Archaeological Excavation at Site 1A, Area 1, Nacton Road, Ipswich, Suffolk, IPS715



Excavation Report



April 2013

Client: Signet Planning on behalf of Mitchells & Butlers Leisure Retail Ltd

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Archaeological Excavation at Site 1A, Restaurant Land, Nacton Road, Ipswich, Suffolk, IPS715

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Site Name: Archaeological Excavation at Site 1A, Area 1, Nacton Road, Ipswich, Suffolk

Date of Works: April 2013

Client Name: Signet Planning on behalf of Mitchells & Butlers Leisure Retail Ltd

Consultant: Ramboll

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Table of Contents

Summary	5
1 Introduction	6
1.1 Location and scope of work	6
1.2 Geology and topography	6
1.3 Archaeological and historical background	6
1.4 Previous Archaeological Investigations	
1.5 Acknowledgements	
2 Aims and Methodology	10
2.1 Aims	10
2.2 Regional Research Aims	10
2.3 Site Specific Research Objectives	10
2.4 Methodology	
3 Results	12
3.1 Introduction	12
3.2 Possible Prehistoric	12
3.3 Post-Medieval	12
3.4 Modern	13
3.5 Undated	13
3.6 Natural Features	13
3.7 Finds Summary	13
3.8 Environmental Summary	14
4 Discussion and Conclusions	14
4.1 Discussion	14
4.2 Conclusions	14
Appendix A. Context Inventory	16
Appendix B. Environmental Reports	19
B.1 Environmental samples	19
Appendix C. Bibliography	21
Appendix D. OASIS Report Form	22

List of Figures

Fig. 1	Site location, showing current excavation and previous SCCAS excavation area IPS 404
Fig. 2	Site location with archaeological features, showing previous SCCAS excavation area IPS 404, evaluation trenches and archaeological features
Fig. 3	Plan and sections of contexts 1, 2 and 5
Fig 4	Plan and sections of contexts 29 and 31
Fig 5	Plans and sections of contexts 23 and 44

List of Plates

Plate 1	(front cover) Site shot, view south-east
Plate 2	ditch 1, view south-east
Plate 3	ditch 23, view south-east
Plate 4	ditch 29 and ?recut 31, view north-west

Summary

In April 2013 Oxford Archaeology East carried out a small excavation between Alnesbourn Avenue and Nacton Road, Ipswich. The excavation was located within the footprint of a new road which will provide access to a restaurant development with associated car-parking. A good proportion of the site had previously been excavated in 2000 by Suffolk County Council Archaeology Service (IPS404). Therefore the current investigation only covered 0.56ha of the total 2.1ha access road area.

The site lay in an area that had previously been occupied by Ipswich Airport. The airport was used as an airfield in World War II.

The investigation revealed the limits of Suffolk County Council Archaeology Service's excavation. The remainder of the area was stripped by mechanical excavator and all exposed archaeological and natural features were recorded. One undated field boundary ditch of possible prehistoric date was found. This is a continuation of that found in 2000. The terminus of another undated linear feature, possibly another field boundary ditch was also recorded. Two probably post-medieval hedge boundary ditches were revealed which also equate to features found in excavation IPS404.

Several isolated, discrete features were revealed which were excavated and found to be natural features – tree boles, animal burrows or glacial ice wedges. Two postholes were recorded which were dated by their finds to the post-medieval or modern periods.

There was no evidence of Second World War defences or airfield features.

1 Introduction

1.1 Location and scope of work

- 1.1.1 Oxford Archaeology East conducted an archaeological excavation between Alnesbourn Avenue and Nacton Road in Ipswich, Suffolk in April 2013. The excavation site was located on the south-eastern outskirts of Ipswich, just north of the A14, at NGR TM 19735 41537 (centred).
- 1.1.2 The investigation arose in response to a restaurant development with associated carparking which had been granted full planning permission (IP/12/00547/FUL). The current excavation site is an area to be used as an access road for the development. It was termed in advance 'Site 1a' in order to differentiate it from further phases of archaeological work at the same site and has been assigned the site code IPS 715 (Figure 1).
- 1.1.3 Site IPS 715, hereafter 'the Site', was located in the Ravenswood housing estate. The Site was undeveloped land covered in rough grass with isolated concentrations of shrubs. The northernmost part of the Site was at 37.0m Above Ordnance Datum (AOD) with the ground surface falling away gently from north-west to south-east to reach its lowest level at 36.3m AOD.
- 1.1.4 This archaeological excavation was undertaken in accordance with a Brief issued by Suffolk County Council's Archaeological Service Conservation Team (SCCAS/CT, 2013) and a Written Scheme of Investigation prepared by Ramboll UK (Ramboll, 2013b).
- 1.1.5 The Site lay in an area which had previously been occupied by Ipswich Airport until its closure in 1997. The majority of the Site had previously been excavated in 1999 to 2000 as part of the large scale former Ipswich Airport evaluation and excavations (SCCAS 2000/90 and 2006/229).
- 1.1.6 The site archive is currently held by OA East and will be deposited with Ipswich Museum in due course.

1.2 Geology and topography

1.2.1 The underlying geology of the Site is the Red Crag formation of coarse-grained, poorly sorted, cross-bedded, abundantly shelly sands. The drift geology of glaciofluvial sand and gravel deposits gives rise to freely draining slightly acidic sandy soils (http://mapapps.bgs.ac.uk/geologyofbritain/home.html).

1.3 Archaeological and historical background

- 1.3.1 The archaeological and historical evidence was analysed in detail in desk-based assessments for Area 1 (the access road and the restaurant development area between Alnesbourn Crescent, Ravenswood Avenue and Nacton Road; Ramboll, 2012) and for Area 2 (the restaurant development area fronting Nacton Road; Ramboll, 2013a). The following section provides a summary of this evidence and is adapted from the WSI prepared by Ramboll UK (Ramboll, 2013b).
- 1.3.2 Archaeological remains dated broadly to the prehistoric period are known from within a study area of 1km-radius from the site boundary and generally comprise shallow discrete features which contained charcoal and fragments of burnt and worked flint and undiagnostic pottery fragments. A number of features containing prehistoric pottery and worked flint fragments were identified during evaluation of the former Ipswich Airport in

- 2000. The Site was located over the position of former evaluation Trench 60 and close by to Trench 21. Trench 60 revealed two ditches and a posthole, the very pale fills of which were sealed by subsoil. This may indicate that the features were of prehistoric date, although no datable evidence was retrieved.
- 1.3.3 No archaeological sites or findspots dated to the Palaeolithic or Mesolithic periods were identified within the study area.
- 1.3.4 There is strong evidence for intensive, albeit scattered, occupation within the study area in the Late Neolithic and particularly the Early Bronze Age periods. Remains of a small settlement with rectilinear and circular post-built structures were located to the north-west of the Site (IPS386; SCCAS 2006/229). The concentration of round barrows of probable Early Bronze Age date to the south of the Site may indicate the location of a cemetery serving the adjacent community (IPS027, 031, 039, 416, 417; SCCAS 2006/229). Another possible settlement of this date may be located to the south of the posited barrow cemetery. The area between the IPS386 settlement and the barrow cemetery (in which the Site is located) is less well understood, but a number of Late Neolithic/Early Bronze Age pits, post-holes and ditches provide evidence for animal husbandry and probably periodic occupation (e.g. IPS406; SCCAS 2006/229). An amorphous pit excavated in Trench 21 contained two flint flakes and an Early Bronze Age pottery fragment.
- 1.3.5 There is little evidence of Iron Age and Roman activity within the study area. The evidence is confined to a small number of finds recovered by metal detecting and isolated small fragments of field systems recorded during archaeological evaluations and analysis of aerial photographs.
- 1.3.6 Metal detecting of an area of field systems identified by aerial photography analysis to the southeast of the Site uncovered a number of Roman bronze objects including crossbow brooch fragments, a Colchester derivative brooch, a disc brooch and a faceted pin head. This concentration of Roman finds may suggest that at least part of the identified field systems could reflect a phase of Roman occupation.
- 1.3.7 Evidence of a complex system of field boundary ditches located to the west and southwest of the Site was first recorded during the large-scale evaluation of the former lpswich Airport (IPS399). Further small-scale excavations as well as investigations of the airport's perimeter revealed field systems and trackways which developed by the end of the late Iron Age and continued in use throughout the Roman period (SCCAS 2006/229). Some of the field alignments continued into the early medieval period.
- 1.3.8 The evidence for early medieval occupation within the study area is scarce, being confined to a small number of unstratified scatters of pottery and metal and several field boundary ditches found within the area of the former Ipswich Airport to the southwest of the Site and within Nacton Quarry (SCCAS 2005/138) to the south.
- 1.3.9 All known medieval remains within the study area concentrate along its edges and comprise unstratified scatters of pottery fragments and metalwork as well as a number of post-holes, pits and enclosure ditches excavated within the boundaries of the former lpswich Airport (SCCAS 2006/299). The features are likely to be associated with Clapgate Lane, a meandering north-to south route linking medieval lpswich and its suburbs with Alnesbourn Priory and probably other settlements along the northern bank of the River Orwell (SCCAS 2006/299).
- 1.3.10 There is little cartographic evidence for the post-medieval period within the study area, as it lay within extra-parochial land of Alnesbourn Priory. The earliest estate maps of

- the Harper's Farm, Sewells Farm and Dunham Farm dated to 1768 to 1770 show the area divided into a number of enclosed fields, laid predominantly for cultivation. These field systems changed little throughout the 19th century (First Edition OS map 1881 to 1882) until the first decades of the 20th century (Third Edition OS map 1938).
- 1.3.11 An extensive post-medieval ditch system, in large part reflecting the boundaries shown on the 1st Edition Ordnance Survey map, was identified as cropmarks on aerial photographs and during large-scale evaluation of the former Ipswich Airport.
- 1.3.12 Approximately 1km to the north of the Site lay Warren House, shown on the contemporary map of J Hodskinson from 1783, and associated remains of a rabbit warren which can be seen on 1946 aerial photographs as linear and rectangular earthworks on Warren Heath. The visible earthworks vary in form between embanked linear mounds and possibly ditched rectangular enclosures and rectangular platforms, all on a north-east to south-west alignment.
- 1.3.13 During the 20th century, the south-eastern extremes of Ipswich gradually became builtup with new housing estates. By the time of the 1927 to 1928 Ordnance Survey map a large estate had been built to the north of the Site, on the edge of Priory Heath.
- 1.3.14 In 1929 147 acres (59 ha) of Ravens Wood was purchased by Ipswich Corporation with the intention of creating a municipal airport for Ipswich, with construction starting in the following year. The airport was officially opened by HRH Prince Edward on 26 June 1930.
- 1.3.15 The advent of World War II saw the airport facilities requisitioned by the government. Ipswich was allocated as a satellite airfield for Wattisham and was placed, like its parent station, in No 2 Group, Bomber Command.
- 1.3.16 The Luftwaffe visited Ipswich on 24 March 1941 when three Heinkel HE111s and two Messerschmitt BF110s attacked the airfield with high explosive bombs and machine gun fire (RRA website). On 1 September the airfield suffered a near miss from a V1. The rocket landed just outside the perimeter demolishing a requisitioned house but also unfortunately killing a RAF NCO (RRA website).
- 1.3.17 Analysis of aerial photographs taken in 1944 and 1946 identified a number of World War II anti-invasion defences visible as structures and earthworks. The defences consisted of stretches of barbed wire which ran around the southern-side of the airfield. Within the barbed wire a number of hexagonal pillboxes were located. Two of the pillboxes were surrounded by a complex system of slit trenches. Numerous other trenches and gun pits were located around the edges of the airfield as were a number of Nissen huts and buildings of unknown function. The photographs show that the post-medieval field boundaries have been painted back on to the airfield as camouflage and at the south-western corner of the airfield four groups of long rectangular structures have also been camouflaged with paint.
- 1.3.18 On 1 August 1945, Ipswich Airport was placed under Care and Maintenance, remaining as such until April 1946 when the RAF left the site and civil flying resumed (RRA website).
- 1.3.19 The archaeological evaluation and excavations at the former Ipswich Airport uncovered two Pickett-Hamilton forts, which were designed to be lowered to ground level while aircraft were operating, but to be raised when necessary by means of a hydraulic mechanism. These were located to defend two of the grass runways (SCCAS 2006/229). Numerous remains of FIDO installations were identified across the airfield.

of which one was found within during the archaeological evaluation in Trench 21 (SCCAS 2000/90). FIDO stands for Fog Investigation and Dispersal Operation (which was sometimes referred to as "Fog Intense Dispersal Operation" or "Fog Intense Dispersal Op") and was a system used for dispersing fog from an airfield so that aircraft could land safely. The device was developed by Arthur Hartley for British RAF bomber stations, allowing the landing of aircraft returning from raids over Germany in poor visibility by burning fuel in rows on either side of the runway (Wikipedia).

- 1.3.20 A Second World War Heavy Anti-aircraft artillery battery and an associated camp can be seen on aerial photographs of the 1940s as four earthwork gun emplacements and a variety of structures, located to the north-east of the airport. The battery appears to have been constructed within an extensive complex of aircraft obstructions. These obstructions were constructed from lines of poles, to the west of which was another area of aircraft obstructions consisting of earthwork ditches and small mounds. Between 26 March 1944 and 6 July 1944 the area of earthwork obstructions was bombed, as can be seen by the earthwork craters visible on photographs taken in July.
- 1.3.21 A possible World War II military camp and possible gun pits are visible as structures and earthworks on aerial photographs in woodland at Robert's Grove, to the south of the airport. The camp is likely to have had some role in the defence of the airfield. After the war civil flying made a tentative start in 1946, but it was not until 1953 that scheduled civil airline services started again. The airfield was de-licensed and ceased to be registered by the Civil Aviation Authority on 31 December 1996. The last aircraft left over a year later in January 1998.

1.4 Previous Archaeological Investigations

1.4.1 The area underwent a magnetometer scan in 1999. A large-scale trench evaluation of the area previously occupied by Ipswich Airport was undertaken in 1999 to 2000 by SCCAS (IPS399; SCCAS 2000/90). The Site was located over the position of one former evaluation trench (Trench 60, Figure 2). Three areas were subsequently chosen for open area excavations in 2000. One of these open area excavations includes the area of the current Site (IPS 404; SCCAS 2006/229). Archaeological features found in evaluation trenches 21 and 60 and the excavation area comprised: an amorphous pit which produced two flint flakes and a rim fragment of an Early Bronze Age vessel; two undated but possibly prehistoric ditches; another probably prehistoric ditch terminus; two parallel post-medieval ditches and evidence for FIDO installations.

1.5 Acknowledgements

1.5.1 OA East would like to thank Andy Shelley from Ramboll UK for arranging the work, and Signet Planning for commissioning the work on behalf of Mitchells & Butlers Leisure Retail Ltd who funded the work. The excavation was carried out by Kate Clover, Lindsey Kemp and Pat Moan. Site survey was carried out by Pat Moan. The project was managed for OA East by Aileen Connor. The Brief was prepared by Jess Tipper of Suffolk County Council Archaeological Service Conservation Team.

2 AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The original aims of the project were set out in the Brief and Written Scheme of Investigation (SCCAS/CT 2013 and Ramboll 2013b).
- 2.1.2 The main aims of this excavation were
 - To assess and record the nature, extent, character and significance of any archaeological features and deposits on the Site.
 - To preserve any archaeological evidence contained within the excavation area by record and to attempt a reconstruction of the history and use of the site.

2.2 Regional Research Aims

- 2.2.1 The aims and objectives of the excavation were developed with reference to Regional Research Agendas (Brown and Glazebrook, 2000 and Medlycott 2011). The WSI (Ramboll 2013b) outlined the relevant regional research aims that the excavation had the opportunity to address:
 - What is the relationship of Neolithic and Bronze Age funerary landscapes to settlements?
 - To what extent can the Neolithic settlement be regarded as nomadic?
 - Strengthening of palaeoenvironmental sampling strategies for deposits of confirmed Neolithic date (eg 100% flotation)
 - Refining the typological identification of later Bronze Age pottery, linked to close radiocarbon and OSL dating
 - Application of Bayesian theory to radiocarbon dates as part of refining the absolute Iron Age chronology for the region
 - How did the use of land change in the Iron Age and Roman period?
 - To what extent can the size and shape of fields be related to the agricultural regimes identified in the Roman period?
 - How does the social change associated with the enclosure of commons and greens impact on the landscape?
 - Classification of Second World War anti-invasion defences through comparison between the field and documentary evidence; and involvement of local amateur groups and individuals in work on Second World War defences.

2.3 Site Specific Research Objectives

- To confirm any further presence and extent of archaeological remains that may be associated with those highlighted by the 1999 to 2000 evaluation and excavation (SCCAS reports 2000/90 and 2006/229)
- To confirm the presence/absence of any Neolithic and Bronze Age activity, such activity possibly being related to the known settlement to the north and a barrow cemetery to the south of the Site

- To confirm the presence/absence of a continuation of the Iron Age and Roman field systems identified to the west of the Site
- To confirm the character of changes in land use from the Iron Age to the Roman period that were postulated in SCCAS's report (SCCAS 2006/229)
- To assess and record the nature and extent of post-medieval field boundaries and their relation to the layout recorded by historic maps
- To assess and record the extent of any further WWII airfield defences and FIDO installations within the Site.

2.4 Methodology

- 2.4.1 The methodology used followed that outlined in the Brief (SCCAS/CT 2013) and detailed in the Written Scheme of Investigation (Ramboll 2013b).
- 2.4.2 Prior to excavation the entire area was subject to an ecological destructive survey. This involved the use of a wheeled excavator fitted with a flat bladed ditching bucket under the supervision of an ecologist and monitored by an archaeologist. The machine lifted the turf from all areas of the site, and the resulting spoil was searched for evidence of specific animal species. No evidence for archaeological features or finds was found during the "Destructive Survey".
- 2.4.3 Machine excavation was carried out by a 20 ton 360° type mechanical excavator using a flat bladed ditching bucket under the constant supervision of a suitably qualified and experienced archaeologist.
- 2.4.4 Spoil, exposed surfaces and features were scanned with a metal detector. All finds were retained for inspection, other than those which were obviously modern.
- 2.4.5 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.
- 2.4.6 Environmental samples were taken for finds retrieval and for carbonised plant remains.
- 2.4.7 Weather conditions were favourable.

3 Results

3.1 Introduction

- 3.1.1 The south-east and south-western edges of SCCAS's 2000 excavation (IPS404) were clearly visible within the current excavation area. The north-eastern edge was outside the current excavation area but could be identified on the ground surface by a change in the vegetation: gorse bushes and scrub were absent over the previously excavated area. The north-western edge of IPS 404 was less clear on the ground but can be made out from Google Earth (http://www.google.co.uk). The south-western, south-eastern and north-eastern edges of IPS 404 were surveyed in (by OA East) using a Leica GPS1200 fitted with *smartnet*. In order to make Figure 2 of this report, the plan of archaeological features from SCCAS report 2006/229 fig 4.3 was transposed onto this GPS plot to make a 'best fit'.
- 3.1.2 The results are presented below by date order from earliest to latest features. Natural features are discussed last. Between 0.4m and 0.45m depth of material was stripped off down to the natural drift deposits of sands and gravels. This stripped material consisted of turf and between 0.3m and 0.35m thickness of topsoil overlying 0.1m thickness of subsoil. All features were cut into natural ground and sealed by subsoil and topsoil unless otherwise stated. All features are shown on Figure 2.

3.2 Possible Prehistoric

3.2.1 A 1.5m wide ditch (29/31) with a very pale leached sandy fill was located in the northeastern part of the site. The north-west to south-east aligned ditch was at least 7m in length and extended beyond the limit of the excavation. It contained no finds. This was a continuation of an undated ditch found within excavation IPS 404 (IPS404.0010) which is described in SCCAS report 2006/209 as being 1.7m wide and 160mm deep. During the current excavation the ditch appeared in plan (the section was less clear) to be two parallel intercutting ditches (29 and 31). Ditch 31 (0.25m deep) appeared to be a recut of 29 (0.15m deep; Fig 4, Plate 4), Almost 100% of these two ditches where they were exposed within the Site was hand dug in order to retrieve datable artefacts. Unfortunately no artefacts were found, thus they remain without a definite date. A discussion of their possible date can be found in Section 4.2.1. One feature excavated by SCCAS (IPS404.0012) was identified as certainly early Bronze Age due the the presence of Beaker pottery in its fill. This was a small irregular pit. A number of irregular pit like features were encountered during the most recent excavation but none contained any evidence of human activity and most are likely to be natural. They are described below in sections 3.5 and 3.6.

3.3 Post-Medieval

- 3.3.1 Several possible (recent) plough marks were seen cutting into the subsoil and natural sands and gravels but these were not assigned context numbers, nor were they planned.
- 3.3.2 Near the north-western entrance to the site a 1.5m -1.7m wide by 0.37m deep ditch (1, 2) was recorded (Fig 3, Plate 2). It had two fills, the main fill being mid brown sandy silt. There was no artefactual evidence from the ditch but the mid brown hue of its fills might indicate a more recent date than ditches 29 and 31. Ditch 1, 2 was irregular in plan and also in profile, especially at the northern and southern ends. These

irregularities may have been due to bioturbation and rooting. At the southern end of the ditch this bioturbation was assigned a separate context number (5, Fig 3). This ditch appeared to be a continuation of undated ditch IPS404.0002 which is described as 2m wide by 450mm deep and filled with a mid brown silty sand with occasional stones.

- 3.3.3 To the south-east of ditch **1,2** was another ditch on a slightly different alignment (**50**). It was very shallow at 0.1m depth and also contained no dating material. However, it was clearly a continuation of ditch IPS404.0014 which was dated by a small fragment of tile to the post-medieval period (SCCAS report 2006/229, 59). Both **50** and **1,2** are likely to be post-medieval field boundary ditches. A third, probably post-medieval, ditch (IPS401.0016) parallel and only a short distance away from ditch **50** (IPS404.0014) did not continue into the current excavation areas.
- 3.3.4 One posthole (44, Fig 5) can be dated to the post-medieval period by the peg-tile in its fill. Post-hole 42 in the north-eastern corner of the Site contained two small fragments of coal, giving a likely post-medieval or modern date for its origin. Another possible posthole was located immediately adjacent (39), but this had a very pale coloured fill and is more likely to have been an animal burrow or caused by root disturbance.

3.4 Modern

3.4.1 Feature **7** on the western edge of the Site was a very modern cut whose shape and size could not be ascertained as it extended beyond the limit of the excavation area. It had an extremely modern looking fill and may be to do with the creation of the pavement to Alnesbourn Crescent. A rectangular pit with grass still its fill was recorded just north of feature **17** (no context number). This is likely to be a very recent intervention such as a filled in geotechnical pit.

3.5 Undated

- 3.5.1 The majority of the undated features have been interpreted as of natural origin due to their irregular shape (see below). One feature (23, Fig 5, Plate 3) which extended beyond the south-western limit of the excavation area is interpreted as either an elongated pit or the terminus of a narrow ditch. It was regular in profile and plan and had a light brown sandy fill.
- 3.5.2 Four further features (15, 25, 37, 39) which resembled postholes were recorded. They did not form any obvious structure and may have derived instead from the action of burrowing animals.

3.6 Natural Features

3.6.1 Eight features (11, 13, 17, 19, 21, 27, 46, and 48) are likely to be natural. These were pit-like features, often elongated and with irregular edges and profiles. These features either derived from the process of freeze thaw of the sands and gravels in periglacial conditions or, alternatively, may be tree boles.

3.7 Finds Summary

3.7.1 The only finds from the entire site were two fragments of coal from the fill (43) of posthole-type feature **42** (not collected). One fragment of post-medieval peg tile, one small fragment of clinker and one animal bone (rabbit tibia) were retrieved from the fill (52) of another posthole (**44**). No further work is required on these finds and it is recommended that they should be discarded.

3.8 Environmental Summary

3.8.1 Two bulk samples were taken from fill 32 of ditch **31** (Sample 1) and fill 52 of pit/post hole **44** (Sample 2) in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations. Charred plant remains are rare and consist of three abraded charred cereal grains in Sample 2 and single seeds of sedge (*Carex* sp.), clover (*Trifolium* sp.) and a bean (Fabacae) in Sample 1. No further work is recommended for these samples.

4 DISCUSSION AND CONCLUSIONS

4.1 Discussion

- 4.1.1 The investigation revealed the limits of SCCAS's excavation (IPS404). One undated field boundary ditch (29) and its recut (31), both of possible prehistoric date, were recorded. These are a continuation of a ditch recorded in IPS404. The terminus of an undated linear feature (23) may also be an early field boundary ditch. These ditches can be very tentatively dated to the mid-Bronze Age (1500-1200 BC), a period when the landscape first appears to have been divided up into fields by the digging of boundary ditches. The very leached fills and the absence of any cultural material would seem to accord better with prehistoric features rather than with any ditch that had been infilled during the Iron Age or Roman periods. There are Bronze Age burial mounds (barrows) to the south and Bronze Age settlement to the north of the Site. It therefore seems possible that this area in between may have been used as fields. A pit (0012) with a sherd of Early Bronze Age 'Beaker' pottery was found within excavation area IPS 404 in 2000, just to the north of ditch 0010. This indicates Bronze Age activity but with such limited evidence it is not possible to identify the nature of the activity.
- 4.1.2 Two boundary ditches of probable post-medieval date (1/2 and 50) were revealed which also line up with ditches found in IPS404. Examination of the 1886 OS map by SCCAS at the time of writing report 2006/229 led to the suggestion that these ditches were part of a system of hedged field boundaries associated with the tree-lined entranceway to Alnesbourn Priory Farm and/or a triangular enclosure around Walk Farm.
- 4.1.3 Several elongated pit-like features and two posthole-like features were revealed which were excavated and found to be natural features either tree boles or glacial ice wedges. Two actual postholes were recorded which were dated by their finds to the post-medieval or modern periods.
- 4.1.4 Excavation IPS404 revealed evidence for a series of features thought to be associated with FIDO (Fog Investigation and Dispersal Operation) installations but no similar features were found within the current excavation area and similarly no evidence for Second World War defences or airport features was found.
- 4.1.5 Most of the features had been heavily truncated. This had probably occurred through ploughing and later on through levelling of the ground for the airport.

4.2 Conclusions

4.2.1 The excavation has not answered any of the regional research aims set out in Section 2.2. However it is has met the specific site objective of confirming the presence and extent of archaeological remains highlighted by the 1999 to 2000 evaluation and excavation.

- 4.2.2 Unfortunately, due do a complete lack of dating evidence, the current excavation has not achieved the specific site objective of confirming the presence or absence of Bronze Age activity.
- 4.2.3 The current excavation has met the specific site objective of assessing and recording the nature and extent of post-medieval field boundaries and their relation to the layout recorded by historic maps.
- 4.2.4 Additionally, the bulk soil samples from the Site have provided evidence of the potential for the preservation of charred plant remains.
- 4.2.5 It is recommended that no further work should be undertaken other than to integrate the results fully with IPS404 and additional programmed excavations on Sites 1B (IPS718) and 2 (IPS719).

APPENDIX A. CONTEXT INVENTORY

Context no	Туре	Width (m)	Length (m)	Depth (m)	Comment/Finds	Date
1	cut	1.5-1.7	>9	0.3	Cut of ditch	Post-med
2	cut	>1	>9	0.37	Cut of ditch – possibly equivalent to 1 but much bioturbation and rooting obscuring the edges.	Post-med
3	fill			0.3	Lower (main) fill of 1 -mid brown sandy silt with poorly sorted stones	Post-med
4	fill			0.37	Fill of ditch 2 at its possible terminus – mixed mid brown and dark brown silty sand. Bioturbation on the east side	Post-med
5	'cut'	>1.5	>2	0.2	'cut' of bioturbation associated with boundary ditch 2 . irregular in plan and profile	Undated
6	fill			0.2	Fill of 5 . Mixed dark brown sandy silt and light yellow sand.	Undated
7	cut	>0.6			Cut of ?pit- very modern. Unexcavated.	Modern
8	fill				Fill of 7 . Dark brown sandy silt- backfilled topsoil	Modern
9	fill				Main fill of 7 . Loose mid reddish yellow sand. Redeposited natural	Modern
10	fill	0.6		0.12	Upper fill of 1.	Post-med
11	cut	0.9		0.2	Oval 'cut' of tree bole or ice wedge	Natural feature
12	fill			0.2	Fill of 11 . Light brownish yellow silty sand with common flint. Secondary silting of feature	undated
13	cut	0.85		0.11	Sub circular 'cut' of tree bole	Natural feature
14	fill			0.11	Fill of 13 . Light brownish yellow silty sand with common flint. Secondary silting	undated
15	cut	0.85		0.12	Sub-circular cut of pit or tree bole	Undated
16	fill			0.12	Fill of 15 . mid yellowish brown silty sand with common flint	Undated
17	cut	1.3		0.13	Sub-circular 'cut' of possible burnt out tree bole	Natural feature
18	fill			0.13	Fill of 17 . Dark greyish brown silty sand with common flint and moderate charcoal	Undated
19	cut	0.5	1.3	0.14	'Cut' of sub-rectangular tree throw	Natural feature
20	fill			0.14	Fill of 19. Mid grey brown fine sand	Undated
21	cut	1.3 max	1.3	0.24	'Cut' of irregular tree throw	Natural feature

Context no	Туре	Width (m)	Length (m)	Depth (m)	Comment/Finds	Date
22	fill			0.24	Fill of 21. Mid grey brown fine sand	Undated
23	cut	0.8	2.5	0.15	Cut of elongated pit or terminus of a ditch	Undated
24	fill			0.15	Fill of 23. Light brown sand	Undated
25	cut	0.18		0.15	Cut of posthole or natural feature	Undated
26	fill			0.15	Fill of 25. light to mid grey brown silty sand	Undated
27	cut	0.9	2.1	0.4	Oval 'cut' of possible ice wedge	Natural feature
28	fill			0.4	Fill of 27. Light brown sand	Undated
29	cut	0.5	>7	0.15	Cut of ditch	Possibly Mid Bronze Age
30	fill			0.15	Fill of 29 . Very pale, almost white coarse to find sand mixed with reddish coarse sand	Possibly Mid Bronze Age
31	cut	1.1	>7	0.25	Cut of ditch. Probable recut of 29	Possibly Mid Bronze Age
32	fill			0.25	Fill of 31 . Pale yellowy brown sand	Possibly Mid Bronze Age
33	cut	0.5	>7	0.15	Cut of ditch. Equivalent to 29	Possibly Mid Bronze Age
34	fill			0.15	Fill of 33. Very pale, almost white coarse to find sand mixed with reddish coarse sand	Possibly Mid Bronze Age
35	cut	1.1	>7	0.25	Cut of ditch. Equivalent to 31	Possibly Mid Bronze Age
36	fill			0.25	Fill of 35. Pale yellowy brown sand	Possibly Mid Bronze Age
37	cut	0.7		0.15	Cut of pit/posthole or tree bole	Undated
38	fill			0.15	Fill of 37. Pale yellowy brown sand	Undated
39	cut	0.3		0.34	'Cut' of posthole or animal burrow	Undated
40	fill	0.3		0.34	Fill of 39 . Pale yellowy brown sand. Patchy. Mixed with 41	Undated
41	fill	0.3		0.34	Fill of 39. Mid greyish brown sand. Patchy. Mixed with 40	Undated
42	cut	0.4		0.12	Cut of posthole	Modern
43	fill			0.12	Fill of 42 . Pale yellowish brown sand; 2 x fragments of coal (not collected)	Modern
44	cut	0.37		0.21	Cut of posthole.	Post-Medieval
45	void				void	
46	cut	0.8	>2.8	0.23	'Cut' of irregular periglacial feature. Curved linear shape	Natural feature
47	fill			0.23	Fill of 46 . Mid grey brown fine sand	Undated

Context no	Туре	Width (m)	Length (m)	Depth (m)	Comment/Finds	Date
48	cut	0.6-1.1	>2.8	0.3	'Cut' of sub-circular tree bole	Natural feature
49	fill			0.3	Fill of 48.Mid orangey brown silty sand	Undated
50	cut	>2.5	1.8	0.1	Cut of ditch	Post-Medieval
51	fill			0.1	Fill of 50 . Mid brown sandy silt	Post-Medieval
52	fill	0.37		0.2	Fill of 44 ; 1 x peg-tile 48g, 1x clinker 1g 1 x rabbit bone 1g (all discarded)	Post-Medieval
53	fill	0.25		0.1	Fill of 44	Post-Medieval
54	layer			0.3- 0.35	Turf and mid brown silty sandy topsoil	Modern
55	layer			0.1	subsoil	Undated
56	layer				Natural – light yellow to orange sand and gravel	Mid Pleistocene

Table 1. List of contexts

APPENDIX B. ENVIRONMENTAL REPORTS

B.1 Environmental samples

By Rachel Fosberry

B.1.1 Introduction and Methods

- B.1.2 Two bulk samples were taken from fill 32 of ditch 31 (Sample 1) and fill 52 of pit/post hole 44 (Sample 2) in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations.
- B.1.3 The total volume (up to 20 litres) of both samples was processed by water flotation (using a modified Siraff three-tank system) for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The flot was collected in a 0.3mm nylon mesh and the residue was washed through a 0.5mm sieve. Both flot and residue were allowed to air dry. The dried residue was passed through 5mm and 2mm sieves and a magnet was dragged through each resulting fraction prior to sorting for artefacts. The flot was examined under a binocular microscope at x16 magnification and the presence of any plant remains or other artefacts are noted on Table 2. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands and the authors' own reference collection.

B.2 Results

The results are recorded on Table 2.

Sample No. Context No. Feature Type		Feature Type	Flot Contents	Residue Contents
1	32	Ditch	Charred bean, sedge seed and clover seed	No finds
2	52	Pit	charred abraded cereal grains	No finds

Table 2. Contents of environmental sample

- B.2.1 .Preservation is by charring with no evidence of preservation by waterlogging or mineralisation.
- B.2.2 Charred plant remains are rare and consist of three abraded charred cereal grains in Sample 2 and single seeds of sedge (Carex sp.), clover (Trifolium sp.) and a bean (Fabacae) in sample 1.

B.3 Discussion

The environmental samples from the Site at Nacton Road, Ipswich contained a very limited range, variety and quantity of charred plant remains. Their presence indicates both limited occupation in the area and the disposal of small amounts of food waste. The assemblages are small but provide evidence of the potential for the preservation of charred plant remains. This is a very small assemblage from undated features and no further work is required on it.

APPENDIX C. BIBLIOGRAPHY

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APPENDIX D. OASIS REPORT FORM

Project Do	etails								
OASIS Nun	nber oxfo	ordar3-149412							
Project Nan	ne Exc	1A Restaurant	t Land, Nac	cton Roa	d, Ipswich				
Project Date	es (fieldwo	rk) Start	15-04-2013			Finish	19-04-20	13	
Previous Work (by OA East)			No			Future	Work No	Vork No	
Project Refe	erence Co	des							
Site Code IPS715				Planning App. No.			IP/12	2/00547/FUL	
HER No.	IPS715	IPS715			d HER/	OASIS N	lo. _{IPS4}	04, IPS718, IPS719	
Type of Pro		Direction from	Local Planning	g Authority	- PPS 5				
Please sel		<u>-</u>		eavation.				waga Record	
Field Observation (periodic visits)			Part Excavation				☐ Salvage Record ☐ Systematic Field Walking		
Full Excavation (100%)			Part Survey						
Full Survey			Recorded Observation			∐ Sys	Systematic Metal Detector Survey		
Geophysical Survey			Remote	Remote Operated Vehicle Survey			Tes	st Pit Survey	
✓ Open-Area Excavation ✓ Sa			Salvage	alvage Excavation			□Wa	☐ Watching Brief	
Thesaurus	es using the	NMR Mon their respecti		e Thesa	urus ar finds we	_			e
Monument Period				Object			Period		
ditches Bronze A		ge -2.5k to -700		peg tile			Post Medieval 1540 to 1901	1	
ditch Post Medie			dieval 1540 to 1901		animal bone			Uncertain	
postholes		Post Med	ieval 1540 to 1	901	clinker			Post Medieval 1540 to 1901	1
Project L	ocation								
County	Suffolk			Site Address (including postcode if possible)			· · · · · · · · · · · · · · · · · · ·		
District	Ipswich				Site 1A Restaurant Land, Nacton Road, Ipswich				
Parish	Ipswich								
HER	Suffolk			•					
Study Area	Area _{0.2 ha}				National Grid Reference TM 19735 41537				

Project Originators

Organisation OA EAS		OA EAST	Γ					
Project Brief Originator Suffolk C		uffolk CC Archaeology Service						
Project Design Originator Ramboll		amboll UK and OAEast						
Project Manager Aileen Co		onnor						
Supervisor		Kate Clov	ver					
Project Archives								
Physical Archive			Digital A		Paper A	rchive		
Ipswich Museum			Ipswich N		Ipswich M			
IPSMG: R.2013.8			IPSMG: I		IPSMG:R	2013.8		
Archive Contents/Media								
	Physical Contents	Digital Contents	Paper Contents	Digital M	edia	Paper Media		
Animal Bones						Aerial Photos		
Ceramics				— ⊠ GIS				
Environmental				Geophys	ics			
Glass						Diary		
Human Bones					ns	□ Drawing □ Drawi		
Industrial				☐ Moving I	mage	Manuscript		
Leather				☐ Spreads				
Metal				Survey		Matrices		
Stratigraphic				▼ Text		Microfilm		
Survey				☐ Virtual R	eality	Misc.		
Textiles						⋉ Research/Notes		
Wood						Photos		
Worked Bone								
Worked Stone/Lithic						⋉ Report		
None	\times					⊠ Sections		
						Survey		

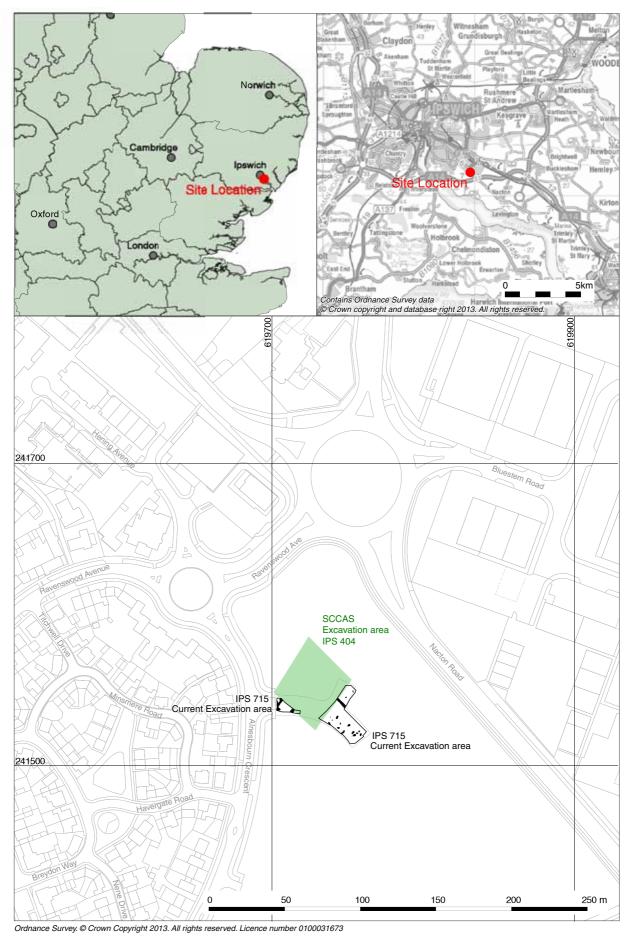


Figure 1: Site location showing current excavation and previous SCCAS excavation area IPS 404

Report Number 1464

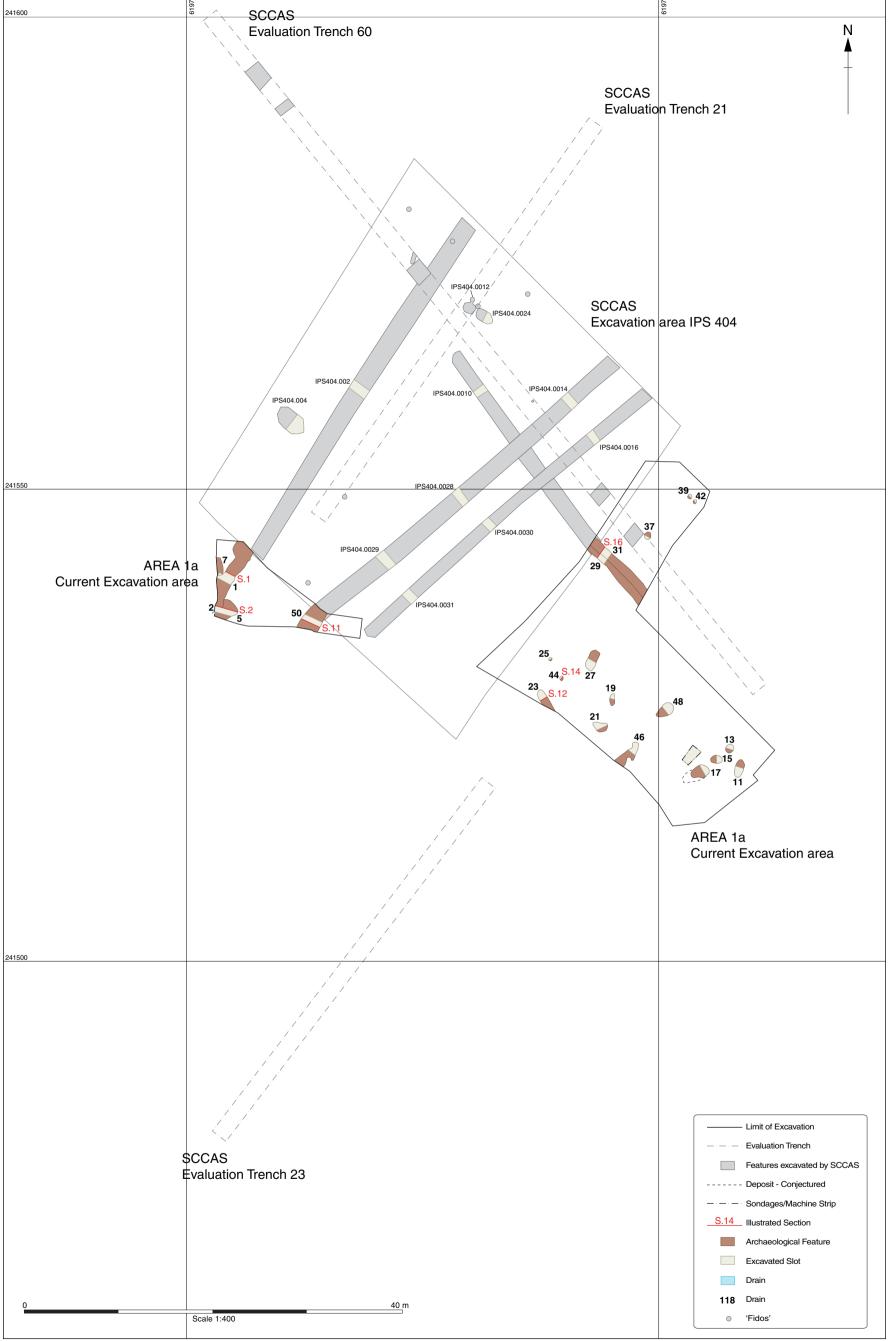


Figure 2: Site location with archaeological features, showing previous SCCAS excavation area IPS 404, evaluation trenches and archaeological features



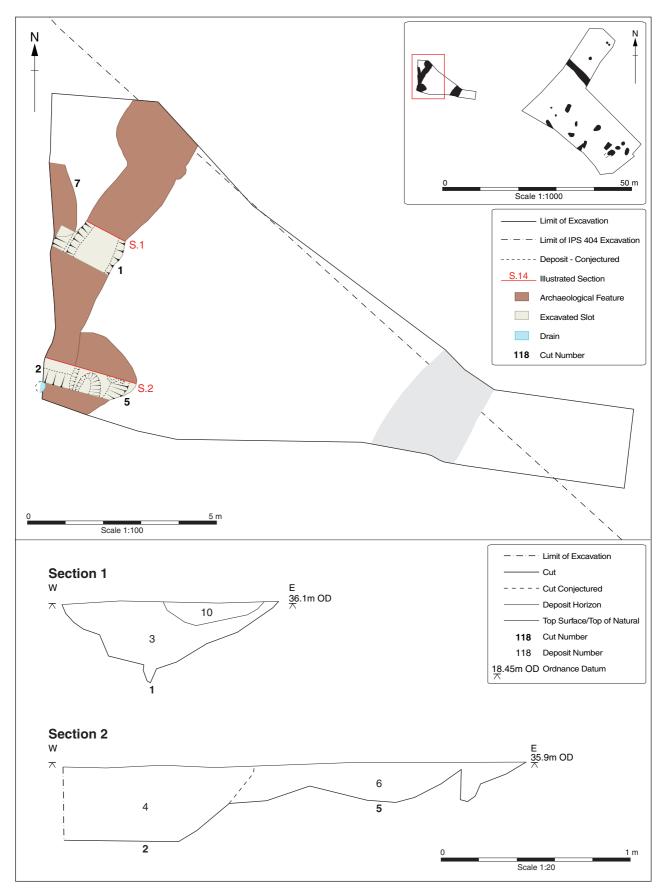


Figure 3: Plan and sections of contexts 1, 2 and 5



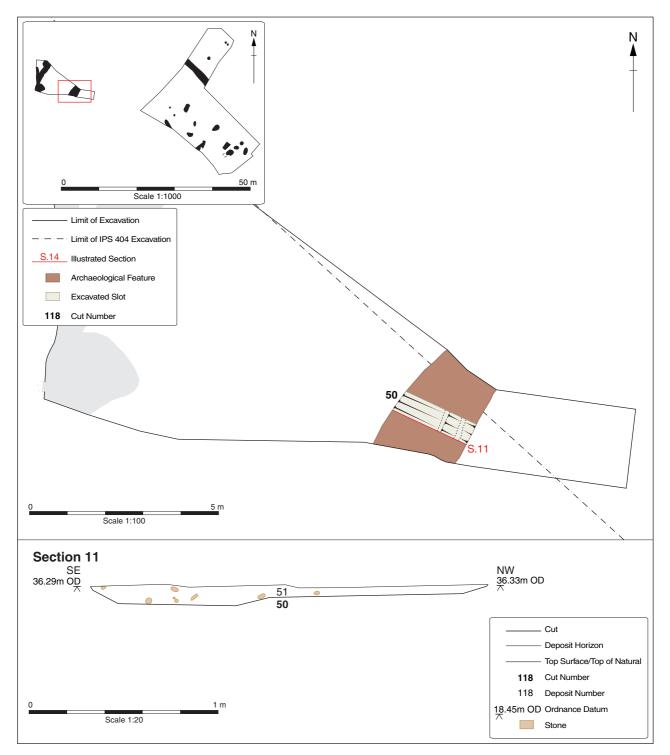


Figure 4: Plan and section of context 50



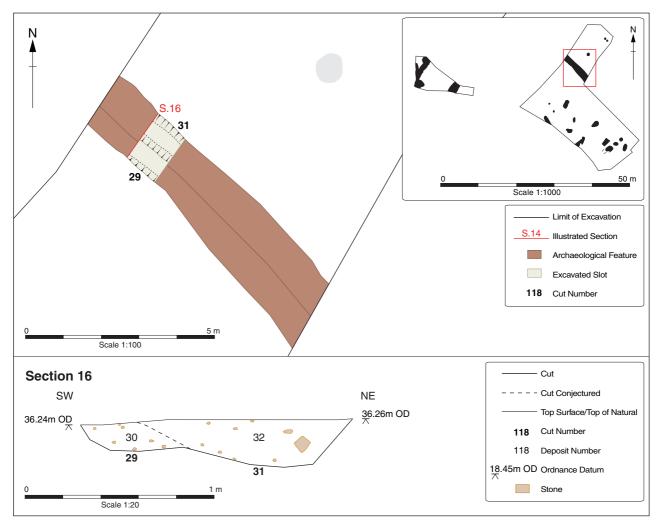


Figure 5: Plan and sections of contexts 29 and 31



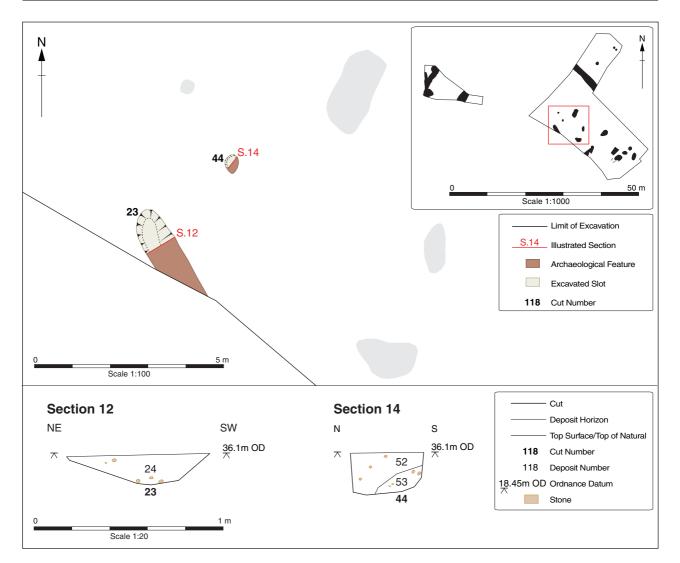


Figure 6: Plan and sections of contexts 23 and 44



Plate 1: Site shot, view south-east





Plate 2: Ditch 1, view south-east



Plate 3: Ditch 23, view south-east





Plate 4: Ditch 29 and ?recut 31, view north-west



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