

nau archaeology

An Archaeological Evaluation at Land to the West of Africa Alive, Kessingland, Suffolk

KSS082



Prepared for EcoGen Ltd. PO Box 49 Chacewater Truro Cornwall TR4 8WZ





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August 2011

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| Issue 1 | | | |

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Location: Land west of Africa Alive, Kessingland, Suffolk

District: Waveney

Grid Ref.: TM 489867 – TM 516864

HER No.: KSS082

OASIS Ref.: TM 5162 8694 – TM 5167 8646

Client: EcoGen Ltd

Dates of Fieldwork: 5 -6 May 2011

Summary

An archaeological Watching Brief was conducted for EcoGen Ltd during the excavation of a trench across open fields to facilitate the installation of underground cabling. The watching brief monitored the final 250m approx. of trench directly south of the junction between Snab Hill, Dam Lane and Back Street.

Several archaeological features(all undated) were recorded.

1.0 INTRODUCTION

The route of the cable trench that is the subject of this report was situated to the immediate south of the junction of Snab Hill, Dam Lane and Back Street and continued in a straight line southwards for approximately 240m. The original plan to evaluate this part of the easement of the cable trench linking a new windfarm to the national grid incorporated a 5% sample trial trenching scheme, the rest of the route (south of the A140 was monitored as a watching brief and is to be dealt with in a separate report (Report No. 2325)). The archaeological approach to the part of the route subject to trial trenching was subsequently amended to a programme of watching brief monitoring.

This work was undertaken to fulfil a Brief issued by The Archaeology Service of Suffolk County Council (Ref. KessinglandUndergroundCabling_2010). The work was conducted in accordance with a Project Design and Method Statement prepared by NAU Archaeology (Ref. NAU/BAU2597/NP). This work was commissioned and funded by EcoGen Ltd.

This programme of work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following the guidelines set out in *Planning* and *Policy Guidance Note 16:* Archaeology and Planning (Department of the Environment 1990). The results will enable decisions to be made by the Local Planning Authority about the treatment of any archaeological remains found.

The site archive is currently held by NAU Archaeology and on completion of the project will be deposited with the Suffolk County Council Archaeology Service (NMAS), following the relevant policies on archiving standards.

2.0 GEOLOGY AND TOPOGRAPHY

The solid geology at the site was London Clay (BGS 1985) underlying glacial and fluvial silt and clay till of the Anglian Glaciation (BGS 1991). The topsoil and

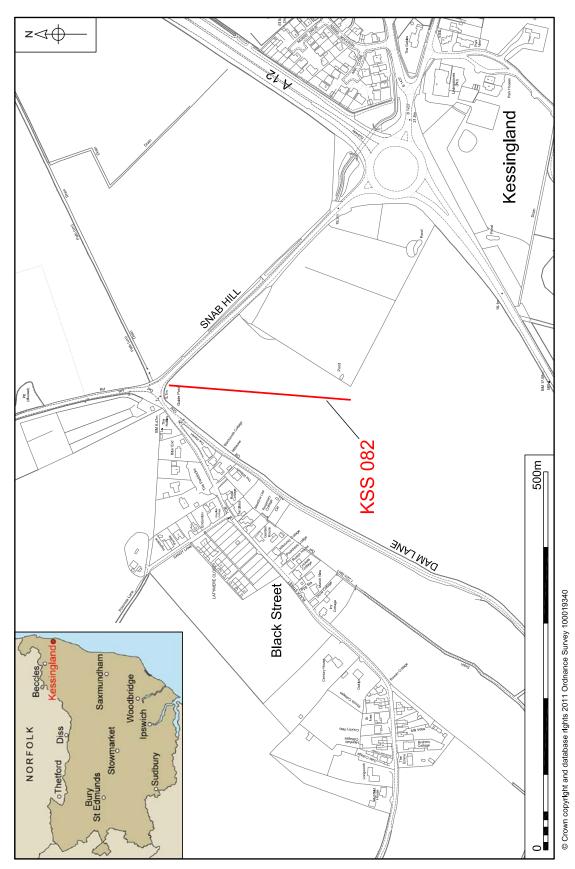


Figure 1. Site location. Scale 1:5000

subsoil covering the site was an orange/brown to brown/orange clay-silt with an occasional to moderate amount of irregular flint gravel.

This well-drained site runs south to north from a plateau which overlooks the Hundred River valley. It drops to the north into a small bowl in the hillside and then down to the junction of Snab Hill, Dam Lane and Black Street.

3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The Suffolk Historic Environment Record (SHER) and some relevant cartographic sources have been consulted during the preparation of this section and sites within 600m of the route are summarised and shown on Figure 2. All recorded sites within one kilometre of the route are described under their relevant Period headings below.

In the same field as the cable trench a 13th-century seal matrix and two 11th-century Late Saxon coins (KSS 016) have been found. In the field directly to the east and approx 160m from the site a fragment of a Bronze Age socketed axe (KSS 020) was recovered.

There are three sites to the north that have also produced metal detected finds (GSE 020, GSE 021 and GSE 022). GSE 020 and GSE 021 both produced 2nd—to early 3rd-century Roman silver denarii whilst two pieces of 10th-century Saxon decorated bronze metalwork have been recovered from GSE 022.

In the area of Black Street, 500m to the west, a Neolithic flint scatter (GSE 009) and a semi-complete Roman cordoned jar (GSE 011) have been found.

In the south-west corner of the site field, in an area bounded by a curve in Dam Lane, two flint axes (KSS 029) and two Iron Age coins of the Iceni (KSS 017) have been recorded.

Prehistoric

A Neolithic flint axe, knife, scrapers, cores and hammer stones (GSE 005) and Neolithic axes, arrowhead, scrapers and cores (GSE 007) have been found at Rookery Farm, 900m west of the present development.

A Neolithic flint scatter (GSE 009) was found 250m west of the present development.

A Neolithic axe head, cores and waste flakes (KSS 006) as well as an arrowhead, scrapers and potboilers (KSS 009) have been found 750m south-south-east of the present site.

A scatter of Neolithic worked flints (KSS 010) has been found 400m to the south.

Two Neolithic axes (KSS 029) have been found 300m south-west of the present site.

Two small ring-ditches (probably Bronze Age barrows) are present 600m south of the development site (KSS 064).

A Bronze Age ring-ditch (KSS 065) larger than those represented at KSS064 was located 800m south of the present development.

A fragment of a Bronze-Age axe (KSS 020) has been found 200m east of the present development.

Two Iron-Age coins (KSS 017) have been found 500m to the south-west.

Roman

Metal detecting has produced a fragment of a Roman incense burner (GSE 004), coins, brooches and a strap end (GSE 014) 1km west of the present development.

Metal detecting has also produced three silver denarii and a brooch fragment (GSE 020) and five more denarii (GSE 021) 800m to the north.

An almost complete Roman jar (GSE 011) has been found 300m west of the present development.

Anglo-Saxon

Metal detecting has produced two decorated bronze mounting plates (GSE 022) 700m north of the present development and a fragment of a cruciform brooch (GSE 014) 1km to the west.

Late Saxon pottery sherds, a stirrup mount and strap end (GSE 004) have been found 1km to the west.

Medieval

Medieval pottery and a key (GSE 004) have been found 1km to the west of the present development.

Metalwork including 2 harness pendants, a buckle and several coins (GSE 014) has been found 1km to the west.

64 sherds of a greyware cooking pot (KSS 009) were found 700km south-east of the present development.

Eleven sherds of medieval pottery (KSS 010) were found 300m south of the present development.

Within the area of the present development, a medieval seal matrix and two 11th-century coins have been found (KSS 016).

Metal detecting has produced a scatter of medieval pottery (KSS 063) as well as bronze items including a Jaws Harp, brooches, buckles and mounts (KSS 023) 700m south-east of the present development.

3.1 Post-medieval

Hodskinson's map of 1783 show the development area as agricultural land, surrounded by large areas of common to the north and south (C. Pendleton, *pers com.*)

On the evidence available from the recorded finds the land in the immediate area of the cable trench has seen human activity to some degree from the Neolithic period the Late Saxon and Medieval period. In later times Hodskinson's map of 1783 shows the development area as agricultural land, surrounded by large areas of common to the north and south (Pendleton, C. pers com.).

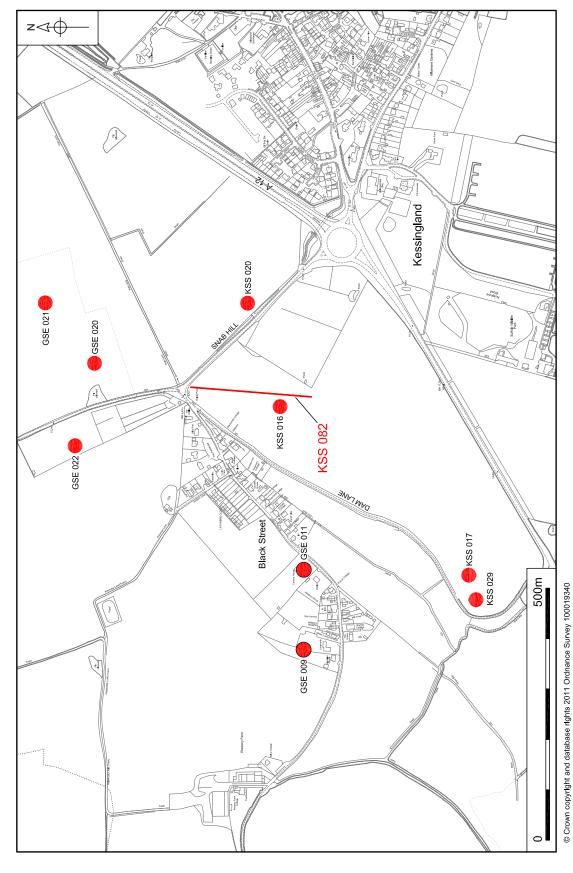


Figure 2. Location of SHER sites mentioned in the text. Scale 1:7500

4.0 METHODOLOGY

The objective of this evaluation was to determine as far as reasonably possible the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

The Brief required that the route of the cable trench south of the junction of Snab Hill and Dam Lane be evaluated by trial trenching involving a scheme of 5% sampling. This plan was amended at a late date to constant monitoring of the groundworks of the route. The cable trench was 0.5m wide and 1.2-1.4m deep. Access to the trench was denied on health and safety grounds hence all features that were observed were recorded from the trench edge.

Machine excavation was carried out with a tracked hydraulic 360° excavator using a toothless ditching bucket under constant archaeological supervision.

Spoil, exposed surfaces and features were scanned with a metal-detector. All metal-detected and hand-collected finds, other than those which were obviously modern, were retained for inspection.

No environmental samples were taken as no suitable deposits were encountered.

All archaeological features and deposits were recorded using NAU Archaeology pro forma. Trench locations, plans and sections were recorded at appropriate scales. Colour, monochrome and digital photographs were taken of all relevant features and deposits where appropriate.

Site conditions were good, with the work taking place in fine weather.



Plate 1. Route of cable trench looking north

5.0 RESULTS

Several archaeological features were encountered within the route of the cable trench (Fig. 3). However the loose nature of the topsoil and subsoil plus the trench depth (1.2–1.4m) and relatively narrow width (0.5m) created a situation where the trench sides were under risk of collapse. Access to the trench was prohibited by the site foreman and as a result no excavation or further investigation of the features was possible.



Plate 2. Cable trench looking south



Plate 3. Cable trench looking north

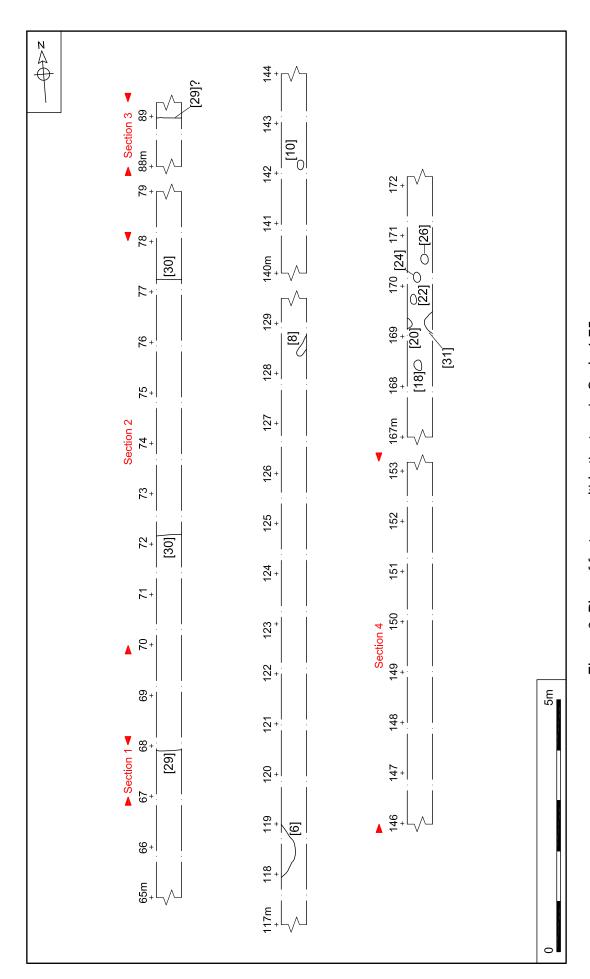


Figure 3. Plan of features within the trench. Scale 1.75

Whilst some of the features are likely to have been of archaeological origin it is entirely possible that some were not. The features that were encountered were recorded in plan and/or section from the trench edge.

The first feature encountered was feature [29] (Figs 3 and 4, sections 1 and 3) which was situated in a dish-shaped depression on the hillside. This feature appears to be over 20m wide and due to its size could be some form of extraction pit.

Section 3 (Fig. 4) drawn approximately 12m north of [29] shows a distinct and sharp change of deposit from a mid brown-orange clay silt to a pale grey-brown clay silt with chalk and flint inclusions. No such change in the deposits was seen at the southern edge of the feature. Although the transitional boundary was a little blurred by the ditching bucket the change from orange-brown clay-silt to a pale grey-brown clay-silt was very pronounced. Deposit (4) located within feature [29] was a markedly different colour from other fills recorded and had a waterlogged appearance. It is possible that if the feature had been an extraction pit, after it fell into disuse it became a pond (labelled as [30]).

The other features recorded in plan were located between points 118m and 171m (Fig. 3) and consisted of three isolated features and a group of six post-holes. Three features were also recorded in section between points 146m and 153m. No finds were recovered from any of these features

The isolated features in plan consisted of pit [6] (118m-119m), possible terminus of putative linear ditch [8] (129m) and post-hole [10] (142m).

Three features, possible gulley [12] and two possible ditches [14], and [16] were recorded in section (Figs 3 (for location) and 4, section 4). These features had fills of similar tone and colour and their regularity of form suggests that they are archaeological in nature.



Plate 4. Group of post-holes

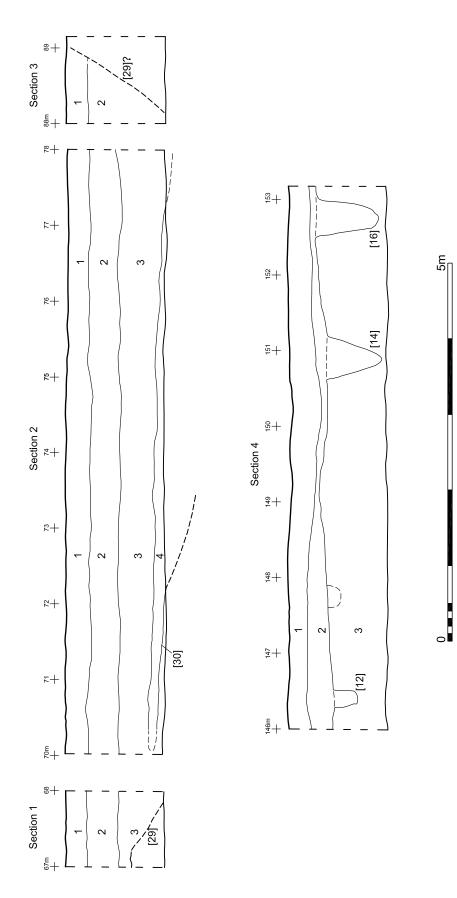


Figure 4. Sections. Scale 1:50

Six post-holes made up a small group of features located at 168m-171m, five of which ([18], [20], [22], [24], [26]) appeared to create an arc around the sixth, post-hole [31] (Fig. 3, Plate 4). It is thought that this cluster of post-holes may possibly be associated with some form of structure.

At the base of the hill a colluvial layer has formed which was still in evidence at a depth of 1.2m.

Four small sherds of prehistoric pottery were found within deposit (28) soil arisings from the area where the colluvium was present.

6.0 THE FINDS

6.1 The Pottery

by Andrew Peachey

6.1.1 Introduction

Watching brief excavations recovered a total of four sherds (26g) of prehistoric pottery and two sherds (18g) of medieval pottery. The pottery is in a relatively unabraded but fragmented condition, and is entirely comprised of non-diagnostic body sherds.

6.1.2 The Prehistoric Pottery

The four sherds (26g) of prehistoric pottery, recovered as un-stratified material from soil arisings (28), occurred in a bonfire-fired fabric with mottled surfaces that range from orange to dark red-brown to black, fading to a thick dark grey core. Inclusions comprise poorly-sorted quartz (0.10-0.50mm) with sparse clay pellets and iron rich grains (0.25-1.00mm). This type of fabric is typical of handmade pottery produced throughout the East Anglian region in the middle to late Iron Age.

6.1.3 The Medieval Pottery

The two sherds (18g) of medieval pottery were contained in extraction/quarry pit [29] (4) and are comprised of coarse wares that would have been produced locally in the 12th to 14th centuries.

One sherd (10g) occurs in a fabric with fumed black exterior surfaces with an offwhite to pale grey core and interior surfaces. Inclusions comprise common subrounded to sub-angular quartz (0.10-0.25mm, occasionally to 1mm) with sparse red and black iron-rich grains (0.10-1.00mm). The fabric is moderately hard with slightly pimple surfaces.

The second sherd (8g) has surfaces that are mottled ranging from dark red brown to black with a thick dark grey core. Inclusions comprise poorly-sorted, subangular quartz (<0.25mm, occasionally to 1mm) with sparse black iron rich grains (0.10-0.50mm). The fabric is hard with slightly abrasive surfaces.

6.2 The Flint

by Andrew Peachey

A single flake (4g) of struck flint was recovered as unstratified material from soil arisings (28). The flake occurs in good quality, mid to dark grey raw flint. The flake

is blade-like, with parallel dorsal scars and a hinge termination suggesting this was a miss-hit flake from a blade core, probably of Neolithic date.

7.0 CONCLUSIONS

Several features were uncovered during the excavation of the cable trench however without the benefit of data obtained through closer investigation the potential identification and dating of the recorded features is somewhat compromised.

The depth at which the features were found is encouraging for the preservation of any further archaeological remains within the vicinity. No plough-scarring was seen cutting into natural deposits and at the base of the hill to the north the base of the trench (at 1.2–1.4m) was reached while still within a layer of colluvium.

Archaeological remains are mostly present on the north facing slope as it drops towards the road junction of Snab Hill, Dam Lane and Black Street but their function and date cannot be determined. Two sherds of 12th- to 14th-century pottery were collected from the fill of extraction/quarry pit [29] which may suggest a medieval date for the backfilling of this feature

The quantity of finds recovered was limited despite the soil arisings being surveyed by metal detector and visually surveyed. It is likely that the paucity of finds is due to the narrow corridor of the excavated cable trench combined with the slope on which it was excavated and the movement and development of colluvium created by the topography.

It is perhaps not too surprising that evidence of archaeological activity is poor given the width of the trench was just 0.5m.

Acknowledgements

The author would like to thank EcoGen Ltd who funded the project.

The finds were processed by Lucy Talbot and recorded by Rebecca Sillwood. The pottery and flint were analysed by Andrew Peachey.

David Dobson produced the figures and Jayne Bown edited the report.

Bibliography

| BGS (British Geological Survey) | 1985 | Sheet 52n 00 Solid Geology (England and Wales) |
|----------------------------------|------|--|
| BGS (British Geological Survey) | 1991 | Sheet 52n 00 Quaternary (England and Wales) |
| Communities and Local Government | 2010 | Planning Policy Statement 5: Planning For The Historic Environment TSO, Norwich. |

Appendix 1a: Context Summary

| Context | Category | Cut Type | Fill Of | Description | Period |
|---------|----------|--------------------------|---------|---------------------------------------|-----------|
| 1 | Deposit | Topsoil | | | - |
| 2 | Deposit | Subsoil | | | - |
| 3 | Deposit | Lower subsoil/ colluvium | | | - |
| 4 | Deposit | | 29 | Fill of 29 | ?Medieval |
| 5 | Cut | Cable Trench | | Approx 240m x 0.50m | Modern |
| 6 | Cut | Pit? | | | Unknown |
| 7 | Deposit | | 6 | Fill of 6 | Unknown |
| 8 | Cut | Linear Terminus? | | | Unknown |
| 9 | Deposit | | 8 | Fill of 8 | Unknown |
| 10 | Cut | Post-hole? | | | Unknown |
| 11 | Deposit | | 10 | Fill of 10 | Unknown |
| 12 | Cut | Post-hole? | | | Unknown |
| 13 | Deposit | | 12 | Fill of 12 | Unknown |
| 14 | Cut | Linear? | | | Unknown |
| 15 | Deposit | | 14 | Fill of 14 | Unknown |
| 16 | Cut | Linear? | | | Unknown |
| 17 | Deposit | | 16 | Fill of 16 | Unknown |
| 18 | Cut | Linear? | | | Unknown |
| 19 | Deposit | | 18 | Fill of 18 | Unknown |
| 20 | Cut | Post-hole? | | | Unknown |
| 21 | Deposit | | 20 | Fill of 20 | Unknown |
| 22 | Cut | Post-hole? | | | Unknown |
| 23 | Deposit | | 22 | Fill of 22 | Unknown |
| 24 | Cut | Post-hole? | | | Unknown |
| 25 | Deposit | | 24 | Fill of 24 | Unknown |
| 26 | Cut | Post-hole? | | | Unknown |
| 27 | Deposit | | 26 | Fill of 26 | Unknown |
| 28 | Finds | | | Unstratified finds from soil arisings | - |
| 29 | Cut | ?Extraction/ Quarry Pit? | | | ?Medieval |
| 30 | Cut | Pond | | | Unknown |
| 31 | Cut | Post-hole? | | | Unknown |
| 32 | Deposit | | 31 | Fill of 31 | Unknown |

Appendix 1b: OASIS Feature Summary

| Period | Feature | Number |
|---------|-------------|--------|
| Unknown | Pit | 2 |
| | Ditch/Gully | 4 |
| | Post-hole | 7 |
| | Pond | 1 |

Appendix 2a: Finds by Context

| Context | Material | Qty | Wt | Period |
|---------|----------------|-----|-----|-----------------|
| 4 | Pottery | 2 | 18g | Medieval |
| 28 | Flint – Struck | 1 | 4g | Neolithic |
| 28 | Pottery | 4 | 26g | Middle Iron Age |

Appendix 2b: OASIS Finds Summary

| Period | Material | Total |
|-----------------|----------------|-------|
| Neolithic | Flint – Struck | 1 |
| Middle Iron Age | Pottery | 4 |
| Medieval | Pottery | 2 |

Appendix 3: Archaeological Specification

The Archaeological Service



9-10 The Churchyard, Shire Hall Bury St Edmunds Suffolk IP33 2AR

Brief and Specification for Archaeological Evaluation and Continuous Archaeological Recording

PROPOSED UNDERGROUND CABLE ROUTE, KESSINGLAND SUFFOLK

The commissioning body should be aware that it may have Health & Safety responsibilities.

- 1. The nature of the development and archaeological requirements
- 1.1 The installation of underground cabling is to be undertaken between Tinkers Lane, Rushmere and the land NW of Africa Alive, Kessingland (TM 489867 TM 516864). **Please contact the applicant for an accurate plan of the site.**
- 1.2 The Conservation Team of Suffolk County Council Archaeological Service has advised Freedom Group that there is a need for a programme of archaeological investigation during development, in accordance with PPS5 *Planning for the Historic Environment* (Policy HE12.3), to record and advance understanding of the significance of the heritage asset before it is damaged or destroyed.
- 1.3 The proposal lies in an area of high archaeological importance, recorded in the County Historic Environment Record. A concentration of Iron Age and Roman finds is recorded from the vicinity of the bridge crossing the Hundred River, Rushmere (RMR 001), while the stretch to the W of Africa Alive crosses a known medieval metalwork scatter (KSS 016). There is high potential for archaeological deposits to be disturbed by development in these areas, and the proposed works would cause significant ground disturbance with the potential to damage any archaeological deposit that exists.
- 1.4 Assessment of the available archaeological evidence indicates that the areas of the Hundred River bridge (TM 4918 8691) affected by the development can be adequately recorded by continuous archaeological monitoring and recording during all groundworks (see Sections 2-4).
- 1.5 The following archaeological evaluation work is required for the stretch of cabling crossing open fields to the W of Africa Alive between TM5162 8694 to TM5167 8646 (see sections 5-7)
 - Field survey comprising both field walking and metal-detecting survey, along the line of the proposed easement (approx 490m at 8m width).
 - Trial excavation (a 5% sample of the easement area to be stripped).
- 1.6 The results of this evaluation will enable the archaeological resource, both in quality and extent, to be accurately quantified, informing both development methodologies and mitigation measures. Decisions on the need for, and scope of, any further work should there be any archaeological finds of significance will be based upon the results of the evaluation and will be the subject of an additional brief.
- 1.7 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.

- 1.8 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.
- 1.9 In accordance with the standards and guidance produced by the Institute for Archaeologists this brief should not be considered sufficient to enable the total execution of the project. A Written Scheme of Investigation (WSI) based upon this brief and the accompanying outline specification of minimum requirements, is an essential requirement. This must be submitted by the developers, or their agent, to the Conservation Team of the Archaeological Service of Suffolk County Council (9-10 The Churchyard, 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 WSI as satisfactory. The WSI will provide the basis for measurable standards and will be used to satisfy the requirements of the planning condition.
- 1.10 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 the Conservation Team of the Archaeological Service of SCC (SCCAS/CT) before execution.
- 1.11 The responsibility for identifying any constraints on field-work, e.g. Scheduled Monument status, Listed Building status, public utilities or other services, tree preservation orders, SSSIs, wildlife sites &c., ecological considerations rests with the commissioning body and its archaeological contractor. The existence and content of the archaeological brief does not over-ride such constraints or imply that the target area is freely available.
- 1.12 Any changes to the specifications that the project archaeologist may wish to make after approval by this office should be communicated directly to SCCAS/CT and the client for approval.
- 1.13 All arrangements for the excavation of the site, the timing of the work, access to the site, the definition of the precise area of landholding and area for proposed development are to be defined and negotiated by the archaeological contractor with the commissioning body.

2. Brief for Archaeological Recording (Hundred River Bridge section)

- 2.1 To provide a record of archaeological deposits which are damaged or removed by any development [including services and landscaping] permitted by the current proposal.
- 2.2 Any ground works, and also the upcast soil, are to be closely monitored during and after stripping in order to ensure no damage occurs any heritage assets. Adequate time is to be allowed for archaeological recording of archaeological deposits during excavation, and of soil sections following excavation.
- 2.2 The significant archaeologically damaging activity in this proposal are:
 - the excavation of entry and exit pits associated with the directional drilling of the cable under the river.

Any ground works, and also the upcast soil, are to be closely monitored during and after stripping by the building contractor. Adequate time is to be allowed for archaeological recording of archaeological deposits during excavation, and of soil sections following excavation.

3. Specification for recording (Hundred River Bridge section)

- 3.1 All features which are, or could be interpreted as, structural must be fully excavated. Post-holes and pits must be examined in section and then fully excavated. Fabricated surfaces within the excavation area (e.g. yards and floors) must be fully exposed and cleaned. Any variation from this process can be made only by agreement with SCCAS/CT, and must be confirmed in writing.
- 3.2 All other features must be sufficiently examined to establish, where possible, their date and function. For guidance:
 - a) A minimum of 50% of the fills of the general features is be excavated (in some instances 100% may be requested).
 - b) 10% of the fills of substantial linear features (ditches, etc) are to be excavated (min.). The samples must be representative of the available length of the feature and must take into account any variations in the shape or fill of the feature and any concentrations of artefacts. For linear features, 1.00m wide slots (min.) should be excavated across their width.
- 3.3 Any variation from this process can only be made by agreement [if necessary on site] with a member of SCCAS/CT, and must be confirmed in writing.
- 3.4 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 WSI must provide details of a comprehensive sampling strategy for retrieving and processing biological remains (for palaeoenvironmental and palaeoeconomic investigations and also for absolute dating), and samples of sediments and/or soils (for micromorphological and other pedological/sedimentological analyses. All samples should be retained until their potential has been assessed. Advice on the appropriateness of the proposed strategies will be sought from Dr Helen Chappell, English Heritage Regional Adviser in Archaeological Science (East of England). A guide to sampling archaeological deposits (Murphy, P.L. and Wiltshire, P.E.J., 1994, A guide to sampling archaeological deposits for environmental analysis) is available for viewing from SCCAS.
- 3.5 A finds recovery policy is to be agreed before the project commences. It should be addressed by the WSI. Sieving of occupation levels and building fills will be expected.
- 3.6 Use of a metal detector will form an essential part of finds recovery. Metal detector searches must take place at all stages of the excavation by an experienced metal detector user.
- 3.7 All finds will be collected and processed. No discard policy will be considered until the whole body of finds has been evaluated.
- 3.8 All ceramic, bone and stone artefacts to be cleaned and processed concurrently with the excavation to allow immediate evaluation and input into decision making.
- 3.9 Metal artefacts must be stored and managed on site in accordance with *UK Institute of Conservators Guidelines* and evaluated for significant dating and cultural implications before despatch to a conservation laboratory within four weeks of excavation.
- 3.10 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 Archaeologists' *Technical Paper 13: Excavation and post-excavation treatment of Cremated and Inhumed Human Remains*, by McKinley & Roberts. Proposals for the final disposition of remains following study and analysis will be required in the WSI.

- 3.11 Plans of the archaeological features on the site should normally be drawn at 1:20 or 1:50, depending on the complexity of the data to be recorded. Sections should be drawn at 1:10 or 1:20 again depending on the complexity to be recorded. All levels should relate to Ordnance Datum. Any variations from this must be agreed with SCCAS/CT.
- 3.12 A photographic record of the work is to be made, consisting of both monochrome photographs and colour transparencies/high resolution digital images, and documented in a photographic archive.
- 3.13 Excavation record keeping is to be consistent with the requirements the County Historic Environment Record and compatible with its archive. Methods must be agreed with SCCAS/CT.

4. Arrangements for Monitoring (Hundred River Bridge section)

- 4.1 To carry out the monitoring work the developer will appoint an archaeologist (the archaeological contractor) who must be approved by SCCAS/CT.
- 4.2 The developer or his contracted archaeologist will give SCCAS/CT 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.
- 4.3 Allowance must be made to cover archaeological costs incurred in monitoring the development works by the contract archaeologist. The size of the contingency should be estimated by the approved archaeological contractor, based upon the outline works in this Brief and Specification and the building contractor's programme of works and time-table.
- 4.4 If unexpected remains are encountered SCCAS/CT must be informed immediately. Amendments to this specification may be made to ensure adequate provision for archaeological recording.

5. Brief for the Archaeological Evaluation (area W of Africa Alive)

- 5.1 Establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation *in situ*.
- 5.2 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.
- 5.3 Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.
- 5.4 Establish the potential for the survival of environmental evidence.
- 5.5 Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.
- 5.6 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.
- 5.7 The developer or his archaeologist will give SCCAS/CT (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.
- 5.8 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.
- 5.9 An outline specification, which defines certain minimum criteria, is set out below.

6. Specification for Field Survey (area W of Africa Alive)

A systematic field-walking and non-ferrous metal-detecting survey is to be undertaken along the route of the proposed easement (c. 490m). The strategy for assessing the artefact content of the topsoil must be presented in the WSI.

7. Specification for Trenched Evaluation (area W of Africa Alive)

- 7.1 Trial trenches are to be excavated to cover 5% by area of the proposed easement, which is 196m². These shall be positioned to sample the full length of the easement. Linear trenches are thought to be the most appropriate sampling method. Trenches are to be a minimum of 1.80m wide unless special circumstances can be demonstrated; this will result in a minimum of 108.00m of trenching at 1.80m in width.
- 7.2 If excavation is mechanised a toothless 'ditching bucket' 1.80m wide must be used. A scale plan showing the proposed locations of the trial trenches should be included in the WSI and the detailed trench design must be approved by SCCAS/CT before field work begins.
- 7.3 The topsoil may be mechanically removed using an appropriate machine with a back-acting arm and fitted with a toothless bucket, down to the interface layer between topsoil and subsoil or other visible archaeological surface. All machine excavation is to be under the direct control and supervision of an archaeologist. The topsoil should be examined for archaeological material.
- 7.4 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 excavation will be made by the senior project archaeologist with regard to the nature of the deposit.
- 7.5 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. For guidance:
 - For linear features, 1.00m wide slots (min.) should be excavated across their width;
 - For discrete features, such as pits, 50% of their fills should be sampled (in some instances 100% may be requested).
- 7.6 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.

- 7.7 Archaeological contexts should, where possible, be sampled for palaeoenvironmental remains. Best practice should allow for sampling of interpretable and datable archaeological deposits and provision should be made for this. The contractor shall show what provision has been made for environmental assessment of the site and must provide details of the sampling strategies for retrieving artefacts, biological remains (for palaeoenvironmental and palaeoeconomic investigations). and samples of sediments and/or micromorphological and other pedological/sedimentological analyses. Advice on the appropriateness of the proposed strategies will be sought from Helen Chappell, English Heritage Regional Adviser for 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.
- 7.8 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.
- 7.9 Metal detector searches must take place at all stages of the excavation by an experienced metal detector user.
- 7.10 All finds will be collected and processed (unless variations in this principle are agreed SCCAS/CT during the course of the evaluation).
- 7.11 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.
- 7.12 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. All levels should relate to Ordnance Datum. Any variations from this must be agreed with SCCAS/CT.
- 7.13 A photographic record of the work is to be made, consisting of both monochrome photographs and colour transparencies and/or high resolution digital images.
- 7.14 Topsoil, subsoil and archaeological deposit to be kept separate during excavation to allow sequential backfilling of excavations.
- 7.15 Trenches should not be backfilled without the approval of SCCAS/CT. Suitable arrangements should be made with the client to ensure trenches are appropriately backfilled, compacted and consolidated in order to prevent subsequent subsidence.

8. General Management

- 8.1 A timetable for all stages of the project must be agreed before the first stage of work commences, including monitoring by SCCAS/CT. The archaeological contractor will give not less than five days written notice of the commencement of the work so that arrangements for monitoring the project can be made.
- 8.2 The composition of the archaeology contractor staff must be detailed and agreed by this office, including any subcontractors/specialists. For the site director and other staff likely to have a major responsibility for the post-excavation processing of this evaluation there must also be a statement of their responsibilities or a CV for post-excavation work on other archaeological sites and publication record. Ceramic specialists, in particular, must have relevant experience from this region, including knowledge of local ceramic sequences.

- 8.3 It is the archaeological contractor's responsibility to ensure that adequate resources are available to fulfil the Brief.
- 8.4 A detailed risk assessment must be provided for this particular site.
- 8.5 No initial survey to detect public utility or other services has taken place. The responsibility for this rests with the archaeological contractor.
- 8.6 The Institute for Archaeologists' *Standard and Guidance for archaeological field evaluation* (revised 2001) should be used for additional guidance in the execution of the project and in drawing up the report.

9. Report Requirements

- 9.1 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).
- 9.2 The report should reflect the aims of the WSI.
- 9.3 The objective account of the archaeological evidence must be clearly distinguished from its archaeological interpretation.
- 9.4 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.
- 9.5 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.
- 9.6 The Report must include a discussion and an assessment of the archaeological evidence, including an assessment of palaeoenvironmental remains recovered from palaeosols and cut features. 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).
- 9.7 The results of the surveys should be related to the relevant known archaeological information held in the County Historic Environment Record (HER).
- 9.8 A copy of the Specification should be included as an appendix to the report.
- 9.9 The project manager must consult the County HER Officer (Dr Colin Pendleton) to obtain a HER number for the work. This number will be unique for each project or site and must be clearly marked on any documentation relating to the work.
- 9.10 Finds must be appropriately conserved and stored in accordance with *UK Institute of Conservators Guidelines*.
- 9.11 The project manager should consult the intended archive depository before the archive is prepared regarding the specific requirements for the archive deposition and curation, and regarding any specific cost implications of deposition. The intended depository should be stated in the WSI, for approval. The intended depository must be prepared to accept the entire archive resulting from the project (both finds and written archive) in order to create a complete record of the project.
- 9.12 If the County Store is not the intended depository, the project manager should ensure that a duplicate copy of the written archive is deposited with the County HER.

- 9.13 If the County Store is the intended location of the archive, the project manager should consult the SCCAS Archive Guidelines 2010 and also the County Historic Environment Record Officer regarding the requirements for the deposition of the archive (conservation, ordering, organisation, labelling, marking and storage) of excavated material and the archive. A clear statement of the form, intended content, and standards of the archive is to be submitted for approval as an essential requirement of the WSI.
- 9.14 The WSI should state proposals for the deposition of the digital archive relating to this project with the Archaeology Data Service (ADS), and allowance should be made for costs incurred to ensure the proper deposition (http://ads.ahds.ac.uk/project/policy.html) with ADS or another appropriate archive depository.
- 9.15 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*, must be prepared. It should be included in the project report, or submitted to SCCAS/CT, by the end of the calendar year in which the evaluation work takes place, whichever is the sooner.
- 9.16 An unbound hardcopy of the evaluation report, clearly marked DRAFT, must be presented to SCCAS/CT for approval within six months of the completion of fieldwork unless other arrangements are negotiated with the project sponsor and SCCAS/CT.
 - Following acceptance, two hard copies of the report should be submitted to SCCAS/CT together with a digital .pdf version.
- 9.17 Where appropriate, a digital vector trench plan should be included with the report, which must be compatible with MapInfo GIS software, for integration in the County HER. AutoCAD files should be also exported and saved into a format that can be can be imported into MapInfo (for example, as a Drawing Interchange File or .dxf) or already transferred to .TAB files.
- 9.18 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.
- 9.19 All parts of the OASIS online form must be completed for submission to the County HER, and a copy should be included with the draft report for approval. 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: 11 November 2010 Ref: KessinglandUndergroundCabling 2010

This brief and specification remains valid for six 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.