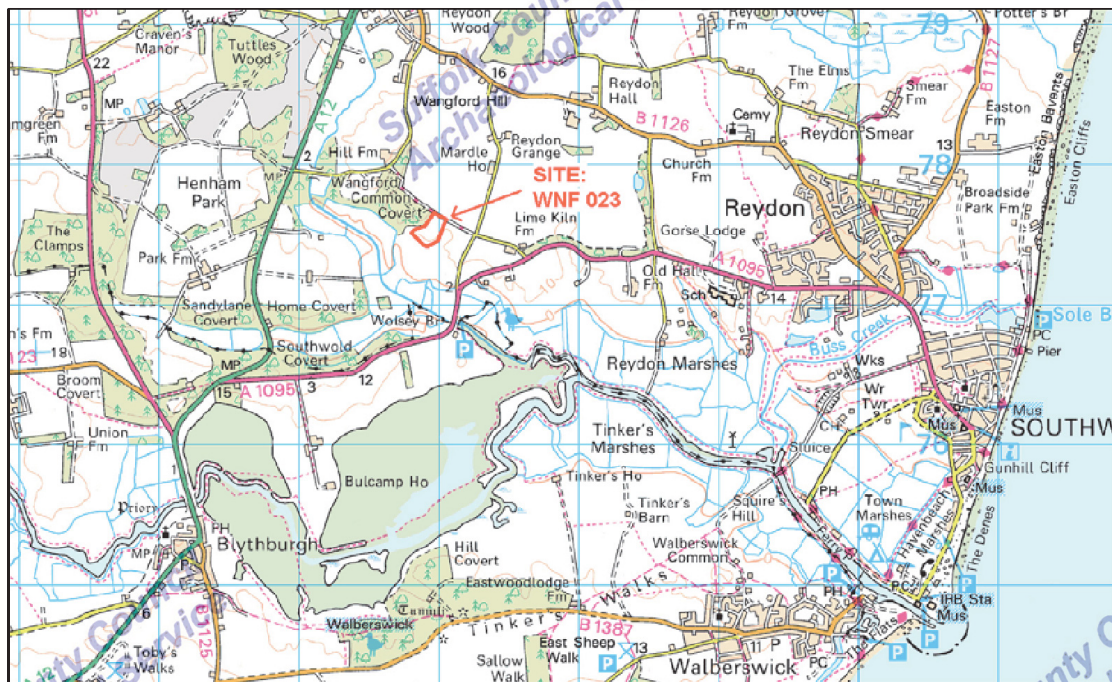


Figure 2: location of the site

2. 0 Location and topography

The majority of the north-eastern part of the site is a low plateau, just above the 10m contour. To the south-west the ground gently slopes down to Alder Carr Marshes. The higher part of the field is divided from that to the south-east (2nd Phase) by a cleft or dry valley, probably the result of periglacial action. At present the site has been left as 'set-aside' with a short growth of grass and wild vegetation. The area to the east (2nd Phase) is at present under cultivation and here the very stony nature of the ploughsoil was apparent.

The underlying drift geology consists almost entirely of medium to large (10-100mm) rounded flints in a coarse sandy matrix. Much of the stone, particularly slightly down-slope towards the south-west, was heavily stained (iron-pan and/or manganese) possible due to the movement of ground-water. The only exception to the stony natural was a seam of yellow to orange brown clay sand encountered in Trench 3 towards the north-west edge of the site. This appears to correspond to a palaeochannel identified in the Desk-Based Assessment (Havercroft 2004)

3.0 Archaeological background

The sites of archaeological significance in the vicinity have been discussed in detail elsewhere (Havercroft 2004). This document also identified a number of features seen on aerial photographs. A possible ring-ditch, linear ditches, drains and palaeochannels were plotted (ibid. Figure 12). This information was used to locate targeted trenches across the study area (Boulter 2006).

The location of the ring ditch as shown in Figure 3 is based on the English Heritage plot for the SCCAS Suffolk Coastal Survey.

4.0 Method

Trenching was conducted using a 360° mechanical digger equipped with a 2.2m wide toothless ditching bucket. Fifteen trenches were positioned to sample the area of the proposed new quarry (Figure 3).

All machining was observed by an archaeologist standing adjacent to or within the trench. Topsoil and subsoil were removed by machine to reveal undisturbed natural deposits and / or archaeological deposits. All archaeological features observed in the base of the trench were planned at 1:50 and their deposits described and sampled for finds. All excavated features were drawn in section at a scale of 1:20

The upcast soil was examined visually for any archaeological finds. The base of all trenches were checked using a metal detector. Records were made of the position and length of trenches.

The site archive will be deposited with the Suffolk County Council Archaeological Service. The site code WNG 023 will be used to identify all elements of the archive associated with this project.

5.0 Results

Features encountered will be discussed below trench by trench. A full context description for all deposits is in Appendix 2. Trench locations are shown in Figure 3. Individual trench plans are shown in Figures 4 and 5 with feature sections also in Figure 5. All features sectioned are illustrated in Figure 5.

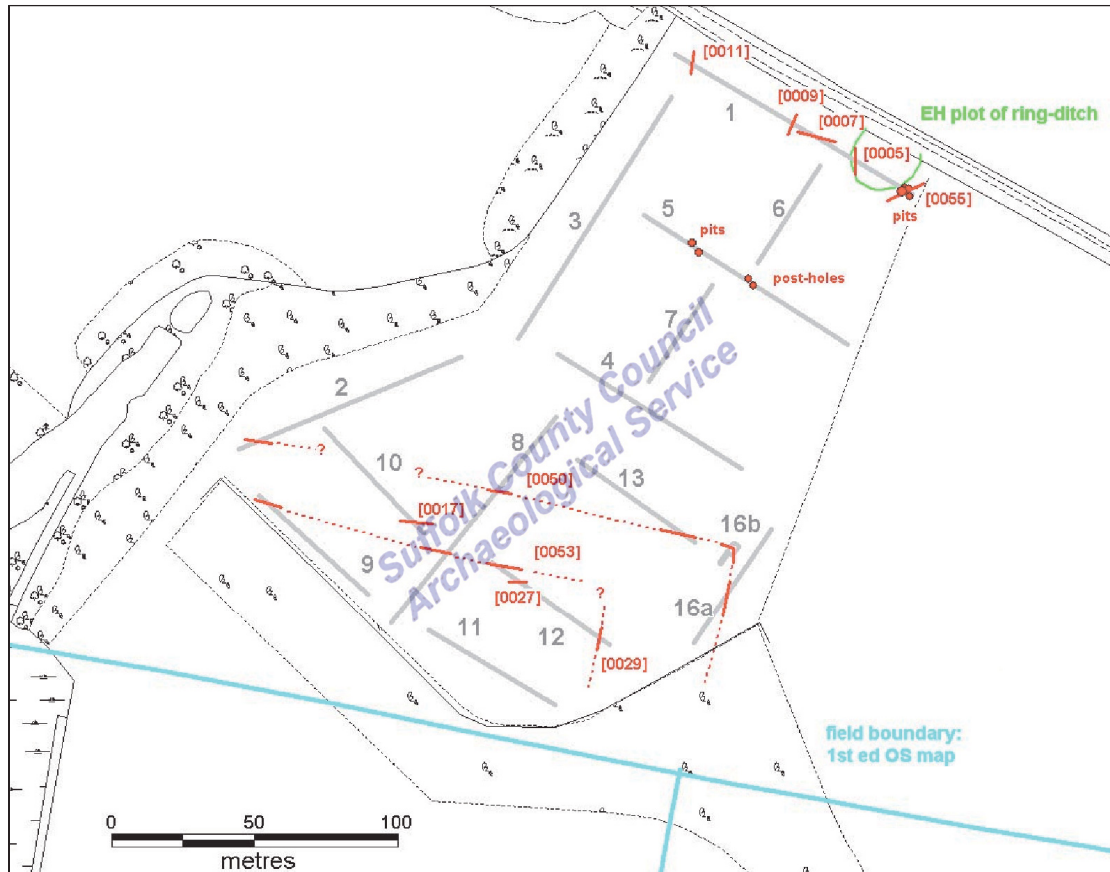


Figure 3: Location of trenches and archaeological features.

All trenches revealed a stony, humic, sandy loam ploughsoil of c.300mm thickness (0001). In all cases this was over a mid brown silty sand deposit of 150-250mm thickness with frequent rounded stone (0002). Although this was treated as a lower soil or subsoil, it was in reality the weathered top of natural the coarse nature of the stony geology allowing for the easy penetration of the overlying humic loam, aided by root and worm action. It was apparent in Trench 1 and 5 that prehistoric features were cutting this layer, however this disturbed horizon had to be removed to be able to see the archaeological features cutting clean natural.

In many cases the 'clean natural' was far from clean, with many trenches revealing a high degree of mineral staining (iron and / or manganese). In the

following table a brief description of the natural encountered is given, as are details of length and orientation.

Trench no.	Length	Orientation	Features present	Natural (types A-C)
1	93m	NW-SE	Y	A
2	80m	NE-SW	Y	B
3	100m	NE-SW	N	C
4	86m	NW-SE	N	A
5	80m	NW-SE	Y	A
6	40m	NE-SW	N	B
7	37m	NE-SW	N	A
8	83m	NE-SW	Y	A
9	49m	NW-SE	Y	A/B
10	44m	NW-SE	Y	B
11	44m	NW-SE	N	A/B
12	50m	NW-SE	Y	A/B
13	43m	NW-SE	Y	A/B
16a	40m	NE-SW	Y	B
16b	9m	NE-SW	Y	B

key	description of natural
A	Medium to large (10-100mm) rounded flint in coarse sand with sandy / silty sandy patches.
B	Similar to A but with frequent patches and mottles of mineral staining (iron and / or manganese)
A/B	Predominantly type A but with localised patches of staining similar to B
C	Yellow to orange brown clay sand with patches of orange brown clay (Trench 2 only)

Table 1. Trench details

Across the south of the site two parallel ditch alignments were recognised. The first of these – given the component number [0050] – was a small east to west linear feature seen in trenches 8 and 13 (and possibly also in 2). At trench 16b it turned to the south and ran on to trench 16a. A much larger ditch ran parallel and to the south of [0050]. This has been given the component number [0053]. This feature ran east to west across trenches 8, 9 and 12, where it appeared to turn to the south.

In the following discussion only trenches with archaeological features will be described. In all cases feature description will start from the most southerly part of the trench and move northwards.

5.1 Trench 1 (Figure 4)

Large ?Ditch [0055]

Partly revealed at the extreme south-east end of Trench 1, this feature could be seen in the edge of the trench to be cutting the weathered top of natural layer 0002. A large feature of over 5m width, the straightness of its northern edge suggests it could have been a ditch.

The upper fill 0042 was mottled mid to dark brown silty sand with frequent small stones, this deposit appeared to seal at least two pits, [0039] and [0043]. These features cut a lower fill 0047, very similar to 0042 but slightly lighter. Due to the pits cutting this fill no sections were attempted.

A sandy clay layer 0041, containing pottery of post-medieval date, was present between topsoil 0001 and the upper ditch fill 0042. This layer might have been deposited here to fill a hollow caused by the large feature [0055] below.

Interestingly all the features (some of possible Bronze Age date) at this end of the trench cut the lower fill 0047 of ditch [0055], suggesting it to be of considerable antiquity.

Pit [0045]

This was a small pit with rounded sides and a flat base, with a diameter of 450mm and a depth of 80mm. This feature cut fill 0047. It's fill, 0046, was a dark brown silty sand with frequent stones. Unfortunately this feature was partly damaged by the machine when this trench was extended, resulting in the south-eastern side of this feature being truncated. This pit contained pottery of Bronze Age date.

Large pit [0039]

Partly revealed in the base of the trench and cutting 0047, this feature appeared circular in plan with a diameter of 2.25m and a depth of 500mm. The cut had steep sides with a rounded base. Fill 0040 was mid brown silty sand with occasional stone becoming frequent towards the base of the feature and with occasional flecks of charcoal. This feature contained pottery of both prehistoric and medieval date and is thus likely to be of the medieval period.

Pit [0043]

A shallow pit, cutting 0047, with gently sloping sides and a flat base, with a diameter of 700mm and a depth of 100mm. Fill 0047 was a mid to dark brown silty sand with frequent small stones (similar to but slightly darker than overlying 0042).

Pit [0003]

A circular pit, cutting 0047, with steep sides, a flat base and with a diameter of 300mm and a depth of 200mm. Fill 0004 was dark grey to black silty sand with frequent small to medium stones, some of which were fire-cracked. The burnt flint and stone suggests a likely later prehistoric date (probably Bronze or Iron Age)

Ditch [0005]

An approximately north to south running linear feature with an open U-shaped profile and with a width of 1.2m and a depth of 400mm. Fill 0006 was mid brown silty sand with frequent stones, becoming very frequent towards the base.

This ditch does correspond with the English Heritage plot of the ring-ditch in this vicinity (see Figure 3) and could be the return for ditch [0055]. These ditches were however quite different in size and nature.

Ditch [0007]

An irregular-sided, approximately east to west running shallow, linear feature with gently sloping sides and a flat base and with a width of 1.1m and a depth of 120mm. Fill 0008 was mid to light grey brown silty sand with frequent stones.

Ditch [0009]

A north-east to south-west running ditch with gently sloping sides and a flat base and with a width of 1.1m and a depth of 160mm. Fill 0010 was light brown grey silty sand with frequent rounded stones.

Ditch [0011]

An approximately north to south running ditch with concave sides and a flat base; width 900mm and depth 220mm. Fill 0012 was light brown grey silty sand with frequent small stones.

5.2 Trench 2 (Figure 4)

Ditch [0013]; component [0050]?

An east to west running shallow linear feature with vertical sides and flat base and with a width of 700mm and a depth of 120mm. Fill 0014 was light grey silty sand with frequent small rounded stones.

This ditch appears to line up with [0050], however there was no trace of this feature crossing Trench 10 (see Figure 3).

5.3 Trench 5 (Figure 4)

Post-hole [0037]

A circular cut with steep sides and a rounded base and with a diameter of 300mm and a depth of 180mm. Fill 0038 was mid brown silty sand with frequent stones.

Post-hole [0035]

Similar to [0037] but with a diameter of 400mm and a depth of 180mm. Fill 0036 was similar to 0038.

Pit [0048]

This feature was discovered while examining the edge of the trench and was recorded mainly in section. With fairly steep sides and a flat base, it had a diameter of 600mm and a depth of 160mm. Fill 0049 was dark brown silty sand with frequent stones. This feature contained Early Bronze Age pottery, including characteristic Beaker-type ware.

Clay-lined pit [0032] (see Figure 1)

This was a clay-lined hemispherical pit with a diameter of 800mm and a depth of 200mm (Figure 1). The lining, 0034, consisted of a c.20mm spread of yellow clay. On top of this was deposit 0033 with a high concentration of ash and/or soot and frequent fire-cracked flints. No indication of in-situ burning could be seen in the underlying 0034.

5.4 Trench 8 (Figure 4)

Large ditch [0019]; component [0053]

An east to west running linear feature of c.2.5m width. Probably same as ditch [0015]. Not excavated in this trench – see Trench 12 for a full description

Ditch [0021]; component [0050]

East to west running ditch with a rounded open U-shaped profile of 800mm width and a depth of 280mm. Fill 0022 was a light grey brown silty sand with frequent rounded stones.

5.5 Trench 9 (Figure 4)

Large ditch [0015]; component [0053]

A very large east to west running ditch of c.5m width. Not excavated in this trench – see Trench 12 for a full description

5.6 Trench 10 (Figure 4)

Ditch [0017]

An east to west running ditch with an open U-shaped profile of 1m width and a depth of 200mm. Fill 0018 was mottled dark and medium brown silty sand with moderate small stones.

5.7 Trench 12 (Figure 5)

Large ditch [0029]; component [0053]?

A large north to south running feature with an irregular profile (possibly due to a later recut?) of 2.8m width and a depth of 800mm. The fill of this ditch was 0052 which consisted of mid to dark grey brown slightly silty sand with moderate to frequent small to medium rounded stones becoming more frequent towards the base and western edge. The stone line adjacent to the western edge might indicate the presence of a bank along this side. The excavated cross-section of this feature was dug by machine.

This ditch might represent a return of the large east to west ditch, component [0015], seen in the other end of Trench 12 and also in Trenches 8 and 9.

Ditch [0027]

A small, east to west ditch running along the southern edge of the large ditch [0025]. This feature had a U-shaped profile of 400mm width and 120mm depth. Fill 0028 was light grey brown silty sand with frequent stones.

Large ditch [0025]; component [0053]

A large east to west running ditch with an open V-profile, steeper on the southern edge. This feature was 2.5m wide and 700mm deep. Fill 0026 was mid to dark grey brown silty sand with moderate small to medium rounded stones becoming frequent to base and sides. The excavated cross-section of this feature was dug by machine.

5.8 Trench 13 (Figure 4)

Ditch [0023]; component [0050]

A slightly meandering east to west running, shallow ditch of 500mm width and 80mm depth. Fill 0024 was light grey brown silty sand with frequent stones.

5.9 Trench 16a (Figure 5)

Ditch [0030]; component [0050]

A north to south running ditch with an open U-shaped profile and rounded base of 1.3m width and a depth of 350mm. Fill 0031 was light grey brown silty sand with frequent rounded stones.

5.10 Trench 16b (Figure 5)

Ditch [0050]; component [0050]

A right-angled turning ditch: continuation of [0023] to the west and [0030] to the south. Both branches of this feature were sampled by excavation with the east to west section being smaller (width 550mm, depth 100mm) than the north to south branch of the ditch (width 1m, depth 180mm).

6.0 Finds

by Cathy Tester, December 2007.

6.1 Introduction

Finds were collected from seven contexts in two evaluation trenches, 1 and 5, and from the topsoil layer. The quantities by context are shown in the table below.

Context	Tr no.	Pottery		Flint		Burnt flint/stone		Miscellaneous	Spotdate
		No	Wt/g	No.	Wt/g	No.	Wt/g		
0001	-			1	7				L Preh
0004	1					2	20		Preh
0033	5					61	4961	Fired clay (4-231g)	Preh
0040	1	2	47	3	9			5 charcoal	Med, BA
0041	1	2	18						PMed
0046	1	4	23						BA
0049	5	41	486	2	7				BA, EBA
Total		49	574	6	23	63	4981		

Table 2. Finds quantities

6.2 Pottery

A total of 49 fragments of pottery which includes hand-made prehistoric and wheel-made medieval and post-medieval wares was collected from four features, three pits and a layer. Details by context are shown in Table 2.

OP No.	Fabric	Period	Sherd No.	Wt/g	Notes	Spotdate
0040	MCW	Med	ba	1	11 Jar base. Abraded	12-14th
	HMG	Preh	b	1	36 Overall fingernail-impressed decoration	BA
0041	LPME	PMed	b	1	15	18-20th
	LMT	PMed	b	1	5 LMT type	15-16th
0046	HMG	Preh	b	2	15 thick sherds Ext. buff-orange, int. dark grey	BA
	HMSO	Preh	b	2	8 Abraded Brown ext. surface and dark grey/black core and int.	Preh
0049	HMG	Preh	rb	6	111 SV. Rim (c.280mm, 7%) Finger tip impressed bands	BA
	HMG	Preh	b	5	18 Beaker fineware. Rim (c 100mm 9%) & body sherd, SV. Dec w square tooth impressed bands	EBA
	HMG	Preh	b	30	357 Misc b/s from 2+ vessels? Orange and orange/buff ext. surfs and dark cores and int. Some with fingernail impressed decoration	BA

Table 3. Pottery by context

Prehistoric pottery

Hand-made prehistoric pottery came from the fills of three pits (0040, 0046 and 0049) and two broad fabrics were distinguished. The first is grog and flint-tempered (HMG) and includes Beaker fineware of early Bronze Age date (0049) as well as Bronze Age coarsewares with fingertip (0049) and fingernail-impressed decoration, some 'over-all' (0001) and some in bands (0049).

Two abraded sherds of sand and organic (HMSO) tempered pottery from pit 0045 (0046) were not closely datable but could possibly be Iron Age.

Medieval and Post-Medieval pottery

A sagging base fragment from a medieval coarseware (MCW) vessel was found in pit 0039 (0040).

Two non-diagnostic bodysherds of post medieval red wares were collected from layer 0041 in Trench 1. The first is a Late Medieval and Transitional (LMT) type which is 15th or 16th century and the second is a fragment of Late Post-Medieval Earthenware (LPME) which is 18-20th century.

6.3 Fired clay

Four fragments (231g) of fired clay with one smooth or flat surface were collected from pit 0032 (0033). Three pieces are orange and sandy with occasional natural flint and a smoothed external surface which is a lighter buff-orange, the fourth piece is greyer but with a similar fabric. This material is undatable but was found in association with burnt flint and stone of probable prehistoric date.

6.4 Flint

(identified by Colin Pendleton)

Six pieces of worked flint were collected from the topsoil layer (0001) and the fills of two pits (0040 and 0049). The flint is dark grey/black and cortex where present is cream or off-white coloured. All of the pieces are unpatinated. Details by context are as follows.

Op No	Type	No.	Notes	Date
0001	flake	1	Flake with limited crude edge retouch. (probably BA)	L Preh
0040	flake	1	Squat flake with hinge fracture and natural striking platform	BA
	flake	1	Snapped flake, thin	Later Preh
	flake	1	Snapped flake, thin	Later Preh
0049	flake	1	Squat flake, irregular, thin. (BA)	Later Preh
	flake	1	Squat flake with irregular limited edge retouch	L Preh

Table 4. Worked flint

The assemblage consists of flakes, four unmodified and two with crude or limited edge retouch. Although small, the group exhibits the typical standards of poor workmanship which characterise the later prehistoric period. The flakes are small and squat and hinge-fractured, one piece has a cortical or 'natural' striking platform which shows that little preparation of the cores occurred before their use. The pieces were found in association with Beaker pottery in pit 0048 (0049) and Bronze Age pottery in pit 0039 (0040) and are probably Bronze Age as well.

6.5 Burnt flint/stone

A large concentration of burnt flint and stone pebbles/cobbles (60-110mm) was found in pit 0032 (0033) in Trench 5. Thirty-one fragments (832g) of blue-grey to white fire-cracked flint and 30 fragments of fire-reddened and cracked sandstone (4129g) were collected. The material is undatable, but is probably prehistoric.

6.6 Charcoal

Five small fragments of charcoal were collected from the fill of pit 0039 (0040).

6.7 Discussion of the finds and environmental evidence

Two of the evaluation trenches produced a small assemblage of mainly prehistoric finds which are probably the result of domestic activity on this site or in the vicinity. The most datable is the pottery which includes Early Bronze Age Beaker fineware and Bronze Age coarseware. The flint assemblage is small but characteristic of later prehistoric assemblages. It was found in association with the Bronze Age pottery and is probably Bronze Age as well.

Later finds are sparse and consist of three sherds medieval and post-medieval pottery which are probably related to low level agricultural activity.

7.0 Conclusions and recommendations

Archaeological features were found in two concentrations on the site. The first concentration was found within the north of the study area in Trenches 1 and 5. The second group, consisting of ditches, was encountered across the south of the site between Trenches 2 and 16a.

In Trench 1 a series of pits (at least one medieval and the others of Bronze Age / prehistoric date) were cut into the fill of an earlier feature. This feature, thought to be a ditch, might correspond to a possible ring-ditch suggested by aerial photography (see Figure 3). Another linear feature 16m to the north-west might represent the other side of the same ring; unlikely however in view of the different characteristics of the two features.

In Trench 5 a cluster of small prehistoric features was encountered. These included a pair of post-holes, a pit containing Early Bronze Age pottery and a clay-lined pit filled with fire-cracked flint. It seems likely that the plateau between Trenches 1 and 5 (before the ground dips away to the south-west) was the location of prehistoric activity – possibly both domestic and funerary in nature.

Across the south of the site a large ditch (component [0053]) ran east to west through Trenches 9, 8 and 12 – where it appeared to turn to the south. Running parallel with this, some 25m to the north, was the much smaller ditch [0050]. This ditch was first encountered in Trench 2 (but could not be detected in Trench 10) before running across Trenches 8, 13, 16b (where it also turned to the south) and 16a. No dating evidence was recovered from any of the excavated ditch fills but these ditches were on a similar alignment to those shown on the First Edition Ordnance Survey Map (c.1880) and are thus possibly also of Post-Medieval date.

It is therefore recommended that the areas adjacent to Trenches 1 and 5 be looked at in greater detail; elsewhere low-level monitoring would be the appropriate mitigation strategy.

8.0 Disclaimer

Any opinions expressed in this report about the need for further archaeological work are those of the Field Projects Division alone. 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 service cannot accept responsibility for inconvenience caused to clients should the Planning Authority take a different view to that expressed in the report.

9.0 References

Boulter, S., 2006, *Cemex, Wangford Covert Extension; Project Design for an Archaeological Evaluation*. SCCAS report no. 2006/158

Havercroft, A., 2004, *Desk-Based Assessment (Update) Archaeology and Historic Features (October 2004) Proposed Extension to Wangford Quarry (Wangford Covert Extension) Wangford, Suffolk*. The Guildhouse Consultancy, Beverley, East Yorkshire.

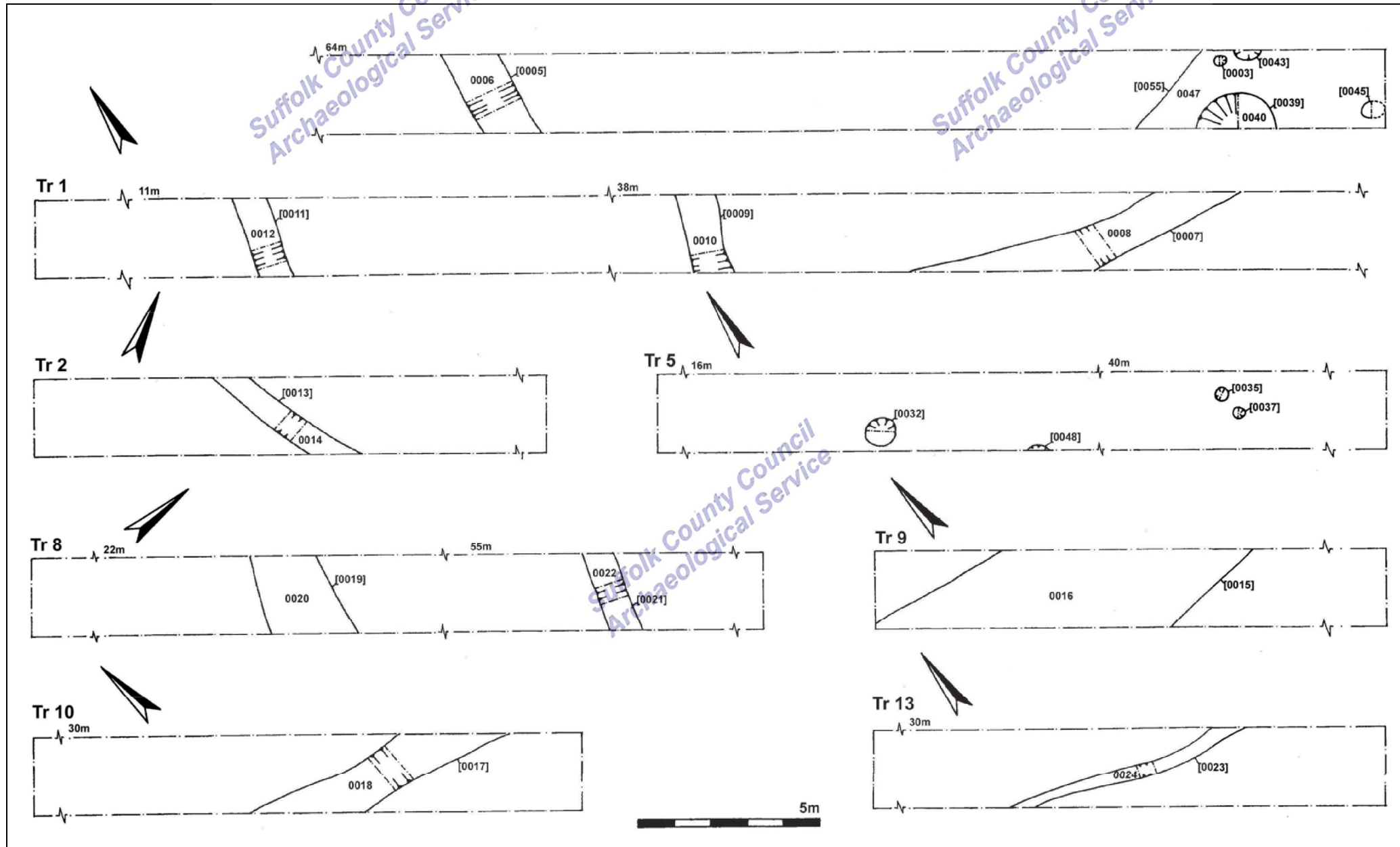


Figure 4: Plan of trenches 1, 2, 5, 8, 9, 10 & 13

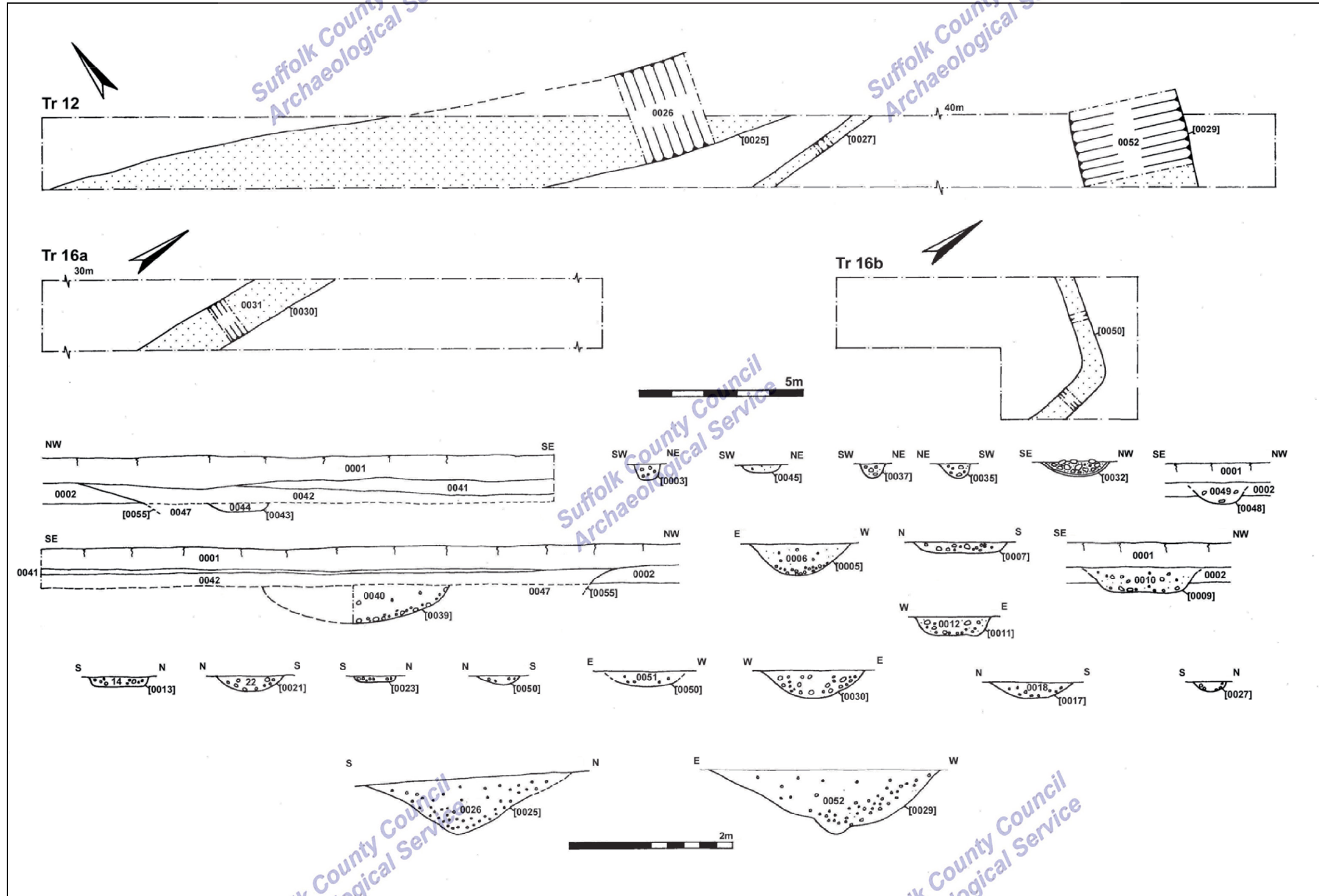
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Figure 5: Plan of trenches 12, 16a, 16b and sections of excavated features
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APPENDIX 1

SUFFOLK COUNTY COUNCIL ARCHAEOLOGICAL SERVICE - CONSERVATION TEAM

Appendix I Brief and Specification for an Archaeological Evaluation

Evaluation by Trial Trench

WANGFORD QUARRY EXTENSION, HILL ROAD, WANGFORD

The commissioning body should be aware that it may have Health & Safety and other responsibilities, see paragraphs 1.7 & 1.8.

This is the brief for the first part of a programme of archaeological work. There is likely to be a requirement for additional work, this will be the subject of another brief.

1. Background

- 1.1 An application [W19531] has been made for an extension to the existing Wangford Quarry.
- 1.2 The Planning Authority has been advised that any consent should be conditional upon an agreed programme of work taking place before development begins (PPG 16, paragraph 30 condition). **An archaeological evaluation of the application area will be required as the first part of such a programme of archaeological work; decisions on the need for, and scope of, any further work will be based upon the results of the evaluation and will be the subject of additional briefs.**
- 1.4 The development area was the subject of a Desk-based Archaeological Assessment by the Guildhouse Consultancy in 2004. This showed that there were crop marks in and adjacent to the application area that were indicative of prehistoric settlement and/or funerary activity in the area (Suffolk Sites and Monuments Record no. WNF 022). The development area is therefore likely to contain sites or deposits of archaeological importance.
- 1.5 All arrangements for the field evaluation 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.
- 1.5 Detailed standards, information and advice to supplement this brief are to be found in *Standards for Field Archaeology in the East of England*, East Anglian Archaeology Occasional Papers 14, 2003.
- 1.6 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.

- 1.7 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 this office before execution.
- 1.8 The responsibility for identifying any restraints on 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. **Brief for the Archaeological Evaluation**

- 2.1 Establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation *in situ*, at the discretion of the developer.
- 2.2 Identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.
- 2.3 Evaluate the likely impact of past land uses and natural soil processes. Define the potential for existing damage to archaeological deposits. Define the potential for colluvial/alluvial deposits, their impact and potential to mask any archaeological deposit. Define the potential for artificial soil deposits and their impact on any archaeological deposit.
- 2.4 Establish the potential for waterlogged organic deposits in the proposal area. Define the location and level of such deposits and their vulnerability to damage by development where this is defined.
- 2.5 Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.
- 2.6 This project will be carried through in a manner broadly consistent with English Heritage's *Management of Archaeological Projects*, 1991 (MAP2), all stages will follow a process of assessment and justification before proceeding to the next phase of the project. Field evaluation is to be followed by the preparation of a full archive, and an assessment of potential. Any further excavation required as mitigation is to be followed by the preparation of a full archive, and an assessment of potential, analysis and final report preparation may follow. Each stage will be the subject of a further brief and updated project design, this document covers only the evaluation stage.
- 2.7 The developer or his archaeologist will give the Conservation Team of the Archaeological Service of Suffolk County Council (address as above) 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.

2.8 If the approved evaluation design is not carried through in its entirety (particularly in the instance of trenching being incomplete) the evaluation report may be rejected. Alternatively the presence of an archaeological deposit may be presumed, and untested areas included on this basis when defining the final mitigation strategy.

2.10 An outline specification, which defines certain minimum criteria, is set out below.

3 **Specification: Field Evaluation**

3.1 Examine the area for earthworks, e.g. banks, ponds, ditches. If present these are to be recorded in plan at 1:2500, with appropriate sections. A record should be made of the topographic setting of the site (e.g. slope, plateau, etc). The Conservation Team of SCC Archaeological Service must be consulted if earthworks are present and before proceeding to the excavation of any trial trenches.

3.2 Trial trenches are to be excavated to cover a minimum 5% by area of the development area and shall be positioned to sample all parts of the site. Linear trenches are thought to be the most appropriate sampling method. Trenches are to be a minimum of 1.8m wide unless special circumstances can be demonstrated. If excavation is mechanised a toothless 'ditching bucket' must be used. The trench design must be approved by the Conservation Team of the Archaeological Service before field work begins.

3.3 The topsoil may be mechanically removed using an appropriate machine fitted with toothless bucket and other equipment. All machine excavation is to be under the direct control and supervision of an archaeologist. The topsoil should be examined for archaeological material.

3.4 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.

3.5 In all evaluation excavation there is a presumption of the need to cause the minimum disturbance to the site consistent with adequate evaluation; that significant archaeological features, e.g. solid or bonded structural remains, building slots or post-holes, should be preserved intact even if fills are sampled.

3.6 There must be sufficient excavation to give clear evidence for the period, depth and nature of any archaeological deposit. The depth and nature of colluvial or other masking deposits must be established across the site.

3.7 The contractor shall provide details of the sampling strategies for retrieving artefacts, biological remains (for palaeoenvironmental and palaeoeconomic investigations), and samples of sediments and/or soils (for micromorphological and other pedological/sedimentological analyses. Advice on the appropriateness of the proposed strategies will be sought from J Heathcote, English Heritage Regional Adviser for Archaeological Science (East of England). A guide to sampling archaeological deposits (Murphy and Wiltshire 1994) is available.

- 3.8 Any natural subsoil surface revealed should be hand cleaned and examined for archaeological deposits and artefacts. Sample excavation of any archaeological features revealed may be necessary in order to gauge their date and character.
- 3.9 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 (unless variations in this principle are agreed with the Conservation Team of SCC Archaeological Service during the course of the evaluation).
- 3.11.1 Human remains must be left *in situ* except in those cases where damage or desecration are to be expected, or in the event that analysis of the remains is shown to be a requirement of satisfactory evaluation of the site. However, the excavator should be aware of, and comply with, the provisions of Section 25 of the Burial Act 1857. *"Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England"* English Heritage and the Church of England 2005 provides advice and defines a level of practice which should be followed whatever the likely belief of the buried individuals.
- 3.12 Plans of any archaeological features on the site are to 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. Any variations from this must be agreed with the Conservation Team.
- 3.13 A photographic record of the work is to be made, consisting of both monochrome photographs and colour transparencies.
- 3.14 Topsoil, subsoil and archaeological deposit to be kept separate during excavation to allow sequential backfilling of excavations.

4. **General Management**

- 4.1 A timetable for all stages of the project must be agreed before the first stage of work commences, including monitoring by the Conservation Team of SCC Archaeological Service.
- 4.2 The composition of the project staff must be detailed and agreed (this is to include any subcontractors).
- 4.3 A general Health and Safety Policy must be provided, with detailed risk assessment and management strategy for this particular site.
- 4.4 No initial survey to detect public utility or other services has taken place. The responsibility for this rests with the archaeological contractor.
- 4.5 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.

5. **Report Requirements**

- 5.1 An archive of all records and finds must be prepared consistent with the principles of English Heritage's *Management of Archaeological Projects*, 1991 (particularly Appendix 3.1 and Appendix 4.1).

- 5.2 The data recording methods and conventions used must be consistent with, and approved by, the County Sites and Monuments Record.
- 5.3 The objective account of the archaeological evidence must be clearly distinguished from its archaeological interpretation.
- 5.5 An opinion as to the necessity for further evaluation and its scope may be given. No further site work should be embarked upon until the primary fieldwork results are assessed and the need for further work is established
- 5.5 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.
- 5.6 The Report must include a discussion and an assessment of the archaeological evidence. Its conclusions must include a clear statement of the archaeological potential of the site, and the significance of that potential in the context of the Regional Research Framework (*East Anglian Archaeology*, Occasional Papers 3 & 8, 1997 and 2000).
- 5.7 Finds must be appropriately conserved and stored in accordance with *UK Institute of Conservators Guidelines*. The finds, as an indissoluble part of the site archive, should be deposited with the County SMR if the landowner can be persuaded to agree to this. If this is not possible for all or any part of the finds archive, then provision must be made for additional recording (e.g. photography, illustration, analysis) as appropriate.
- 5.8 The site archive is to be deposited with the County SMR within three months of the completion of fieldwork. It will then become publicly accessible.
- 5.9 Where positive conclusions are drawn from a project (whether it be evaluation or excavation) 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*, must be prepared. It should be 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.
- 5.10 County SMR sheets must be completed, as per the county SMR manual, for all sites where archaeological finds and/or features are located.
- 5.11 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.
- 5.12 All parts of the OASIS online form must be completed for submission to the SMR. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).

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Date: 21st August 2006

Reference: Wangford Quarry ext 06

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

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

APPENDIX 2: WNF 023 Context List

OP	Context	Component	Trench	Identifier	Description
0001	0001			layer	Topsoil: whole site. Sandy humic loam with frequent stone, c.300mm
0002	0002			layer	Subsoil: whole site. Mid brown, silty sand with frequent rounded stone, c 150-250mm - weathered / disturbed top of natural
0003	0003		1	pit cut	Circular pit cutting 0047 with steep sides and flat base; diam 300mm, depth 200mm
0004	0003		1	pit fill	Dark grey / black silty sand with frequent small / medium rounded stones
0005	0005		1	ditch cut	N-S running ditch with an open U-profile; width 1.2m, depth 400mm
0006	0005		1	ditch fill	Mid brown silty sand with frequent small / medium rounded stones, becoming very frequent to base.
0007	0007		1	ditch cut	E-W running shallow ditch with gently sloping sides and flat base; width 1.1m and depth 120mm
0008	0007		1	ditch fill	Mid to light grey brown silty sand with frequent small / medium rounded stones
0009	0009		1	ditch cut	N-S running ditch with gently sloping sides and flat base; width 1.1m and depth 160mm
0010	0009		1	ditch fill	Light brown grey silty sand with frequent small / medium rounded stones
0011	0011		1	ditch cut	N-S running ditch with concave sides and a flat base; width 900mm and depth 220mm
0012	0011		1	ditch fill	Light brown grey silty sand with frequent small / medium rounded stones
0013	0013	0050	2	ditch cut	E-W running shallow ditch with vertical sides and flat base; width 700mm and depth 120mm
0014	0013	0050	2	ditch fill	Light grey silty sand with frequent small / medium rounded stones
0015	0015	0053	9	ditch cut	Large E-W running ditch of c.5m width - not excavated in this trench
0016	0015	0053	9	ditch fill	see 0026
0017	0017		10	ditch cut	E-W running ditch with open U-profile and flattened base; width 1m, depth 200mm
0018	0017		10	ditch fill	Mottled dark and medium brown silty sand with moderate small / medium rounded stones
0019	0019	0053	8	ditch cut	E-W running ditch of c.2.5m width, not excavated. Probably same as 0015
0020	0019	0053	8	ditch fill	see 0026

OP	Context	Component	Trench	Identifier	Description
0021	0021		8	ditch cut	E-W running ditch with rounded, open U-profile; width 800mm and depth 280mm
0022	0021		8	ditch fill	Light grey brown silty sand with frequent small / medium rounded stones
0023	0023	0050	13	ditch cut	A slightly meandering E-W running shallow ditch; width 500mm depth 80mm
0024	0023	0050	13	ditch fill	Light grey brown silty sand with frequent small / medium rounded stones
0025	0025	0053	12	ditch cut	Large E-W running ditch with open V-profile, steeper on the S edge; width 2.5m, depth 700mm
0026	0025	0053	12	ditch fill	Mid / dark grey brown silty sand with moderate small / medium rounded stones becoming frequent to base and
0027	0027		12	ditch cut	Small ditch running along S edge of [0025] with U-profile; width 400mm, depth 120mm
0028	0027		12	ditch fill	Light grey brown silty sand with frequent small / medium rounded stones
0029	0029	0053?	12	ditch cut	Large N-S running ditch with irregular profile (?recut); width 2.8m, depth 800mm. Possible return for large ditch [0015 / 0025]
0030	0030		16a	ditch cut	N-S running ditch with open U-profile and rounded base; width 1.3m, depth 350mm
0031	0030		16a	ditch fill	Light grey brown silty sand with frequent small / medium rounded stones
0032	0032		5	pit cut	Clay-lined, hemispherical pit; diameter 800mm, depth 200mm
0033	0032		5	pit fill	Mid brown to black stony silty sand; occasional flecks of charcoal, frequent pieces of fire-cracked flint
0034	0032		5	pit fill	Lining of pit, yellow clay - no evidence for in-situ burning
0035	0035		5	p/h cut	Circular cut with steep sides and rounded base; diameter 400mm, depth 180mm
0036	0035		5	p/h fill	Mid brown silty sand with frequent stones
0037	0037		5	p/h cut	Circular cut with steep sides and rounded base; diameter 300mm, depth 180mm
0038	0037		5	p/h fill	Mid brown silty sand with frequent stones
0039	0039		1	pit cut	Large, circular pit cutting 0047, partly revealed in base of trench, with steep sides and rounded base; diameter 2.25m, depth 500mm
0040	0039		1	pit fill	Mid brown silty sand with occasional stone becoming frequent to base of feature, occasional flecks of charcoal
0041	0041		1	layer	Layer SE end of trench between topsoil 0001 and deposit 0042. Light orange brown sandy clay. Possible pmed/modern fill of depression caused by [0055]
0042	0055	0055	1	fill	Upper fill of [0055] below 0041. Mid to dark brown silty sand with frequent small stones

OP	Context	Component	Trench	Identifier	Description
0043	0043		1	pit cut	Shallow pit cutting 0047 with gently sloping sides and flat base; diameter 700mm, depth 100mm
0044	0043		1	pit fill	Slightly darker than but similar to 0042
0045	0045		1	pit cut	Small pit cutting 0047 with rounded sides and flat base; diameter 450mm, depth 80mm. Damaged / truncated by machine SE side
0046	0045		1	pit fill	Dark brown silty sand with frequent stones
0047	0047	0055	1	fill	Similar to 0042 but slightly lighter
0048	0048		5	pit cut	Pit revealed in edge of trench, with fairly steep sides and flat base; diameter 600mm depth 160mm
0049	0048		5	pit fill	Dark brown silty sand with frequent stones
0050	0050	0050	16b	ditch cut	Turning ditch, continuation of [0023] to W and [0030] to S. E-W section smaller - width 550mm, depth 100mm - than N-S part - width 1m, depth 180mm
0051	0050	0050	16b	ditch fill	Mid grey brown, slightly silty sand with frequent small to medium rounded stones
0052	0029	0053?	12	ditch fill	Mid / dark grey brown slightly silty sand with moderate / frequent small to medium rounded stones becoming more frequent towards base and W edge - likely bank on this side
0053	0053	0053	8 9 12		Component number used for large E-W ditch in Trs 8, 9, & 12, possibly turning to S in Tr 12 - see [0029]
0054					number not used
0055	0055	0055	1	ditch cut	Large cut (possibly for ring-ditch) only observed at extreme SE end of trench: in excess of 5m width. Seen in section to cut sub 0002, several prehistoric pits cut its fill 0047