EAKRING TRAINING AGI

Archaeological Monitoring and Recording

Network Project Code: EAK 16

NGR: SK 6761 6150

Museum Accession Number: TBA

Planning Ref.: 12/00802/FUL

Prepared by

NETWORK ARCHAEOLOGY LTD

for

NATIONAL GRID

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Our operating systems have been verified by:

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NON-TECHNICAL SUMMARY

A programme of archaeological monitoring and recording was undertaken by Network Archaeology Ltd on land at the current National Grid Training Centre at Eakring, Nottinghamshire during groundworks associated with the construction on a new training gas AGI (Above Ground Installation). The archaeological work formed part of the discharge of conditions that accompanied planning permission for the development.

During the monitoring of the affected area, which occupied some 1ha, a modest and unremarkable assemblage of artefacts was recovered from the ploughsoil, and a number of features and deposits were recorded. These relate to the agricultural exploitation of the land from the medieval period onwards, and principally comprise remains of ridge and furrow material and a historic hedgerow. Nothing of substantial archaeological importance was present, and the observations largely corroborate what was already known about how the site was used in the past.

The degree of direct and indirect impact from the monitored development has been negligible. The observations presented here may be used to formulate strategies for any future development in the area.

1 INTRODUCTION

This report presents the results of a programme of archaeological monitoring and recording undertaken within a development area at the National Grid Training Centre at Eakring, Nottinghamshire; it indicates the level of impact on archaeological remains recorded during groundworks, and the successful mitigation strategy adopted.

This report was commissioned by National Grid. The archaeological contractor was Network Archaeology Ltd. J Murphy and Sons were the principal groundworks contractor.

1.1 Development area

Location

The site lies on the north eastern edge of the current Training Centre, around 600m to the south of the village of Eakring, and is approximately equidistant between Ollerton to the north and Southwell to the south (SK 6761 6150), (Figure 1).

Development

National Grid proposes to construct on a training gas AGI (Above Ground Installation) at its Eakring Training Centre. Although the installation will be fully functioning, it will pump compressed air rather than gas, as befits its training function (Cater 2011). The impacted area occupies an area of approximately 1ha.

Construction works will include:

- installation of temporary construction compound and spoil storage area;
- excavation of new AGI foundations;
- construction of new AGI structure, gas chambers and buried and above-ground pipework;
- excavation of service trenches;
- construction of access road and car-parking;
- landscaping of AGI complex and erection of security fencing.

Archaeological monitoring was confined to the stripping of topsoil from the compound area, as well as the excavation of an archaeological trial trench across a historic hedgerow.

Character

Sedimentary mudstones of the Mercia Mudstone Group underlie the site, with no superficial deposits recorded (BGS 2012). At the time of monitoring, the land was divided into three distinct parcels. These were, moving from north to south: a field of long pasture; a belt of woodland, hedgerow and scrubby vegetation; and an area of hardstanding. The development area lies at a height of around 85m above sea level in an area of undulating terrain drained by the River Trent to the east.

According to the terms of the Landscape Character Assessment of Nottinghamshire, the development area lies within the mid-Nottinghamshire farmlands, locally described as having gently undulating topography, numerous blocks of mixed deciduous woodland, and a mixture of intensive arable fields alongside low intensity farming with permanent improved pasture (Newark & Sherwood Council 2009).

1.2 Planning background

An Archaeological and Cultural Heritage Desk-Based Assessment (DBA) was prepared by Groundwork Archaeology and submitted to Newark and Sherwood District Council at the

pre-application stage (Cater 2011). Planning Permission under application number 12/00802/FUL was subsequently granted, subject to a number of conditions. An archaeological condition attached to the planning permission states that:

"No development shall be commenced until a Scheme for an Archaeological Watching Brief has been submitted and approved in writing by the local planning authority. The approved scheme shall be carried out by a qualified archaeologist or archaeological body approved by the local planning authority. Unless otherwise agreed in writing by the planning authority, within 3 months of completion of the excavation works a summary report shall be submitted to the local planning authority and the results of the 'watching brief' shall also be made available for inclusion in the archive of information of Nottinghamshire County Council's 'Sites and Monuments Record."

A Written Scheme of Investigation was subsequently produced by Groundwork Archaeology Ltd detailing the archaeological mitigation procedures to be followed (Cater 2012) during the archaeological monitoring.

The current document represents the 'watching brief' report, as described in the planning condition above.

1.3 Archaeological and historical background

A thorough account of the historical development of Eakring was included in the DBA (Cater 2011). As such, there is no need to repeat the exercise here, but especially salient points within the DBA have been repeated below:

Palaeolithic Era (c. 500,000 BP - 10 000 BP)

Palaeolithic

The celebrated Palaeolithic site of Creswell Crags lies just19km to the north west of Eakring, although elsewhere in the East Midlands region, remains from this period are sparse, lack context and tend to be surface-collected. The majority of early finds are struck flints, rather than structural or palaeoenvironmental remains. The distribution of these is weighted toward the gravel geologies of the Trent Valley.

Mesolithic (c. 10 000 BP – 4000 BC)

After the end of the last Ice Age, around 12,000 years ago, a range of more hospitable environments developed. These were subsequently exploited by the hunter-gatherers of the Mesolithic period. A human presence is principally detectable in the archaeological record by finds of distinctive struck flint and by signs of deliberate alteration of the environment.

Across Britain, Mesolithic activity tended towards coastal, riverside and lakeside locations. As in the preceding Palaeolithic period, the vast majority of the region's Mesolithic sites are clustered around the Trent Valley, with many representing the remains of temporary camps situated on the terrace edges adjacent to watercourses.

Neolithic (c. 4000 – 2400 BC)

Throughout the Neolithic period, communities across much of Britain adopted an increasingly sedentary lifestyle, with agriculture gradually gaining primacy over hunting and gathering as the principal subsistence method. Domestic structures and associated field systems are rarely found (Darvill 1996), and evidence of occupation generally comprises flint scatters, clusters of pits, as well as increasing traces of habitat management including forest clearance (Whittle 1999).

Neolithic peoples are most visible through the large earthwork monuments, such as long barrows and henges, which they constructed. Such monuments may have defined places chosen to host important gatherings between different tribes. Monumentalisation of the

landscape may therefore be linked to a growing awareness of territory, as the population became more sedentary.

Finds scatters, findspots and cropmarks of funerary and ritual features are the principal evidence of Neolithic activity in the region. There is again a concentration on the gravel geologies, although the evidence from unstratified artefacts suggests that Neolithic activity extended beyond these areas.

Bronze Age (c. 2400 – 800 BC)

New metalworking technology was introduced into Britain in the mid-third millennium BC. From the middle of the period, settlement remains increase in number, while visible ritual sites decrease. Funerary ceremonies came to focus on the individual, with round barrows being characteristic features of this period. Land divisions became increasingly marked during the later Bronze Age, and evidence of settlement increases. Deposition of fine metalwork into the Trent and other watercourses occurred during the Bronze Age, and a ritual preoccupation with water might be envisaged.

As was the case with records of Neolithic activity, cropmarks and artefact findspots predominate in the regional record for the Bronze Age, with the gravel areas containing concentrations of known remains.

Iron Age (c. 800 BC – AD 60)

Iron-working, coinage and the potter's wheel were among the new technologies introduced to Britain from the Continent during the Iron Age. The landscape largely remained one of enclosed roundhouse settlements, field systems and farming communities (Haselgrove 1999). With sustained population growth came increased competition for land, and a highly territorial society emerged (Cunliffe 2004).

By the Late Iron Age, Nottinghamshire had witnessed a considerable expansion of settlement and agriculture at the expense of the county's wildwood. The majority of the evidence is again derived from the Trent valley.

No prehistoric sites (be they individual findspots or scatters of stratified remains) are recorded in the Nottinghamshire HER as having been identified within the DBA study area, which comprised a 1km-radius buffer centred on the development site (Cater 2011 and citations therein).

Roman (AD 60-410)

The Roman invasion in AD 43 was followed by a rapid implementation of centralised administration, based on towns such as Leicester, Lincoln and York, and supported by a network of roads. Communities were able to engage in large-scale trade and exchange networks, adopting a wealth of new items, fashions and customs, while maintaining a degree of continuity with their Iron Age past (Esmonde Cleary 1999).

The study area of this assessment falls within an area that saw rather less-intensive "native" settlement than that evident in southern England. This part of Nottinghamshire is likely to have been a border zone between the Corieltauvi and the Brigantes, and for a short time marked the northern frontier of the Roman province. This would account for the line of 1st-century-AD military roads and forts along the boundary between these two territories.

Although there is such a fort just 5km to the south of the development site, at Osmanthorpe, no known Roman assets are present within the study area of this assessment (Cater 2011 and citations therein).

Early Medieval (410-1066)

Following the collapse of the Roman economy and centralised administration, the Midlands, in common with much of the country, witnessed a significant contraction of settlement and expansion of woodland during the 5th and 6th centuries.

The early medieval period saw fundamental changes reordering the political, economic, social and physical landscape. Migration and takeover by settlers from across the North Sea has traditionally been the explanation for this, but more recent accounts, often drawing on emerging scientific evidence such as DNA and isotope analysis, point to general continuity within the population after the end of Roman rule (Yeates 2012). The matter is not yet settled.

Within Nottinghamshire, Anglo-Saxon material culture tends to be recovered principally from cemeteries found within the Trent Valley and the south of the county. Conversely, and mirroring Roman-era settlement patterns, early Anglo-Saxon settlement evidence for north and west of the Trent is sparse, suggesting it remained less attractive to settlers.

Palaeoenvironmental evidence suggests that the Mercia Mudstone clay lands reverted widely to woodland at this time, with pastoral economies prevailing where exploitation occurred. Eakring at this time is likely to have comprised small scattered farmsteads or hamlets, providing woodland or pastoral products (Cater 2011 and citations therein).

Medieval (1066-1540)

Domesday Book records two equal-sized manors in Eakring. At some point between the 10th and the 13th centuries, the previously dispersed settlement pattern was superseded by a nucleated village, as happened throughout much of the English Midlands. At about the same time and part of the same process, the hitherto small enclosed fields, gave way to an open-field system, where tenants held narrow strips of land approximately evenly spread across two or three large open fields (Cater 2011 and citations therein).

Post-medieval - Modern (1540 -)

The Map of the Manor of Eakring, of 1737, shows that the land to the east and south-east of the village (the proposed development site included) was part of one of the village's three open fields. This arrangement is almost certainly medieval in inception, although Eakring's three-field system was unusually long-lived. Systematic enclosure and reorganisation of landholdings did not occur until World War II, and then only at the behest of the War Agricultural Committee.

In the 1930s, oil was discovered near Eakring, and Eakring and Dukes Wood became the UK’s first commercial oilfields. These were a particularly important resource during World War II, when German naval action threatened Britain’s oil supplies from overseas.

Both fields were eventually depleted and were shut down in 1989. BP left the depot that they had built at Eakring, and their facility was acquired by National Grid for use as a training base. Proposed construction of an Above Ground Gas Installation for training purposes at this facility necessitated the works described in this report (Cater 2011 and citations therein).

Previous archaeological investigations

As mentioned above, an Archaeological and Cultural Heritage desk-based assessment was produced as part of the development that forms the subject of this report (Cater 2011).

Neither the National Monuments Record Excavation Index nor the Nottinghamshire Historic Environment Record (HER) contains any record of any previous archaeological work within 1km of the development area. However, just over 1km to the west, prehistoric flints were

collected during a fieldwalking in advance of a wind turbine development, although no evidence to suggest settlement activity was recorded (Gajos 2006).

1.4 Aims

The aims and objectives of the programme of archaeological work, as set out in the WSI, were to identify record and interpret and, where possible, preserve by record any archaeological remains disturbed or destroyed by the monitored development.

1.5 Circulation of this report

This report will be circulated to the following recipients:

- Jim Bonnor, Groundwork Archaeology
- Gillian Benson, Rhead Group/National Grid
- Ursilla Spence, Nottinghamshire County Council

2 FIELDWORK PROCEDURES

2.1 Quality standards

All archaeological work was undertaken in accordance with the Institute for Archaeologists' standard and guidance documents (I*f*A 2008a, 2008b, 2009a, 2010).

The standards represented by the Registered Organisation (RO) scheme operated by the I*f*A were adhered to throughout. Network Archaeology Limited is a Registered Organisation (RO) with the I*f*A. Key project staff are members of the I*f*A at appropriate levels.

2.2 Mechanical excavation

The monitored area was excavated by a Case CX210B tracked excavator fitted with a 2m wide toothless ditching bucket.

2.3 Hand excavation, recording and sampling

A full written record was maintained on site, including standardised context descriptions on pro forma record sheets. A scale representative section showing the sequence of deposits revealed was produced and digital, black and white and colour transparency photographs were taken. Fieldwork was undertaken 12th-19th November 2012 by Patrick Daniel, and then by Richard Moore 3rd-4th December 2012.

2.4 Project codes and number allocations

The scheme of work has been given the internal Network Archaeology project code EAK 16. The project cannot be allocated a museum accession number at present as Newark Milgate Museum is being decommissioned and will not be accepting archives until late 2014

3 RESULTS

3.1 Natural deposits

The stratigraphically earliest deposit exposed on site were contexts *104* and *108*, representing the natural mudstone substrate in various degrees of erosion, ranging from weak rock with a platy structure, to clay. This was overlain by a mid-orangey brown subsoil (*103* and *107*).

3.2 Remnant ridge and furrow

Overlying the subsoil was context *109*, recorded as a plastic-friable mid-greyish brown silty clay, approximately 0.1m thick (Figure 2b). This material probably represents plough-spread ridge and furrow material.

In places, this deposit was visible as parallel bands, up to 2m wide, and spaced approximately 7m apart. As far as could be seen, these were aligned west-north-west to east-south-east and so ran roughly parallel to the historic hedgerow referred to in the DBA as asset 60 (see below). They are likely to have had medieval or early post-medieval origins, but the only artefacts noted were relatively recent building materials. The furrows had been cut by land drains. As well as ceramic land drains, two potentially older drains filled with river cobbles were noted, one on a similar alignment to the furrows, the other at right-angles.

3.3 Historic hedgerow

As recommended in the WSI, the historic hedgerow identified in the DBA ('asset 60') was investigated by means of a machine-cut trench. This measured 4.5m in length by 2m wide and achieved a maximum depth of 0.6m below the current ground surface (Figure 2a). The presence of buried services immediately north of the hedge prevented excavation in this area, and so the trench was not as long as the WSI had proposed.

The hedgerow bank (context *101*) was found to be approximately 3.6m wide by 0.5m high, and was composed of a humic, rooty, dark brown soft friable clay. It overlay a subsoil (*103*) which in turn overlay eroded natural mudstone (*104*). No evidence capable of dating the establishment of the boundary marked by the hedgerow was identified. An infilled ditch may have lain to the north of the hedge, although the presence of multiple service ducts prevented further investigation. A line of stones (*100*) seen running parallel with the southern edge of the hedgerow was judged to be associated with the aggregate hardstanding in the southern part of the site, and therefore modern in date.

3.4 Modern features

There were several large spreads of brick and concrete, especially in the low-lying southern and eastern part of the monitored area. The largest of these measured approximately 7m and 9m across. Investigation of one, numbered 110, revealed that it filled a cut at least 0.48m deep, and had truncated a modern ceramic land drain. Other disturbance to the surface included a large concrete setting holding two pieces of angled steel, the remains of an electricity pylon leg or similar; and a smaller concrete base.

3.5 Artefacts

A modest assemblage of material was collected from the ploughsoil and stripped ground surface during the archaeological monitoring. The finds comprise pottery, brick and tile, clay pipe, glass and a possible whetstone. The majority of the material is post-medieval to early modern in date, although some of the pottery dates to the 13th-14th century. The assemblage is typical of ploughsoil contexts, and much of it will have been deposited by agricultural activities such as manuring. All of the finds represent domestic material commonly found in the area, and there are no pieces of special note. Full details are in Appendices C and D.

3.6 Confidence rating of results

There is a moderate to high confidence in the descriptions, interpretations and relationships of the remains observed and recorded during the archaeological monitoring. Separate stratigraphic units were generally well-defined and easy to distinguish, although the stripped ground surface often lacked clarity due to the ploughing of the land in the past. Only the removal of topsoil was subject to archaeological monitoring: the widespread presence of the furrow material (context *109*) means that it is not possible to state that archaeological remains were definitely absent from the area covered by this material.

It is worth reiterating that the presence of service ducts to the north of the hedgerow prevented the attending archaeologist from establishing whether or not the hedge had once been accompanied by a ditch on this side.

It was agreed with Ursilla Spence, Senior Archaeological Officer for Nottinghamshire County Council, that stripping of the hardstanding area occupying the southern portion of the development site would not form part of the archaeological watching brief. This decision was taken in light of the negative results of the monitoring of the excavation of the footings for a CCTV mast dug into the hardstanding, the largely negative results of the main body of work in the adjacent area, and the extent of known and probable disturbance to the area.

4 DISCUSSION

The monitoring of the removal of topsoil did not reveal any remains of substantial archaeological importance, although the recorded deposits do to a certain extent corroborate what is known of the history of development area (Cater 2011).

A possible narrative summary of the depositional sequence of the site may record that in geological prehistory a subsoil developed over Triassic Mercian mudstone deposits. At some unknown juncture, the area was cleared and enclosed for farming. By the medieval period the site probably lay within the open fields around Eakring village, and was cultivated using the ridge and furrow method. The finds assemblage suggests that the land was manured at least from the 13th or 14th century onwards, probably until the beginning of the 20th century. During this period a hedgerow separated two of the fields that once stood here. At some point, probably in the early twentieth century, ceramic land drains were installed to maintain and enhance the agricultural viability of the land. In the 1930s-40s, an oil depot, associated with the Eakring and Dukes Wood oilfields, was constructed (Cater 2011). After the exhaustion of the oil reserves, the depot was redeveloped as a National Grid training facility. Construction and groundworks associated with both of these latter phases may have led to the installation of the surface ducts that crossed the site, as well as the spreads of modern rubble. The northern part of the monitored area continued to be used for pasture until the commencement of the current works.

5 CONCLUSION

The scheme of monitoring and recording revealed little of archaeological importance beyond exposing ridge and furrow probably associated with cultivation of medieval to post-medieval strip fields around the village of Eakring. The finds assemblage suggests that the land was manured from the 13th or 14th century onwards.

The recorded observations provide an indication of what remains may be encountered in the immediate vicinity, and will assist in designing future schemes of archaeological mitigation for any other nearby developments in the future.

Finally, it may be worthwhile to reflect that, although historic boundaries such as the hedgerow investigated here form an important part of the historic environment, and contribute much to the character and time depth of the landscape (*'the vital stitching in the patchwork quilt of the English countryside*' (CPRE 2010 5)), this need not be matched by any great archaeological complexity with regard to the boundaries themselves.

6 ARCHIVE

The documentary archive will comprise:

- A copy of the Written Scheme of Investigation
- A copy of this final report
- Site records, as detailed in the table below:

Table 7.1: Quantification of the site archive

Item	Count
Context registers	1
Context sheets	13
Drawing registers	1
Drawing sheets	2
Photographic registers	4
Black and white photographs	11
Colour transparencies	11
Digital colour photographs	80

On completion of the reporting stages of the project, the archive will be prepared for long-term storage in a format agreed in advance with the relevant local depository. This will be in accordance with guidelines prepared by the UK Institute of Conservation (Walker 1990), the Museums and Galleries Commission (MGC 1992), and the I*f*A (2009b).

As stated earlier in the text the Newark Milgate Museum is being decommission at present and will reopen at the Old Magnus Buildings Appletongate Newark. The museum service has told us that they will not be accepting any new archives or generating accession numbers until late 2014. The contact is Liz Shutler (Collection and Learning Officer, Newark and Sherwood District Council; e-mail: liz.shutler@nsdc.info; tel: 01636 6557771). The archive will therefore be held at Network Archaeology until this date.

As shown in Appendix B, details of this project have been entered onto OASIS, the online database of archaeological investigations (OASIS ID - networka2-143080).

7 ACKNOWLEDGEMENTS

Network Archaeology would like to thank John Corcoran of J Murphy and Sons and Andy Coyne of National Grid for their assistance during fieldwork; Jim Bonnor of Groundwork Archaeology provided advice on behalf of National Grid; and Ursilla Spence of Nottinghamshire County Council gave curatorial support and guidance.

For Network Archaeology, the work was managed by Claire Lingard, and fieldwork was carried out by Patrick Daniel and Richard Moore. This report was produced by Patrick Daniel; illustrations were by Susan Freebrey.

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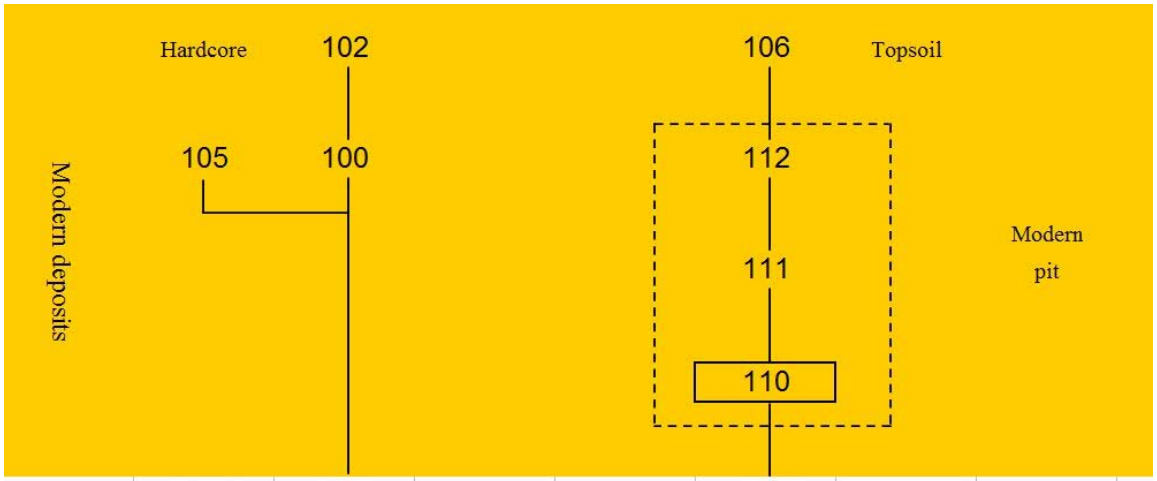
Appendix A Context Summary and Harris Matrix

Context	Type	Fill of/ filled by	Description	Interpretation	Provisional Date
100	Layer	-	Irregular stone alignment	Stones probably associated with hardcore layer covering hardstanding to the south of historic hedgerow (DBA Asset 60)	Modern
101	Layer	-	Dark brown clay	Hedge bank	Med-modern
102	Layer	-	Reddish brown stony mixed clay and sand	Aggregate preparation layer; hardstanding	Modern
103	Layer	-	Mid tannish brown clay	Subsoil	Unknown
104	Layer	-	Greyish green clay	Natural substrate	Geological
105	Layer	-	Greyish green clay	Upcast natural from digging of service trenches	Modern
106	Layer	-	Mid to dark brown silty clay	Topsoil	Modern
107	Layer	-	Mid to dark reddish orangey brown silty clay	Subsoil	Unknown
108	Layer	-	Greenish grey rotten stone	Natural mudstone rock head, not yet degraded to clay	Geological
109	Layer	-	Mid greyish brown silty clay	Homogeneous soil spread. Colluvium or spread ridge and furrow material	Unknown
110	Cut	111, 112	Unknown form, at least 2.2m x 1.7m x 0.48m deep	Modern pit, contains rubble, cuts a clay field drain.	Modern
111	Fill	110	Mixed reddish brown and brown and greenish grey silty clay	Mixed redeposited topsoil, subsoil and natural	Modern
112	Fill	110	Mid to dark brown silty clay	Redeposited topsoil	Modern



	Hedge	101			109	Furrow/ coll.	
	Subsoil	103	=		107	Subsoil	
	Natural	104	=		108	Natural	

Appendix B OASIS summary

OASIS ID: networka2-143080

Project name	Eakring National Grid Training Centre, Nottinghamshire, Watching Brief Nov-Dec 2012
Short description of the project	A programme of archaeological monitoring and recording was undertaken by Network Archaeology Ltd on land at the current National Grid Training Centre at Eakring Nottinghamshire (SK 6761 6150), during groundworks associated with the construction on a new training gas AGI (Above Ground Installation). The archaeological work formed part of the discharge of conditions that accompanied planning permission for the development. During the monitoring of the affected area, which occupied some 1ha, a modest and unremarkable assemblage of artefacts was recovered from the ploughsoil, and a number of features and deposits were recorded. These relate to the agricultural exploitation of the land from the medieval period onwards, and principally comprise remains of ridge and furrow material and a historic hedgerow. Nothing of substantial archaeological importance was present, and the observations largely corroborate what was already known about how the site was used in the past. The degree of direct and indirect impact from the monitored development has been negligible. The observations presented may be used to formulate strategies for any future development in the area.
Project dates	Start: 12-11-2012 End: 04-12-2012
Previous/future work	Yes / No
Any associated project reference codes	12/00802/Ful - Planning Application No.
Type of project	Recording project
Site status	None
Current Land use	Transport and Utilities 3 - Utilities
Monument type	RIDGE AND FURROW Medieval
Monument type	RIDGE AND FURROW Post Medieval
Significant Finds	POT, CBM Medieval
Significant Finds	POT, CBM Post Medieval
Investigation type	"Watching Brief"
Prompt	Planning agreement (Section 106 or 52)
Country	England
Site location	NOTTINGHAMSHIRE NEWARK AND SHERWOOD EAKRING Eakring
Postcode	NG220PE
Study area	1.00 Hectares
Site coordinates	SK 6761 6150 53 0 53 08 45 N 000 59 20 W Point
Lat/Long Datum	Unknown
Height OD / Depth	Min: 83.00m Max: 87.00m

Project creators	
Name of Organisation	Network Archaeology Ltd
Project brief originator	Local Planning Authority (with/without advice from County/District Archaeologist)
Project design originator	National Grid
Project director/manager	Patrick Daniel
Project director/manager	Claire Lingard
Project supervisor	Patrick Daniel
Type of sponsor/funding body	British Gas/Company
Name of sponsor/funding body	National Grid
Project archives	
Physical Archive recipient	Nottingham City Museums and Galleries
Physical Contents	"Ceramics","Worked stone/lithics"
Physical Archive notes	The museum is decommissioning at present so the archive will not be able to be deposited to late 2014
Digital Archive recipient	Nottingham City Museums and Galleries
Digital Contents	"Ceramics"
Digital Media available	"Images raster / digital photography","Text"
Digital Archive notes	The museum is decommissioning at present so the archive will not be able to be deposited to late 2014
Paper Archive recipient	Nottingham City Museums and Galleries
Paper Contents	"Ceramics"
Paper Media available	"Context sheet","Drawing","Matrices","Photograph","Plan","Report","Section"
Paper Archive notes	The museum is decommissioning at present so the archive will not be able to be deposited to late 2014
Entered by	Claire Lingard (clairel@netarch.co.uk)
Entered on	6 February 2013

Appendix C: The Pottery and Ceramic Building Material

by Alex Beeby

The Pottery

All the material was recorded at archive level in accordance with the guidelines laid out in Slowikowski *et al.* (2001). The pottery codenames (Cname) are in accordance with the Post Roman pottery type series for Lincolnshire, as published in Young *et al.* (2005), which also covers surrounding counties.

The material was laid out and viewed in context order. Sherds were counted and weighed by individual vessel. The pottery was examined visually and using x20 magnification. This information was then added to an Access database. A summary of fabric types is shown in Table C1 below, with an archive list included in Archive Catalogue 1.

A total of 38 sherds from 34 vessels, weighing 330 grams was recovered from the topsoil/ stripped ground surface (106). The pottery is fragmentary and some is also abraded

Table C1: Summary of the pottery

Period	Cname	Full Name	Earliest Date	Latest Date	NoS	NoV	W(g)
Medieval	NOTGL	Nottingham Light Bodied Glazed ware	1220	1320	3	2	29
	NOTG	Nottingham glazed ware	1250	1500	1	1	1
Medieval to Post-medieval	CMO	Coal Measures Orange ware	1300	1550	1	1	10
	RAER	Raeren stoneware	1450	1600	1	1	13
Later medieval to Post-medieval	CIST	Cistercian-type ware	1480	1650	1	1	3
Post-medieval	GRE	Glazed Red Earthenware	1500	1650	1	1	4
	BERTH	Brown glazed earthenware	1550	1800	5	5	83
	BL	Black-glazed wares	1550	1750	9	8	92
	STSL	Staffordshire/Bristol slipware	1650	1780	1	1	7
	STMO	Staffordshire/Bristol mottled-glazed	1670	1800	1	1	2
Post-medieval to Early Modern	ENGS	Unspecified English Stoneware	1690	1900	5	4	41
	NOTS	Nottingham stoneware	1690	1900	1	1	8
Early Modern	PEARL	Pearlware	1770	1900	4	3	6
	NCBW	19th-century Buff ware	1800	1900	1	1	1
	WHITE	Modern whiteware	1850	1900	3	3	30
Total					*38*	*34*	*330*

There is a wide range pottery types ranging in date from the medieval to the early modern period. This is typical of the type of material recovered from topsoil deposits and much will have been distributed by agricultural activities such as manuring. All of the types are domestic varieties commonly found in this area and there are no sherds of special note. No further work is required on the assemblage. Although there is some medieval material here, it is fragmentary and unstratified, with many sherds also highly abraded; the pottery can therefore be discarded.

The Ceramic Building Material

All the material was recorded at archive level in accordance with the guidelines laid out by the ACBMG (2001). The material was laid out and viewed in context order. Fragments were counted and weighed within each context. The ceramic building material was examined visually and using x20 magnification. This information was then added to an Access database. A summary of ceramic building material types is shown in Table C2 below, with a full archive list included in Archive Catalogue 2.

A total of six fragments of ceramic building material, weighing 138 grams was recovered from the site. The material is fragmentary and abraded.

Table C2, Summary of the Ceramic Building Material

Cname	Full name	NoF	W(g)
CBM	Ceramic building material	2	30
PNR	Peg, nib or ridge tile	4	108
Total		6	138

There are four pieces of flat roofing, peg, nib or ridge tile (PNR), including a fragment from at least one medieval type, and two amorphous and undiagnostic pieces of ceramic building material (CBM). No further work is required, and the material can be discarded.

Spot date

(106) 20th century

Abbreviations

BS Body sherd

CXT Context

NoS Number of sherds

NoV Number of vessels

W (g) Weight (grams)

References

ACBMG 2001, *Draft Minimum Standards for the Recovery, Analysis and Publication of Ceramic Building Material, third version* [internet]. Available from http://www.tegula.freeserve.co.uk/acbmg/CBMGDE3.htm

Slowikowski, A. M., Nenk, B., and Pearce, J., 2001, *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*, Medieval Pottery Research Group Occasional Paper 2

Young, J., Vince, A.G. and Nailor, V., 2005, *A Corpus of Saxon and Medieval Pottery from Lincoln* (Oxford)

Archive catalogue 1: the pottery

Cxt	Cname	Sub fabric	Form	NoS	NoV	W(g)	Dec	Part	Comment	Date
106	BERTH	Pale orange	Jar or Bowl	1	1	30		Base		
106	BERTH	Bright orange	Jar or Bowl	1	1	18		BS	Abraded	L16th-18th
106	BERTH	Pale orange	Hollow	1	1	8		BS		
106	BERTH	Pale orange; clay pellets	Hollow	1	1	13		BS	Abraded	
106	BERTH	Mid orange	Jar or Bowl	1	1	14		Base	Burnt	
106	BL	Dark red	Drinking Cup	2	1	9		BS; handle		M16th-17th
106	BL	MP	Jar or Bowl	1	1	19		BSS		
106	BL	Bright orange	Bowl	1	1	28		Rim	Upright rim	17th-18th
106	BL	Bright orange	Jar or Bowl	1	1	9		BS	Very abraded	
106	BL	Dark red	Hollow	2	2	10		BSS		
106	BL	Pale orange; Ca	Hollow	1	1	3		BS		M16th-17th
106	BL	Dark red	Jar or Bowl	1	1	14		BS		L16th-18th
106	CIST		Hollow	1	1	3		BS		M15th-16th
106	CMO		?	1	1	10		BS		14th-M16th
106	ENGS		?	1	1	4		BS		19th-E20th
106	ENGS		Mug or Jug	1	1	24		Rim		18th-19th
106	ENGS		?	1	1	1		BS	Drinking cup?	L17th-18th
106	ENGS		Mug	2	1	12		BS; base		
106	GRE		?	1	1	4		BS	Abraded	16th-17th
106	NCBW		?	1	1	1		BS	?ID	19th
106	NOTG		?	1	1	1		BS	Very abraded; ?ID	13th-15th
106	NOTGL		Jug	3	2	29		BSS	Abraded	13th-14th
106	NOTS		Jar or Bowl	1	1	8		Rim	Long everted rim	19th
106	PEARL		Flat	1	1	1	Brown paint on rim	BS	Flake	19th
106	PEARL		?	2	1	4		BSS	Abraded	19th
106	PEARL		Flat	1	1	1	Blue transfer print - willow pattern	BS		L19th
106	RAER		Hollow	1	1	13		BS		M15th-L16th
106	STMO		Drinking Cup	1	1	2	Rilled	BS		L17th-18th
106	STSL		Press Moulded Dish	1	1	7		Rim	Very abraded	M17th-18th

Cxt	Cname	Sub fabric	Form	NoS	NoV	W(g)	Dec	Part	Comment	Date
106	WHITE		Flat	2	2	12		Rim; base		19th-20th
106	WHITE		Mug	1	1	18		Base	Backstamped "W, 1941"	20th

Archive catalogue 2: the ceramic building material

Context	Cname	Fabric	NoF	Weight	Description	Date
106	CBM	Oxidised; fine-medium sandy; Fe; Mica	1	7	Surfaceless; abraded	Roman or Post Roman
106	CBM	Oxidised; fine	1	23	Surfaceless; abraded	Roman or Post Roman
106	PNR	Oxidised; fine-medium sandy; Fe; Mica	1	15	Flat roofing tile; abraded	13th-15th
106	PNR	Oxidised; medium-coarse sandy; Ca	2	59	Flat roofing tile; poorly mixed clay	14th-18th
106	PNR	Oxidised; medium sandy; Ca	1	34	Flat roofing tile; poorly mixed clay	14th-18th

Appendix D: Other Finds

by Mike Wood

Finds Assessment for clay pipe, glass and stone

Mike Wood BA (hons) MLitt MIfA

Introduction

Twelve fragments of clay tobacco pipes, 5 fragments of glass and a single stone were recovered from archaeological works at Eakring (EAK16) in Nottinghamshire. All finds were recovered from ploughsoil (106).

Methodology

The material was counted and weighed in grams, then examined visually to identify any diagnostic pieces and the overall condition of the assemblage. Reference was made to published guidelines (Higgins & Davey 2004). Where no other identification has been possible, clay pipe stems have been dated by established stem bore guidelines (Oswald 1975). It should be noted that dates provided by stem bore size can have an appreciable margin for error and are intended only as a general guide. A summary of the material is recorded in Tables 1-3.

Assemblage

Context	Date range	Stems	Bowls	Weight (g)	Stem bore	Comments
106	1767-1782	2		6	4/64"	
106	1682-1757	8		10	5/64"	
106	1850-1900	1		1	4/64"	Green glazed – broken near mouth? Probably a Victorian stem
106	1600-1900		1	1	-	fragment

Table 1 Clay tobacco pipe

Context	Colour	Date	Count	Weight (g)	Comments
106	Clear	20th C	1	1	Drinks tumbler with stripe decoration
106	Black glass	18th-19th C	1	10	Fragment of wine bottle- fractured and abraded.
106	Clear	19th – 20th C	1	8	Rectangular chemist bottle
106	Brown	20th C	1	10	Beer bottle base – standard modern lager bottle
106	Brown	20th C	1	35	Beer bottle base – stamped with 275ml and 58mm – standard modern lager bottle

Table 2 Glass

Context	Date range	Count	Weight (g)	Measurements (mm)	Comments
106	undated	1	202	93 by 47 by 22	A smoothed, sub rounded quartz veined pebble with possible striations on the edges. Possible ad hoc hone?

Table 3 Stone

Discussion

The clay tobacco pipe represents snapped stems and a fragment of undecorated bowl, all of which could date from the late 17th to 19th century. Stem bore size suggests a late 17th to late 18th century date is most likely; however, the fragment of glazed stem would be more typical of the 19th century. None of the pieces are diagnostic enough to attempt to identify a pipemaker or production site.

With the exception of a single, fractured and abraded, fragment of 18th or 19th century wine bottle, the glass assemblage is of little value, beyond illustrating modern debris in ploughsoil.

A single natural quartz veined pebble was recorded, which may have been used as an ad-hoc hone. The pebble does not represent any locally derived geological source and appears to have had no modification beyond some possible striations on the edge, which could be from sharpening tools. This possible hone is conveniently hand-sized and could have been picked up and used ad-hoc before being discarded again on site.

Recommendations for further work

None of the material warrants any further work or illustration. All the artefacts are in a stable condition and require no further conservation.

Reference:

Higgins, D A & Davey, P J, 2004, 'Appendix 4: Draft guidelines for using the clay tobacco pipe record sheets' in S D White, The Dynamics of Regionalisation and Trade: Yorkshire Clay Tobacco Pipes c1600-1800, The Archaeology of the Clay Tobacco Pipe, XVIII, British Archaeological Reports (British Series 374), Oxford, 487-490 (567pp)

Oswald, A, 1975 Clay Pipes for the Archaeologist BAR 14, Oxford

PLATES

Plate 1: Pre-excavation site shot, camera facing south east

Plate 2: Topsoiling in progress, camera facing south east

Plate 3: Stripped ground surface, camera facing north

Plate 4: Representative section of site depositional sequence

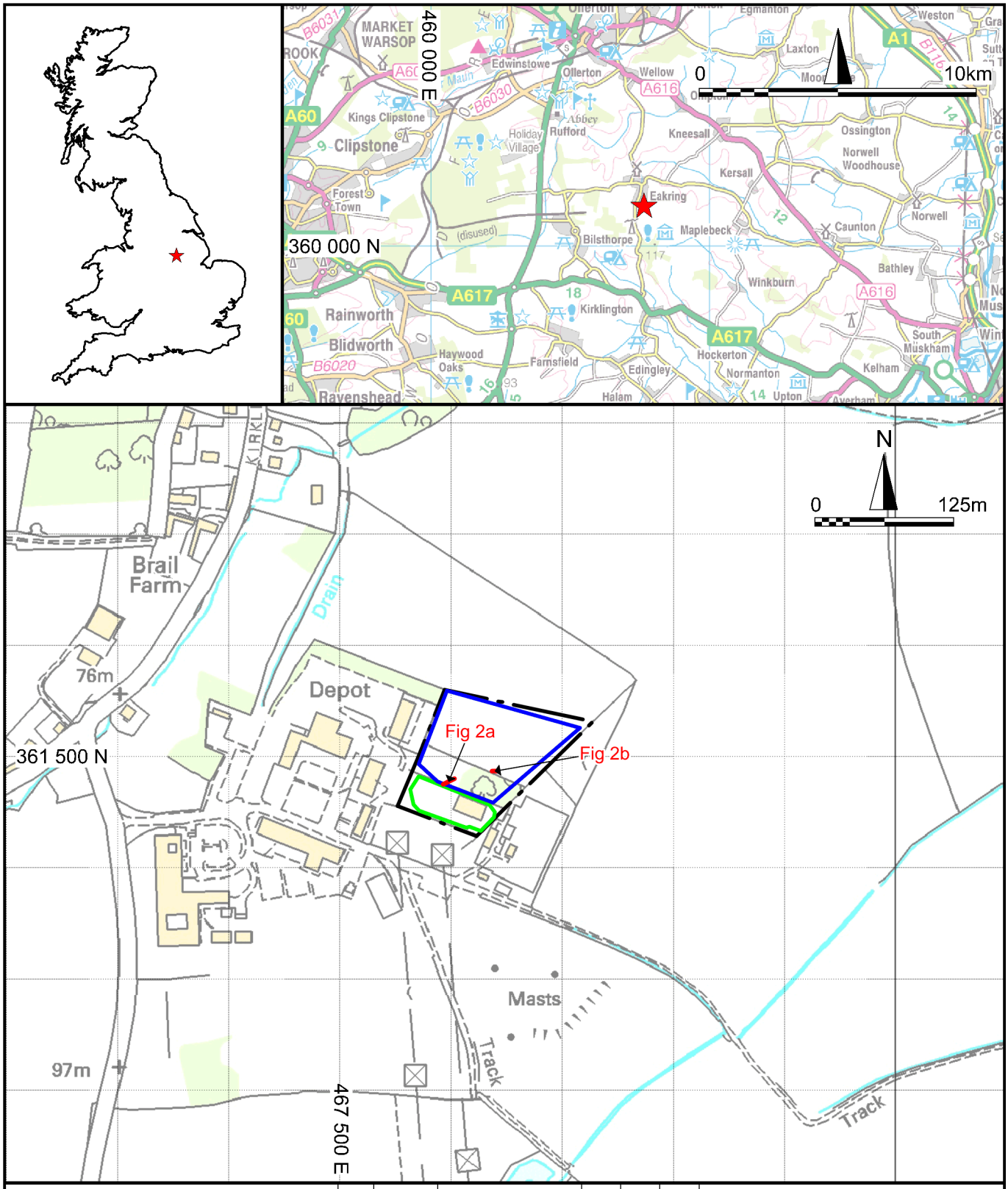
Plate 5: East-facing section of trial trench through historic hedgerow (DBA asset 60)

Plate 6: Detail of historic hedgerow (DBA asset 60)

Plate 7: Cables and pipes running along the line of hedge (Asset 60); facing east

Plate 8: Modern feature 110, partially excavated

Figures



Ver	Date	Description	Drn	Chk	App
1.0	06/02/13	First issue	SAF	RM	CT

network archaeology

Eakring Training AGI

Figure 1
General location of Eakring Training AGI

Scale: 1:200 000 and 1:5000

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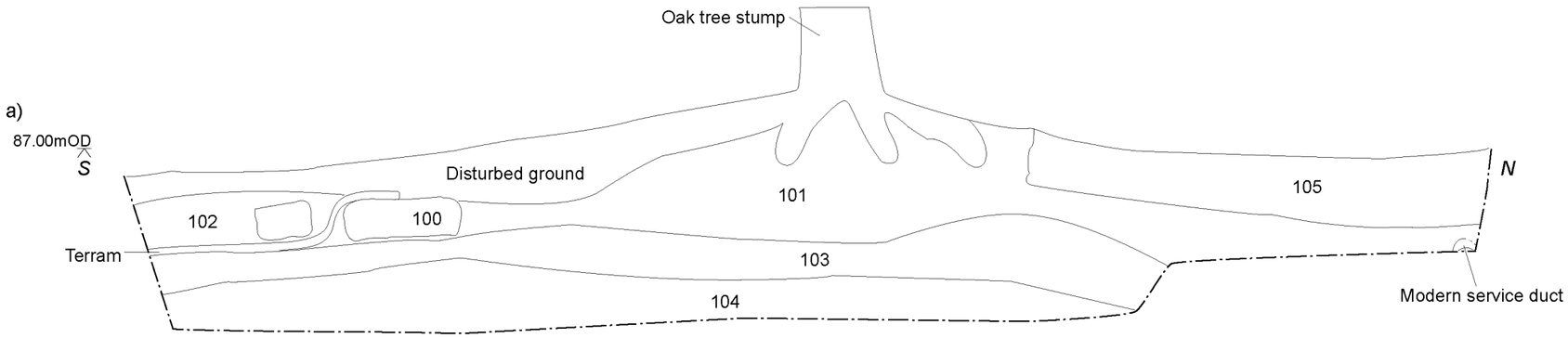

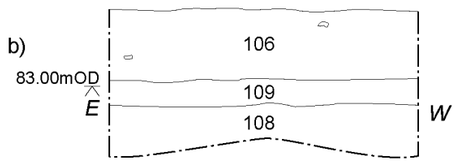

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Scale for sections

Limit of excavation

Cut line

Layer line

Field drain/modern features

1234 Cut number

1233 Layer/fill number

Ver	Date	Description	DM	Chk	App
1.00	04/02/13	Excavated area	SAF	PD	CT

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Eakring Training AGI

Figure 2:

a) East facing section through historic hedgerow (DBA Asset 60)
b) Representative section of site depositional sequence

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