Report 2999

nps archaeology

Archaeological Excavation and Contour Survey at Salthouse Barrow Cemetery, Salthouse Heath, Norfolk

ENF132000 and ENF132001

Prepared for
Norfolk Historic Environment Service
Environment, Transport and Development
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July 2013

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PROJECT CHECKLIST		
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Edit Completed	Jayne Bown	02/07/2013
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Issue 1		
Revised	Peter Crawley	17/07/2013
Reviewed	Jayne Bown	17/07/2013
Issue 2		

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BAU 2999 01-04-13-2-1045

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Location:	Salthouse Barrow Cemetery, Salthouse Heath, Norfolk
District:	North Norfolk
Grid Ref.:	TG 0697 4240
Planning Ref.:	n/a
HER Nos.:	ENF132000 (Survey) and ENF132001 (Excavation)
OASIS Ref.:	154239
Client:	Norfolk Historic Environment Service (NHES)
Dates of Fieldwork:	31 October (Survey); 1-6 November 2012 (Excavation)

Summary

A contour survey and targeted archaeological excavation were undertaken on a small mound thought to be one of a number of mini-barrows located within the large barrow cemetery located at Salthouse Heath in Norfolk.

Two opposing quadrants were excavated through the small mound. The excavated slots indicated that the mound was likely to be of natural origin and may have been caused through the accumulation of sand, trapped by the root system of a gorse bush or similar, which had since been removed. No artefacts were recovered.

The work, though producing negative results, was a useful exercise which suggests that not all of the small mounds in the area of the cemetery are certain to be mini-barrows.

INTRODUCTION

A proposal was put forward by Norfolk Historic Environment Service (NHES) to more fully understand the character of the mini-barrows present within the barrow cemetery on Salthouse Heath (Fig. 1). (David Robertson 26 January 2012). The brief required that a contour survey and targeted excavation with recording be undertaken on a small mound thought to be one such mini-barrow. As there is no development associated with this project, there was no planning implication or reference. The work was conducted in accordance with a Project Design and Method Statement prepared by NPS Archaeology (NAU/BAU2999/DW). Norfolk County Council's Historic Environment Service commissioned this work as part of the Norfolk Monuments Management Project, which itself has received funding from English Heritage'

Specifically this programme of work was designed to recover information relating to the extent, date, phasing, character, function, status, significance and state of preservation of the suspected mini-barrow following the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government 2012).

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

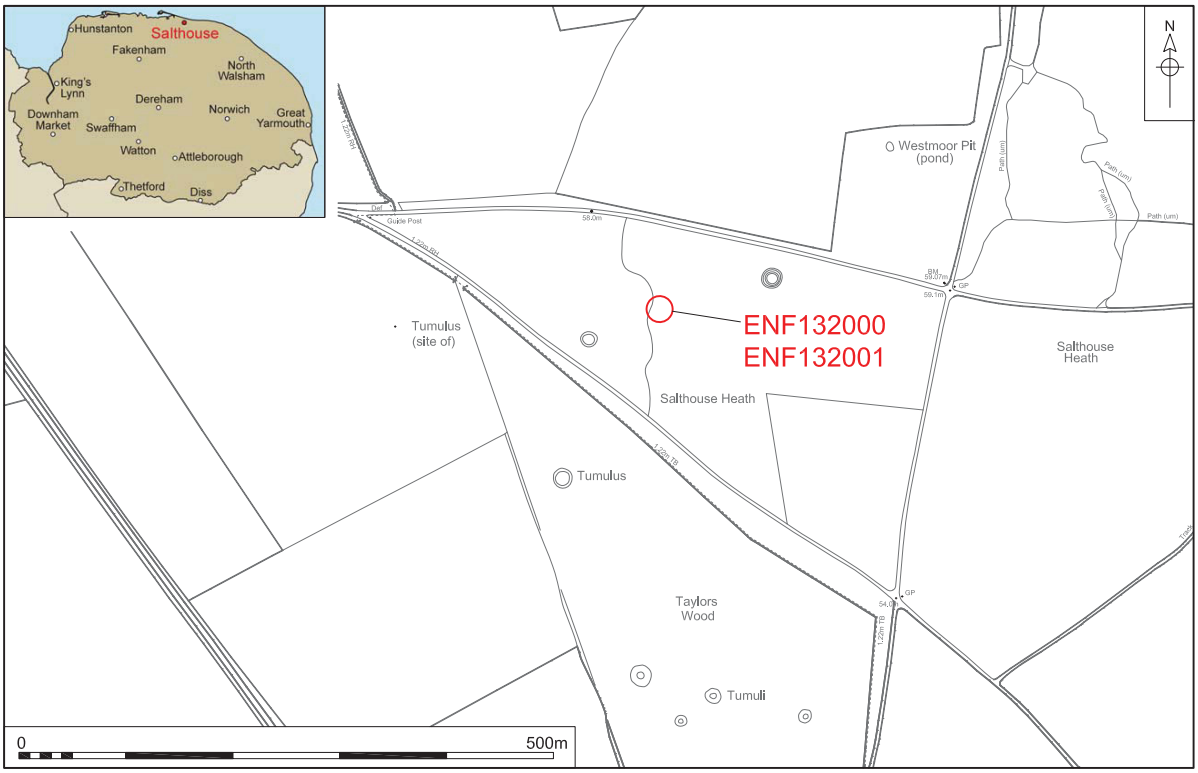

Figure 1. Site location. Scale 1:5000

GEOLOGY AND TOPOGRAPHY

The investigation took place on Salthouse Heath, located on higher land to the south of the coastal settlement of Salthouse, which along with the adjacent land at Gallows Hill, is one of the largest surviving areas of heath in north Norfolk. The area has been colonised by gorse, bracken and silver birch following the historic decline of grazing on the area, though in recent years, management of the heath has led to much of the gorse cover being cut back. The mound in question lay in one such cleared area. The introduction of sheep onto the heath has also helped to control vegetation.

The underlying geology is chalk bedrock which formed 71 to 94 million years ago in the Cretaceous period in an environment dominated by warm seas (http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html). Above this there was a layer of sand and gravel which formed up to 2 million years ago in the Quaternary Period. The environment at this time was one of glacial scarring of the landscape which created moraines of till and outwash sand and gravel with glacial meltwater.

The specific natural substratum consisted of firm orange sand and gravel (allocated context [07] during the project). The upper soils in this part of Norfolk are generally described as 'North Norfolk Heathlands', which refers to a band of varied sandy and loamy soils extending northwards from Norwich to the coast (Williamson 2005, 8).

Heathland in its natural state is largely covered by trees, however as these areas were easily exploited by farmers with primitive technology, they were often cleared at an early period in history and then intensively grazed. The acid nature of the soil and continued grazing opened up these areas to heather, gorse and broom, which in turn led typically to the formation of a podzol, a type of soil, where the upper layers are leached of humus and iron (Williamson 2006, P175)

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The Norfolk Historic Environment Record (NHER) for the area of this excavation and survey project at Salthouse Heath is unsurprisingly dominated by references to the barrow cemetery (NHER 6212) and the majority of the historical background in this report is based on those references. In addition to prehistoric evidence, notable activity is recorded for remains associated with Second World War defences. Other historical activity in the vicinity of the site has left little trace, although it is known that heath as an environment was formed through the grazing activities of animals from local communities.

Salthouse Heath contains the densest concentration of surviving late Neolithic and Bronze Age burial mounds in Norfolk (NHER 6212); these date from 3000 to 700 BC. The barrow cemetery contains eighteen large burial mounds but also many 'mini-mounds'. These were first identified in the 1930s and several were excavated at this time (see Plates 11, 12 and 13, below). Bronze Age pottery associated with cremated bone confirmed their nature and date although only a single one of those excavated was located (at TG 0696 4267) with any certainty (Robertson 2012)

The eminent prehistorian John Wymer investigated the area in the 1980s and re-discovered some of the mini-mounds, and since that time the National Mapping

Programme (NMP) has had some success between 2003 and 2005 in identifying further possible mounds through interpreting aerial photographs. The area was examined by Ray Loveday and other local enthusiasts, who with the use of sketch maps and handheld GPS units, built on the information of John Wymer and the NMP to provide a full survey of the monuments. A total of 69 mini-mounds are mapped as part of that survey, although it is possible that some of them may have been recorded twice (Robertson 2012)

The heath was extensively used during the Second World War. Notably there was a gun emplacement and trackway associated with a firing target, visible on RAF aerial photographs from 1946, in the area of the present investigation (NHER 27935) and to the east there was a decoy airfield - a Type Q airfield for night time use, which consisted of a string of lights. The generator for the airfield was located approximately 1.5km to the east (NHER 16023).

METHODOLOGY

The objective of this project was to better understand the nature of the mini-barrows on Salthouse Heath using a mixture of targeted excavation and contour survey (which would in particular also allow for accurate reinstatement).

The scope of the project initially was to survey and excavate two discrete small mounds (approximately located at TG 06983 42490 and TG 06855 42464), although after discussions between David Robertson (NHES) and David Whitmore (NPS Archaeology) it was decided to examine just one - the slightly wider mound which may have represented a double mini-barrow at TG 06855 42464. This approach was aimed to cause minimise disruption to a single area of the heath and more fully utilise the resources available. The mini-barrow selected for examination was marked prior to survey by a pile of flints (see Fig. 3). The mound was situated outside the area of Scheduled Monuments which form part of the overall barrow cemetery.

As a land form the small mound measured around 6.00m east to west by 4.00m north to south in extent. Prior to the start of the project four canes were placed around the mound to form a 10m by 10m squared area that defined the limit of the excavation (Plate 1).

Plate 1. The proposed mini-barrow, pre-excavation, looking north-west

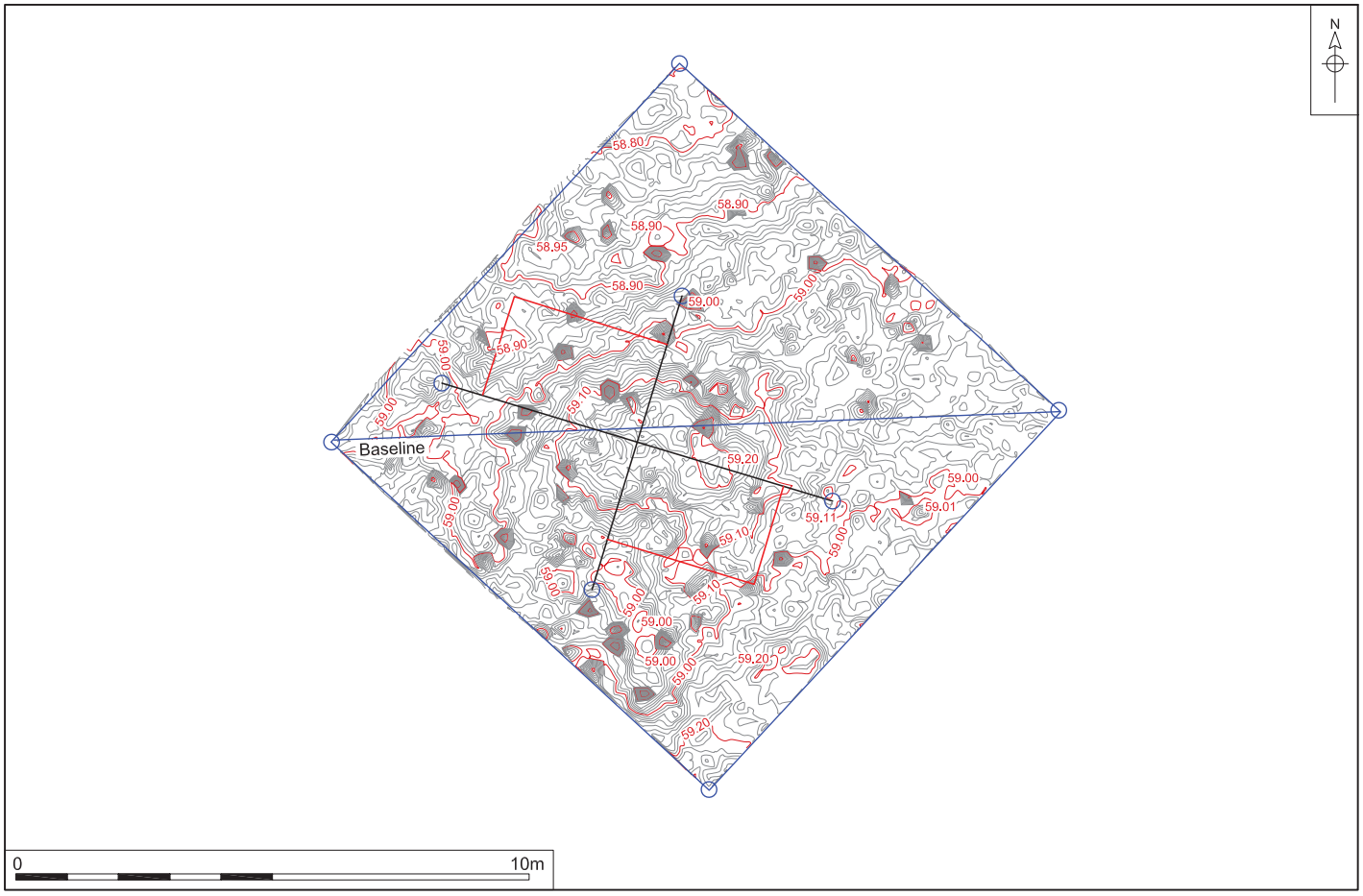

Figure 2. The contour survey in relation to the subsequent excavation. Scale 1:100

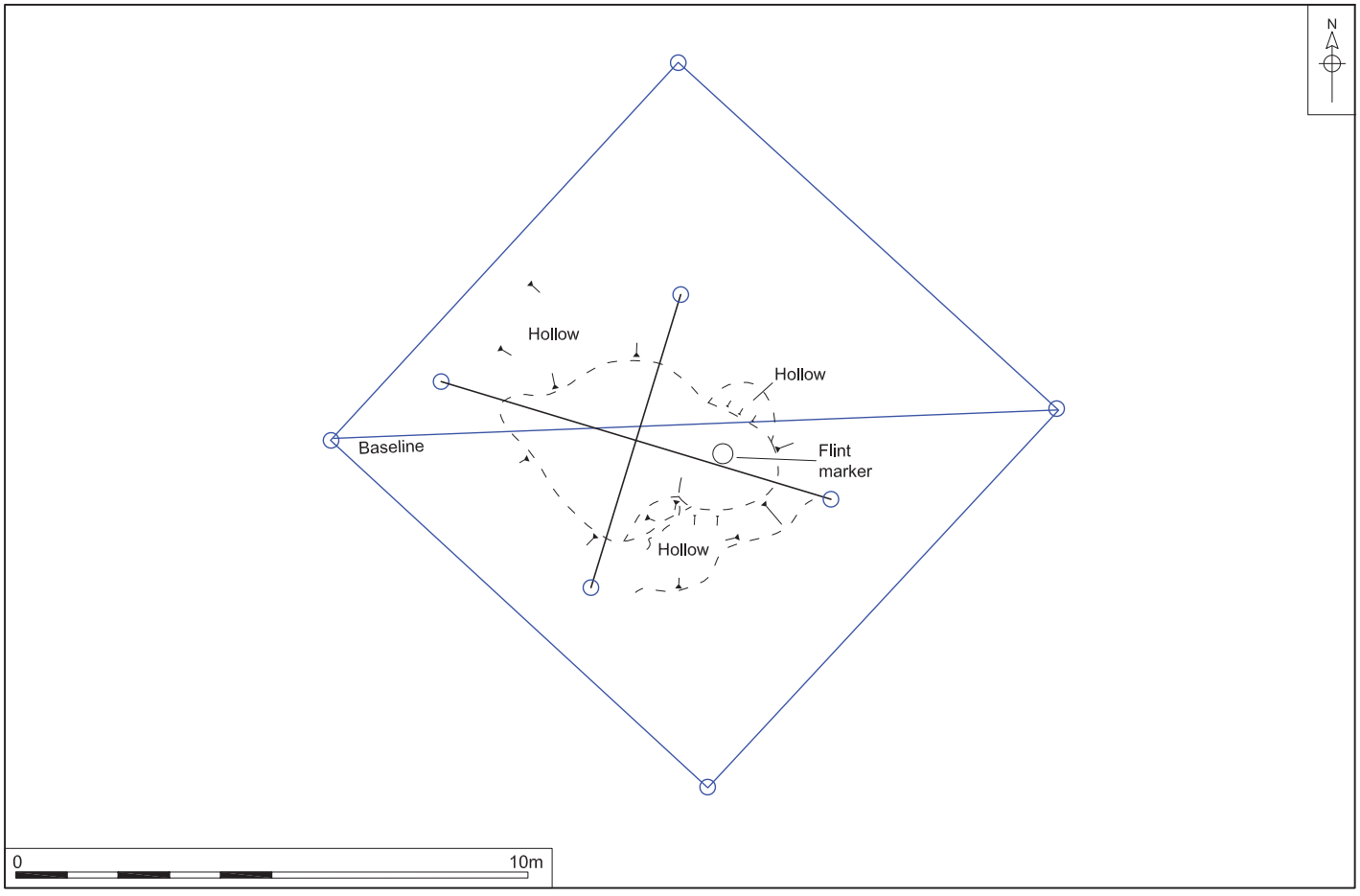

Figure 3. Pre-excavation plan. Scale 1:100

The Contour Survey

The initial contour survey was undertaken on 31 of October 2012. The survey was undertaken using a Leica GPS 900RTK Rover device with readings taken on average every 20cm to fully illustrate all variations in levels over the 10m x 10m area (Fig. 2).

A contour plan was created using ACAD. A copy of this plan was taken into the field in order to ensure accurate backfilling and reinstatement of the excavations and mound to its former shape at the end of the project.

The Excavation

Prior to the excavation of two quadrants of the mound, a pre-excavation plan was made (Fig. 3). Two opposing quadrants were selected and marked out with string, fixed by nails and then excavated (Plates 2 and 3). At the end of the work a base line was created between the eastern and western canes and this was used to plot the exact position of the quadrants within the 10m by 10m survey area. The excavation of the two slots was undertaken on the 1st and 2nd of November, and following a single day away from site, the backfilling took place (6 November).

Plate 2. The location of the proposed mini-barrow, looking south

Plate 3. The location of the proposed mini-barrow, looking east

Spoil, exposed surfaces and features were scanned with a metal-detector although unfortunately there were no finds of any kind.

Environmental samples were not taken with the permission of David Robertson of NHES as the layers encountered were devoid of inclusions or potential.

All archaeological features and deposits were recorded using NPS Archaeology pro forma with plans and sections being recorded at appropriate scales. Monochrome and digital photographs were taken of all deposits and photographs were also taken prior to the excavation and following re-instatement. Photographs were also taken to record the progress of the excavation and to provide working shots.

The contour survey undertaken by the Leica GPS 900RTK Rover supplied a large number of levels, which were used during the course of the work.

Site conditions were good although the work took place in often cool and damp weather. The conditions helped to make the ground more cohesive during re-instatement.

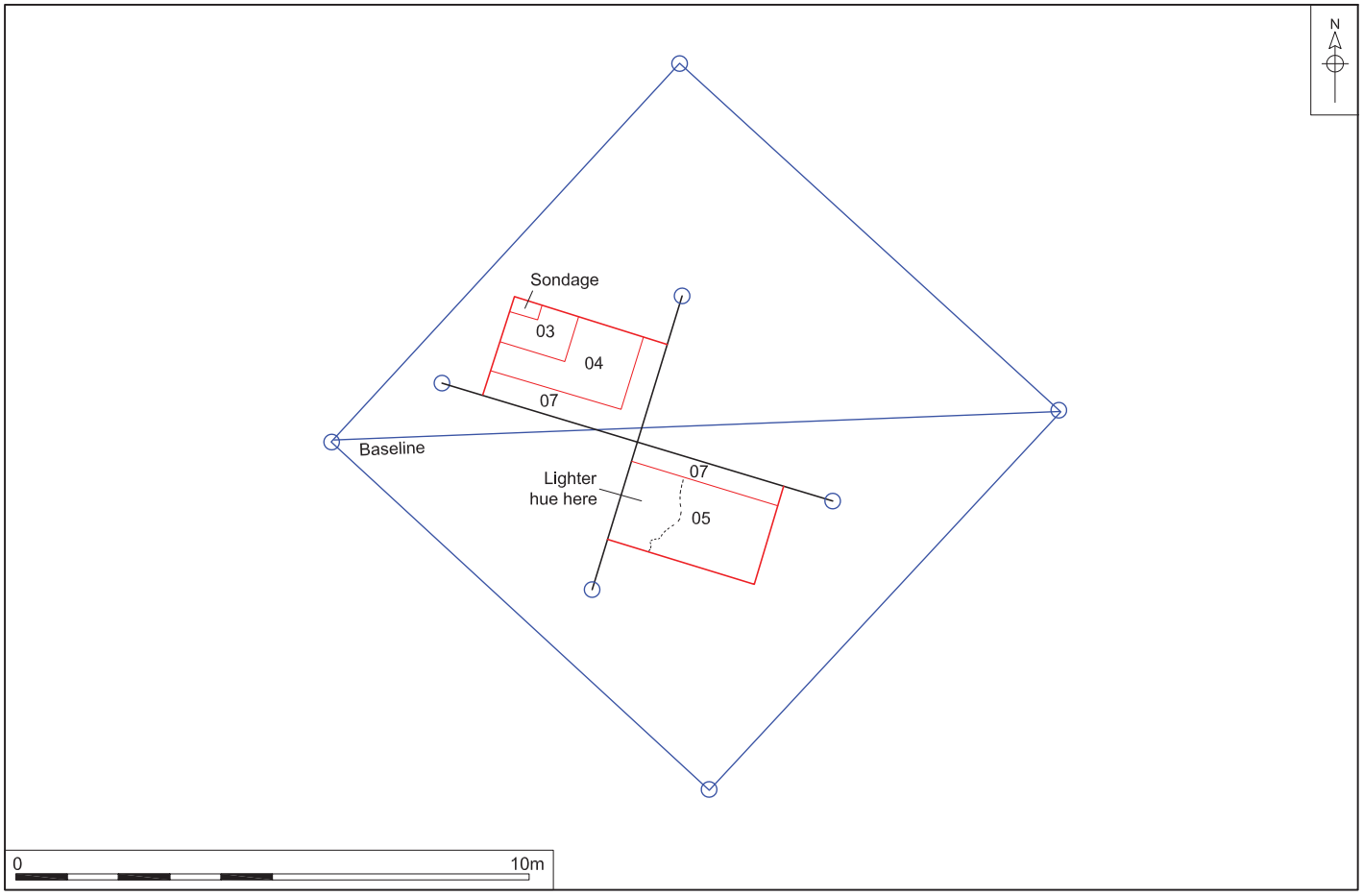

Figure 4. Excavation plan. Scale 1:100

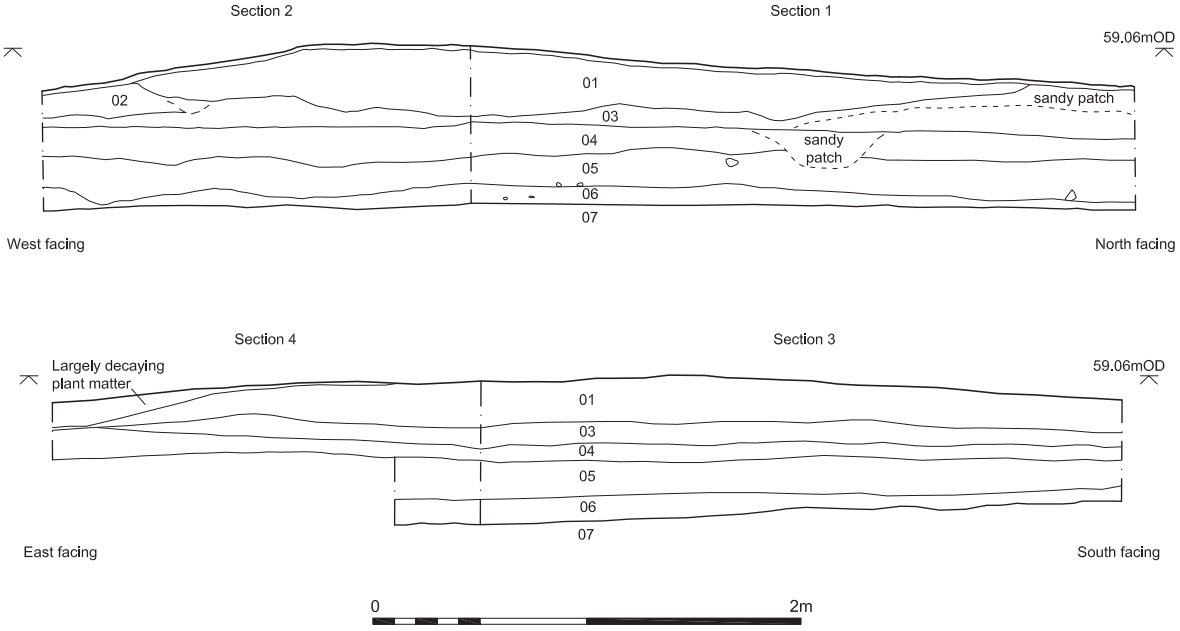

Figure 5. Sections 1 - 4. Scale 1:25

RESULTS

(Figures 4 and 5, Plates 4-10))

The underlying natural substratum consisted of sand and gravel ([07]) and was observed in the two deepest slots excavated adjacent to the drawn sections at the centre point of the small mound. Deposits were cleaned, although they were devoid of any further features and there was no sign of any disturbance.

Above it there was a layer of slightly darker brownish yellow 'dirty' sand ([06]) which had probably been caused by a mixing of the natural substratum and subsoil, possibly through the presence of frequent roots and the general high level of bioturbation which could have easily affected the loose sandy soils. The layer undulated slightly and was only 0.10m deep at its thickest point.

A thicker layer of greyish brown silty sand ([05]) was located above it. This layer was essentially a lower layer of subsoil of completely natural origin. It was 0.19m thick at its thickest point.

A light grey silty sand ([04]) was the next deposit in the sequence. It was also entirely of natural origin and was in effect an upper subsoil. The top of this deposit was more noticeably flat, than the layers already described. This layer was also 0.19m thick.

Layer [03] was a light grey silty sand which contained a large number of roots. The roots appeared to be part of an old root system and were quite difficult to dig through. The top of the layer was very irregular and at its thickest, it was 0.22m deep. The top of the layer appeared on the section to be dished and sloped downwards towards the centre.

A darker greyish silty sand ([02]) was recorded on the northern side of the mound. It was probably essentially the same phase as layer [03] and had taken on a darker hue probably due to the presence of decaying plant matter and roots. This layer was 0.16m thick.

Layer [01] was essentially the 'mounding material' which was the cause of the land form. It was composed of a light brown silty sand which had probably been caused by the collecting of sandy material at the base of an old bush (which had left the root system within layer [03]). It was 0.30m thick at the centre.

At the top of the sequence there was a thin layer of dead leaves, bracken and other plant matter, some of which was initially scraped back from the working area prior to commencing the excavation. No context number was allocated to it.

Plate 4. The northern quadrant, looking south-east

Plate 5. The northern quadrant, looking east

Plate 6. Close up of section 1, looking south

Plate 7. Close up of section 2, looking east

Plate 8. The southern quadrant, looking north-west

Plate 9. Close up of sections 3 and 4, looking north-west

Plate 10. The backfilled excavations, looking east

CONCLUSIONS

This small targeted excavation was a useful exercise and a great opportunity to further understand the nature of the mini-barrows located within the barrow cemetery. A small mound was selected for further study by Norfolk Historic Environment Survey (NHES) on the north western edge of the main cluster of barrows. It was perhaps less well defined than the norm, being slightly flatter and wider.

The small mounds at Salthouse Heath were originally thought to represent survivals of Late Bronze Age culture into the first phase of the Iron Age, though now they may be regarded as still part of the later Bronze Age. In his article in *The Archaeological Journal* Clarke presented the background to the mini-barrows, although some of his ideas have subsequently been superseded. He stated that 'In 1936 Mr. A. Q. Watson discovered a large group of small mounds about 10 feet in diameter on Salthouse Heath overlooking the sea and forming part of a well-known barrow group of Middle and Late Bronze Age date. Several of these mounds have been examined and their centres contain coarse degenerate bucket urns with cremated bones, the last gasp of the Dutch Middle Bronze Age barrow tradition fused with the urn-field idea and transported to East Anglia to continue in isolation. These mounds are perhaps contemporary with the Iron Age 'A' occupation of other parts of the county, and find a ready parallel in the barrow clusters of north-east Yorkshire though there the small mounds generally cover inhumations' (Clarke 1940, 20).

The current excavation certainly proved that there was a physical mound, and that the sections through it suggest that the 'mounding' material was building up at the top of the sequence of deposits, rather than from a lower level. The mound was essentially composed of sandy layer [01] which did appear to fill the shallow depression on the surface of layer [03]. It was slightly irregular in form, being steeper on its northern side. The contour survey also confirmed that the steepest incline was on the northern side of the mound with various shallow depressions located around it. This irregularity could suggest a natural origin for the feature, although it should be borne in mind that an original archaeological feature can be heavily modified by later plant and animal activity. Rabbits and badgers in particular can do serious damage to archaeological features.

The sandy mound ([01]) appeared to be located above the densest part of an old root system located towards the top of layer [03] and it is very possible that a large bush with its thick root system could have 'fixed' and gathered this layer of sand ([01]) into a mound. It is known that the root systems of gorse bushes in particular are extensive and multi-branched, forming a 'mat' of roots which often occur in the top 10 cm of soil. Plants which have been repeatedly burned (as gorse often is on heath) can have a denser root system. Gorse bushes also often have a larger tap root and it is known that the removal of the whole bush can leave behind a hole up to 1.00m across and 46-60cm deep (http://www.fs.fed.us/database/feis/plants/shrub/uleeur/all.html). Could the mound have been created following the removal of a bush, as the sand of [01] does seem to fill a shallow 'basin'? It is known that in recent years many gorse bushes have been cleared from the heath. The 1946 aerial photographs show that the present mound was situated in one of the

densest parts of this scrub vegetation cover (http://www.historic-maps.norfolk.gov.uk/e-map explorer).

Photographs of mounds excavated in the late 1930s (Plates 11-13), though not ideal for comparison with the present work, do seem to show that the material forming the mounds was very stony, compared with the sandier nature of the present mound. This may have been due to differences in the underlying natural substratum, although it could also indicate the difference between a naturally occurring mound (where finer material is trapped by e.g. a root system) and a deliberately deposited mound where more gravelly material is derived from excavated natural deposits, probably in order to form a more solid mound.

Plate 11. Previously excavated mini-mound (photograph obtained from NHER)

Plate 12. Previously excavated mini-mound (photograph obtained from NHER)

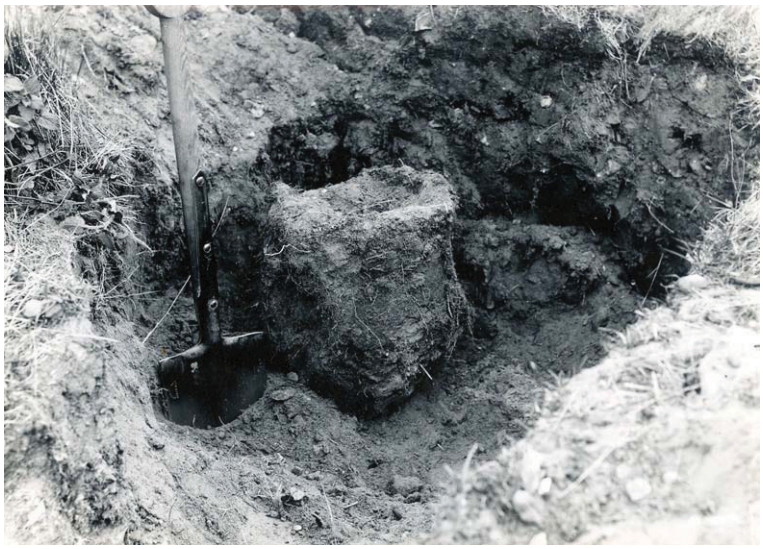

Plate 13. Previously excavated mini-mound (photograph obtained from NHER)

The absence of any finds or even inclusions (charcoal flecks, small fragments of burnt bone etc) was significant. It is possible that a burial or cremation burial located within the opposing unexcavated quadrants of the feature could have remained completely intact, though it is posited that this is less likely with cultural material being able to easily move through the sandy and loose ground. As the excavation slots were dug through the centre of the mound, where burial urns are typically located in such mounds this factor becomes more important. The sandy ground is highly acidic in nature and may have dissolved any trace of an inhumation burial, if this mound represented such a type of burial, though the absence of disturbance or traces of a grave cut also appears to discount this idea.

It is possible that even in spite of the factors described above, the small mound may represent a mini-barrow, with an *in situ* cremation burial located within an unexcavated quadrant (or having been long since dislodged through animal action). However on balance it is considered most likely that the mound had a natural cause. If this is the case, it would suggest that some of the other small mounds within the barrow cemetery are also natural in origin. Further examination may be required to determine the true number of mini-barrows surviving within the barrow cemetery and the total number of such monuments may be less than currently thought.

Acknowledgements

Thanks also to David Robertson who commissioned the work on behalf of NHES, monitored the site and added extra useful information

The author undertook the fieldwork with John Cousins to whom many thanks are extended.

Thanks to Heather Hamilton for finding the original photographs in the NHER and scanning them for reproduction here.

This report was illustrated by David Dobson after initial digitising by the author. The report was edited by Jayne Bown.

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Appendix 1: Context Summary

Context	Category	Description	Period
01	Deposit	Light brown silty sand	Unknown
02	Deposit	Dark greyish silty sand	Unknown
03	Deposit	Light grey silty sand with frequent roots	Unknown
04	Deposit	Light grey silty sand	Unknown
05	Deposit	Greyish brown silty sand	Unknown
06	Deposit	Brownish yellow ‘dirty’ sand	Unknown
07	Deposit	Natural substratum	Unknown

Appendix 2: OASIS Report Summary

OASIS DATA COLLECTION FORM: England

List of Projects | Manage Projects | Search Projects | New project | Change your details | HER coverage | Change country | Log out

Printable version

OASIS ID: norfolka1-154239

Project details

Project name	Mini-barrow, Salthouse Heath
Short description of the project	A contour survey and targeted archaeological excavation were undertaken on a small mound thought to be one of a number of mini-barrows located within the large barrow cemetery located at Salthouse Heath in Norfolk. Two opposing quadrants were excavated through the small mound. The excavated slots indicated that the mound was likely to be of natural origin and may have been caused through the accumulation of sand, trapped by the root system of a gorse bush or similar, which had since been removed. No artefacts were recovered. The work, though producing negative results, was a useful exercise which suggests that not all of the small mounds in the area of the cemetery are certain to be mini-barrows.
Project dates	Start: 31-10-2012 End: 06-11-2012
Previous/future work	No / No
Any associated project reference codes	ENF132000 - HER event no.
Any associated project reference codes	132001 - HER event no.
Type of project	Recording project
Site status	None
Current Land use	Other 15 - Other
Monument type	NONE None
Significant Finds	NONE None
Investigation type	'"Full excavation"','"Full survey"'
Prompt	Research

Project location

Country	England
Site location	NORFOLK NORTH NORFOLK SALTHOUSE Mini-barrow on Salthouse Heath
Study area	100.00 Square metres
Site coordinates	TG 0697 4240 52 1 52 56 18 N 001 04 49 E Point

Project creators

Name of Organisation	NPS Archaeology
Project brief originator	Norfolk Historic Environment Service
Project design originator	NPS Archaeology
Project director/manager	david whitmore
Project supervisor	Peter Crawley
Type of sponsor/funding body	Local Authority
Name of sponsor/funding body	Norfolk County Council

Project archives

Physical Archive Exists?	No
Digital Archive recipient	NPS Archaeology
Digital Contents	"other"
Digital Media available	"Images raster / digital photography","Images vector","Survey","Text"
Paper Archive recipient	Norfolk Museums and Archaeology Service
Paper Contents	"other"
Paper Media available	"Context sheet","Plan","Report","Section","Survey "

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological Excavation and Contour Survey at Salthouse Barrow Cemetery, Salthouse Heath, Norfolk
Author(s)/Editor (s)	Crawley, P.
Other bibliographic details	Report 2999
Date	2013
Issuer or publisher	NPS Archaeology
Place of issue or publication	Norwich
Description	A4 paper, double-sided, colour-printed, spiral-bound; pdf

Entered by	Jayne Bown (jayne.bown@nps.co.uk)
Entered on	4 July 2013

OASIS:

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