



WINTERTON WIND FARM SITE, NORTH LINCOLNSHIRE

Archaeological Evaluation

for Axis on behalf of WRG Ltd

February 2011

WINTERTON WIND FARM SITE, NORTH LINCOLNSHIRE

Archaeological Evaluation

for Axis on behalf of WRG Ltd

February 2011

HA Job No.: WWFL10

HAS no.: 868

NGR: 491200, 419200

Council: North Lincolnshire

Project Manager

Richard Conolly

Author

David Doyle

Fieldwork

David Doyle & Liam Fogarty

Graphics

Anna Sztromwasser

Approved by

Richard Conolly, Project manager



North East
Edinburgh

North West
Glasgow

Midlands & West
Hereford

South & East
Leighton Buzzard

Ireland
Cork, Galway & Dublin

Headland Archaeology (UK) Ltd
© **Headland Archaeology (UK) Ltd 2011**

13 Jane Street, Edinburgh, EH6 5HE
T 0131 467 7705 • F 0131 467 7706 • E office@headlandarchaeology.com
www.headlandarchaeology.com

CONTENTS

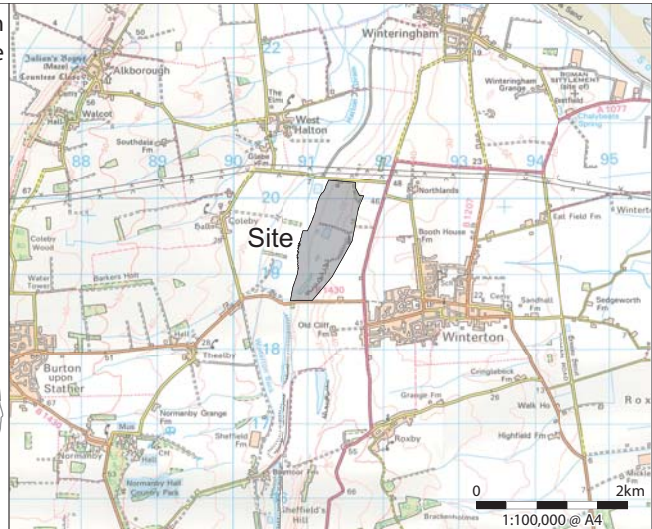
1.	INTRODUCTION	1
1.1	Previous work in relation to the project	1
1.2	Archaeological background	2
2.	OBJECTIVES & METHODOLOGY	2
2.1	Method	2
2.2	Recording	3
3.	RESULTS	3
	<i>Trench 1</i>	3
	<i>Trench 2</i>	3
	<i>Trench 4</i>	4
4.	DISCUSSION	4
5.	REFERENCES	4
5.1	Bibliography	4
5.2	Maps	4
6.	APPENDICES	5
6.1	Appendix 1 – Site registers	5
	<i>Trench register</i>	5
	<i>Context register</i>	5
	<i>Drawing register</i>	5
	<i>Photographic register</i>	5
6.2	Appendix 2 – Written Scheme of Investigation	7
	<i>Introduction</i>	7
	<i>Schedule</i>	7
	<i>Project team</i>	7
	<i>Insurance</i>	7
	<i>Health & safety</i>	7
	<i>Access & services</i>	7
	<i>Project design</i>	8
	<i>Copyright</i>	9
	<i>Publicity</i>	10
	<i>Bibliography</i>	10

LIST OF ILLUSTRATIONS

<i>Illus 1</i>		viii
	<i>Site location</i>	
<i>Illus 2</i>		3
	<i>Trench 1, section facing north-west, showing redeposited clays</i>	
<i>Illus 3</i>		3
	<i>Trench 2, facing north-east, showing undisturbed geological deposit. No archaeology</i>	
<i>Illus 4</i>		4
	<i>Trench 4, facing south, showing undisturbed geological deposit. No archaeology</i>	
<i>Illus 5</i>		4
	<i>Trench 4, facing west, showing extensive earlier disturbance</i>	







Winterton Wind Farm
Lincolnshire



viii



Key

-  trench
-  site boundary
-  track
-  turbine

Reproduced using 2006 OS 1:50,000 Landranger No. 112 and digital 1:1,000 data supplied by Waste Recycling Group. Ordnance Survey © Crown copyright 2011 All rights reserved. Licence No. AL 100013329

Scale 1:12,500 @ A4



Illus 1
Site location

WINTERTON WIND FARM SITE, NORTH LINCOLNSHIRE

Archaeological Evaluation

Three trenches, Trenches 1, 2 and 4, measuring approximately 50m x 2m were excavated within the boundary of Winterton Landfill site by Headland Archaeology (UK) Ltd as part of a programme of archaeological evaluation. The work was carried on behalf of Axis and their client WRG Ltd who propose to construct four wind turbines at this location. No archaeological features or finds were revealed.

1. INTRODUCTION

Headland Archaeology (UK) Ltd was commissioned by Axis on behalf of their client WRG Ltd to carry out a programme of trial-trench evaluation of the proposed locations of three wind turbines at Winterton Landfill. The areas to be evaluated are located within the boundary of Winterton Landfill, North Lincolnshire, to the northwest of the village of Winterton, at NGR 491200, 419200 (site centre).

The landfill site lies approximately 1.5 km north-west of the village of Winterton. It occupies the area of a former ironstone quarry. The site is currently in use as a landfill waste management site.

The site lies over a junction in the underlying geology between Coleby Mudstones, sands of the Grantham Formation, and the limestone which characterises the Lincoln Edge (British Geological Survey 1983). The mudstones overlie Frodingham Ironstone. The natural geological deposit in the excavation trenches was predominantly a yellow-brown or grey silt clay with evidence of frost cracking.

The proposed development comprises four turbines and their supporting infrastructure (crane bases, access tracks and underground cabling). This evaluation is intended to provide further information on the archaeological potential of the proposed locations of three turbines (T1, T2 & T4) and their associated crane bases. The fourth location (T3) lies in an area that has been shown to have been subject to quarrying, which will have removed any archaeological features that may have been present. New access tracks will predominantly utilise existing tracks or are within demonstrably disturbed areas. Consequently no trenching was carried out in relation to tracks.

The trenches are referred to by the number of their associated turbine. Hence Trench 1 was at the location of Turbine 1 and so forth.

North Lincolnshire County Council and the planning authority advised that it required an archaeological evaluation to take place in order to provide sufficient information on the likely impact of the development on any buried archaeological remains within the proposed development, in line with PPS5. The evaluation was designed to provide this information and a Project Design was agreed in advance with the Archaeological Advisor from North Lincolnshire Sites and Monuments Record (NLSMR), Alison William.

1.1 Previous work in relation to the project

Previous archaeological work had been undertaken in connection with the application. A Desk-Based Assessment completed in 2009 and geophysical survey in early 2010 provided background to the site and assisted in the placing of trenches across the site.

The desk-based assessment demonstrated that the proposed development lies in an area of high archaeological potential; numerous cropmarks relating to Late Iron Age/Romano-British activity have been recorded to the east of the landfill site and archaeological work within the landfill site itself has encountered Romano-British features. However, as a former quarry, substantial areas of the landfill site have been archaeologically sterilised. It was not possible to demonstrate conclusively the extents of this disturbance in some areas using documentary and cartographic evidence.



A geophysical survey was subsequently undertaken. The locations of T1 and T2 were excluded from the survey as there was evidence that both areas had been disturbed to some extent by the operation of the quarry and landfill, which would have prevented a geophysical survey from producing useful results. Consequently, the geophysical survey took in two potential turbine locations and their potential micro-siting area. Both turbine locations were located outside the landfill site's boundary, to its east, but the micro-siting area for the southernmost turbine (T4) extended into the landfill site and this was surveyed as far as was possible. In neither area did the geophysical survey identify anomalies that were definitely of archaeological origin, but some linear anomalies that were on the same alignment as nearby cropmarks were identified in the T4 survey, outside the landfill site. These may be archaeological. The geophysical survey undertaken in the vicinity of T4 within the landfill site (WYAS 2010) was inconclusive due to high levels of 'noise' associated with dumped material in the area.

As the iterative design process progressed, turbine locations were revised; the area covered by the northernmost block of geophysics will not be affected by the proposed development. Turbine 4 was moved west to an area that has been stripped of topsoil in recent years.

1.2 Archaeological background

2

The site lies within a landscape of archaeological importance. The surrounding areas contain evidence of predominately prehistoric and Romano-British date, with Anglo-Saxon and medieval remains uncovered nearby. The majority of this evidence comes from crop marks, which may represent field systems, boundaries, enclosures and trackways in combination with recovered pottery and flints. These areas are generally located to the east of the landfill site.

A few kilometres to the north-east of the landfill site lay the small Roman town of Old Winteringham which was established in 70 AD and continued in use until the end of the 4th century). There was also a very elaborate and substantial Roman villa located at Winterton about 1 km to the southwest. It is believed that this was in use between the early 2nd century and the 4th century (George 2004). This site was excavated between 1958 and 1967 and the research and findings published by Stead in 1976 (Stead 1976).

A geophysical survey was undertaken in 1994 at the south eastern end of the landfill site. This survey revealed the presence of a large rectangular enclosure and an anomaly interpreted as a possible kiln. An archaeological evaluation and watching brief was undertaken between August and September 2003 and July 2004 to target these features. The results of these investigations revealed the presence of a substantial ditched Romano-British enclosure that was likely occupied during the later 1st and 2nd centuries

and abandoned thereafter. Significantly, the intrusive work encountered substantial features that had not been identified from aerial photographs or geophysical survey (George 2004). The current evaluation was located to the north west of this area.

2. OBJECTIVES & METHODOLOGY

The objective of the trial trench evaluation was to ascertain whether there are any archaeological features that may be affected by the proposed development; in particular, to determine the presence or absence of archaeological remains within the area which may be related to trackways and enclosures in the adjacent fields, and to ascertain their quality, nature, extent, depth, date and character and the levels of disturbance that each location has been subject to. The results of the evaluation will enable informed decisions to be made concerning future mitigation of construction impacts on the archaeological resource, whether that is preservation in situ or preservation by record.

2.1 Method

A total of three trenches were excavated across the site, Trench 1, Trench 2 and Trench 4 (Illus 1).

All trenches were set-out using a Trimble R6 RTK GPS with sub centimetre accuracy. Service plans provided by the client were consulted and any underground services were identified using a CAT scan pipe/cable locator prior to any excavation. The locations of the trenches were adjusted by the archaeologist from their original agreed upon positions to avoid obstructions at their locations.

Trench 1 was situated on the east of the site. Its position was adjusted approximately 5m to the east to avoid the overhead cables and provide a safe working distance for the machine.

Trench 2 was moved approximately 5m to the north to avoid a leachate pipe running east-west at the south end of the trench area and 3m to the east to minimise disturbance to newly planted saplings, a mesh fence and to provide a safe working distance from an overhead power line.

Trench 4 was orientated perpendicular to cropmarks and geophysical anomalies previously recorded in the area to maximise the potential of intercepting such features. The location of the trench was adjusted due to the constraints of the area. These included waterlogged ground, spoils heaps, large boulders and unsafe areas for the machine. The trench was repositioned approximately 15m east and 15m north of the original proposed position.

Work was conducted with a 13 tonne 360° tracked excavator that was equipped with a 1.8m wide toothless



Illus 2

Trench 1, section facing north-west, showing redeposited clays



Illus 3

Trench 2, facing north-east, showing undisturbed geological deposit. No archaeology

ditching bucket. All trenches were excavated by machine under direct archaeological supervision. The topsoil and deposits of modern make-up were removed in controlled spits. Machine excavation was stopped when natural geology was reached. Any landfill waste was not excavated. On completion of machine excavation selected areas and sections of the trenches were cleaned with the use of appropriate hand tools to investigate any features and to facilitate the recording of the soil profile in each of the trenches, even though no archaeological deposits were identified.

2.2 Recording

All recording was carried out to IfA Standards and Guidance for conducting archaeological evaluations. All contexts were given unique numbers. All recording was undertaken on pro forma record cards. Non archaeological stratified deposits were encountered and a 'Harris' matrix was compiled. The trenches were photographed using 35mm colour transparencies and black-and-white prints with graduated metric scale clearly visible. 7.2mp digital photographs were taken for illustrative purposes.

An overall site plan was recorded digitally using a Trimble R6 RTK GPS with sub centimetre accuracy adhering to standard Headland Archaeology methodology. This allows the site plan to be accurately linked to the National Grid. One section from Trench 2 was hand-drawn on permatrace at a 1:20 scale as this was the only trench that contained a soil profile of any notable depth.

3. RESULTS

Full detailed descriptions of each trench are presented in Appendix 1. Results are summarised below.

Trench 1

Trench 1 was situated on the east of the site. Its position was adjusted approximately 5m to the east to avoid the overhead cables. The trench sloped approximately 0.2m from the northeast to the southwest. A sondage was excavated at the northeast extent of the trench. This was 2m in length and 2.5m in depth. The topsoil [2000] was 0.3m in depth and the redeposited clay [2003], deposited from quarrying activities, was immediately below this and extended to at least 2.5m in depth - the reach of the mechanical excavator arm (Illus 2). The remainder of the trench was excavated to the top of the clay [2003]. This was present for the entire length of the 50m trench. Undisturbed geological deposits were not reached. No archaeological features were uncovered.

Trench 2

Trench 2 was situated in an area on the northwest of the site. The trench was excavated to approximately 0.6m until undisturbed geological deposits were reached. The subsoil [2001] was disturbed in most of the trench by modern activities. There were remains of metal pins and pegs possibly associated with the placement of pipes and also small pockets of disturbance in an area where trees had been previously been planted. No archaeology was uncovered (Illus 3).



Trench 4

Trench 4 was situated at the east of the landfill site. The ground sloped by approximately 2m north to south over 50m. The area had been stripped previously and used for storing compost and it was evident that the geological deposits (yellow-brown and grey silt clays) had been truncated to some degree. In the course of this previous activity the proposed turbine location had been stripped by a machine equipped with a toothed bucket and large



Illus 4

Trench 4, facing south, showing undisturbed geological deposit. No archaeology



Illus 5

Trench 4, facing west, showing extensive earlier disturbance

spoil heaps and dumps of boulders had been created. The latter restricted the area available for trenching. As a result, the trench area of 2m x 44.45m was cleaned with a toothless bucket. No archaeological features were uncovered (Illus 4 & 5).

4. DISCUSSION

At the position of Turbine 1 (Trench 1) quarrying activity extends to at least 2.5m below the current ground surface. No archaeological remains were encountered and it is likely that there are no archaeological remains at this turbine location due to the extent of disturbance. Disturbance by modern activity to the location of Turbine 4 (Trench 4) has been total, and there is no possibility that archaeological remains survive in this area. At the location of Turbine 2 (Trench 2), modern disturbance did not reach the level of undisturbed geological deposits where negative archaeological features could be expected to be preserved. However, no archaeological features were encountered in this trench and it is unlikely that any remains of significance are present at this turbine location. Based upon the results of the evaluation, it is concluded that there is no potential for archaeology to survive at the locations of Turbines 1 and 4. It is concluded that there is negligible potential for archaeology to be present at the location of Turbine 2, this area has been previously disturbed and any features that were present will have been heavily truncated.

5. REFERENCES

5.1 Bibliography

- George, R, 2004, *An Archaeological Excavation at Winterton Landfill Site, North Lincolnshire*, Humber Archaeology Report No. 161.
- IfA, 1994 (revised October 2008), *Standards and Guidance for archaeological field evaluation*.
- NLSMR, *Template for archaeological evaluation by trial trench*, Issued by NLSMR 08/09.
- Stead, IM, 1976, *Excavations at Winterton Roman Villa and Other Roman Sites in North Lincolnshire, 1958-1967*, DOE Archeological Report 9, HMSO, London.
- WYAS, 2010, *Winterton Wind farm, North Lincolnshire*, unpublished client report.

5.2 Maps

- 1983, British Geological Survey, *Kingston Upon Hull, England and Wales*, Sheet 80, Drift Geology 1:50,000.

6. APPENDICES

6.1 Appendix 1 – Site registers

Trench register

Trench no.	Dimensions	Description	Levels mOD (max & min)	Contexts
1	2 x 50m	Excavated at east of the site through grazing land. No archaeological features or finds. Soil profile of modern topsoil [2000] over a disturbed a redeposited clay [2003].	Ground Surface 11.991m Redeposited clay limit 9.512m	2000 2003
2	2 x 50m	Excavated at north-west corner of the site through scrub land. No archaeological features or finds. Soil profile of modern topsoil [2000] over a disturbed subsoil [2001] above sterile geological deposits [2002].	Ground surface: 12.704m Sterile Geological deposit: 12.08m	2000 2001 2002
4	2 x 44.45m	This trench was already stripped to sterile geological deposits and was cleaned back in order to identify any archaeological feature. No features were observed. The trench slopes by approx 2m north to south.	Ground surface: 42.667m Sterile Geological deposit: 40.443m	2002

Context register

Context no.	Trench no.	Description	Dimensions (m)
2000	1, 2 & 4	Modern topsoil.	2 x 0.6 x 50 +
2001	2	Mid brownish orange subsoil, disturbed by modern intrusions related to sapling planting and metal pegs, presumably used to hold a previous pipes or fittings in place.	2 x 0.4 x 50 +
2002	2 & 4	A yellow brown or grey silty clay geological deposit, presumably eroded fractions of the underlying strata, with some sterile brown clay bands (frost cracks).	2 x 50 +
2003	1	Re-deposited blue glacial clay.	2 x 2.5 x 50+

5

Drawing register

Drawing no.	Scale	Plan or section	Description
1	1:20	section	Section of Trench 2
2	1:20	section	South-east facing section of Trench 1

Photographic register

Photo no.	B&W print	Colour slide	Digital	Direction facing	Description
1	-	-	2001	S	Trench 4 sterile geological deposit
2	445/36	440/37	2002	S	Trench 4 sterile geological deposit
3	445/35	440/36	2003	N	Trench 4 sterile geological deposit
4	-	-	2006	S	Trench 4 sterile geological deposit
5	-	-	2007	N	Area for Trench 1 general shot



<i>Photo no.</i>	<i>B&W print</i>	<i>Colour slide</i>	<i>Digital</i>	<i>Direction facing</i>	<i>Description</i>
6	445/32	440/33	2008	NE	Trench 2 plan
7	445/31	440/32	2009	SE	Trench 2 section
8	445/30	440/31	2010	SW	Trench 2 plan
9	-	-	2019	W	Trench 4 spoil
10	-	-	2020	W	Trench 4 general stripped area
11	-	-	2021	W	Trench 4 general stripped area
12	-	-	2022	NE	Trench 4 general shot
13	-	-	2023	S	Trench 4 spoil
14	-	-	2024	S	Trench 4 plan
15	-	-	2025	SW	Trench 4 general shot
16	-	-	2026	SE	Trench 4 general shot
17	-	-	2027	N	Trench 4 plan
18	-	-	2029	N	Trench 4 general area
19	-	-	2030	S	Trench 4 general area
20	-	-	2031	N	Trench 4 general area
21	-	-	2032	N	Trench 4 general area
22	+	-	-	NE	Trench 1 general
23	+	-	+	NW	Trench 1 section
24	+	-	+	NW	Trench 1 section
6 25	+	-	+	SW	Trench 1 plan
26	+	-	+	SW	Trench 1 plan
27	+	-	+	SW	Trench 1 general
28	+	-	+	SW	Trench 1 general
29	+	-	+	NE	Trench 1 general

6.2 Appendix 2 – Written Scheme of Investigation

Introduction

This document is submitted by Headland Archaeology (UK) Ltd as the method statement for a programme of trial-trench evaluation of the proposed locations of three wind turbines at Winterton Landfill. It is based on North Lincolnshire Sites and Monuments Record's (NLSMR) usual requirements for such work and discussions with their representative (Alison Williams).

The areas to be evaluated are located within the boundary of Winterton Landfill, North Lincolnshire, to the northwest of the village of Winterton, at NGR 491200, 419200 (site centre).

The proposed development comprises four turbines and their supporting infrastructure (crane bases, access tracks and underground cabling). The evaluation is intended to provide further information on the archaeological potential of the proposed locations of three turbines (T1, T2 & T4) and their associated crane bases. The fourth location (T3) lies in an area that has demonstrably been subject to quarrying that will have removed any archaeological features that may have been present. Access tracks predominantly utilise existing tracks or are in demonstrably disturbed areas. Consequently no trenching is proposed in relation to tracks.

Geophysical survey has been undertaken in the vicinity of T4 (WYAS 2010), but the results of this were inconclusive, owing to high levels of 'noise' associated with dumped material in the area. T4 has been moved since the geophysical survey to an area that has been stripped of topsoil in recent years. The locations of T1 and T2 were excluded from survey owing to there being evidence that both areas had been disturbed to some extent by the operation of the quarry and landfill, which would prevent geophysical survey producing useful results.

Schedule

Subject to receipt of the necessary approval and to any notice period which the council's archaeological advisors may require, the programme of trial trenching will begin in September and the fieldwork will be completed within five days. A draft report will be delivered to the client and copied to the NLSMR within one month of the completion of fieldwork.

Project team

The project will be managed for Headland Archaeology by Richard Conolly who will liaise with NLSMR directly;

the field team will consist of a Project officer, and one other member of staff from Headland Archaeology and an additional sub-contracted excavator driver. *Curricula vitae* of key personnel are attached as Appendix 1. The project team will familiarise themselves with the background to the site and will be aware of the project's aims and methodologies.

Specialist artefact analyses will be managed by Julie Franklin who is Headland's Finds Manager. Julie will undertake finds assessment within her areas of competence (medieval and post-medieval metalwork, glassware, clay pipes, ceramic building material and other small finds) and assisted by Julie Lochrie (lithics). Further consultation will be sub-contracted to recognised period specialists where appropriate. Specialists (Ian Rowlandson for Romano-British and Iron Age material) familiar with the pottery of the region will undertake assessment of ceramics and use local pottery reference collections.

Environmental analysis will be managed by Dr Scott Timpany. Headland has in-house specialists who can undertake analysis of pollen, plant macrofossils, insect remains and thin sections. Faunal remains will be assessed by Dr Auli Tourenen (Headland Archaeology's faunal remains specialist).

Headland Archaeology (UK) Ltd is a Registered Archaeological Organisation and abides by the Codes of Conduct and Approved Practice and Standards of the Institute of Field Archaeologists. The company has all the necessary technical and personnel resources for the satisfactory completion of the evaluation.

Insurance

Headland Archaeology (UK) Ltd is fully indemnified and all necessary insurances can be presented on request.

Health & safety

All of Headland's work is undertaken in accordance with current H&S legislation. A risk assessment and method statement will be prepared prior to the commencement of fieldwork. All staff will wear appropriate PPE and this will include high-visibility clothing, hard hats and safety footwear. Welfare facilities will be located at a suitable location after consultation with the landowner. Removal of all livestock from fields that have open trenches will be required.

Access & services

This Written Scheme of Investigation is submitted on the understanding that there will be unhindered access (including machine-access) to all areas of the site. A plan



of any services within the proposed development area will also be provided by the client or their agents.

Project design

Objectives & strategy

The objective of the trial trench evaluation is to ascertain whether there are any archaeological constraints that may affect the proposed development; in particular, to determine the presence or absence of archaeological remains within the area and to ascertain their quality, nature, extent, depth, date and character and the levels of disturbance that each location has been subject to. A trench location plan is attached and comprises 3 x 50m trenches each 2 m wide. The orientation and location of the trenches at T1 and T2 have been determined by the by the constraints place by existing services, which include an overhead powerline, ditches and roads. The trench at turbine 4 has been orientated in order to run perpendicular to cropmarks and geophysical anomalies in the vicinity and hence to increase the chances of intercepting such linear features.

The results of the evaluation will enable informed decisions to be made concerning future mitigation of construction impacts on the archaeological resource, whether that be preservation *in situ* or preservation by record.

- 8 This project design has been produced in line with the template brief provided by NLSMR (*Template for archaeological evaluation by trial trench*).

Method

Fieldwork

All trenches will be set-out using either differential GPS or Total Station EDM. Service plans will be consulted in advance of excavation and trenches will be scanned with a CAT pipe/cable locator before any digging commences.

Works will be conducted with a 360° tracked excavator, suitably equipped with a wide toothless ditching bucket. All trenches will be excavated by machine under direct archaeological supervision to remove topsoil and deposits of modern make-up and will be excavated in controlled spits. Machine excavation will terminate at the top of the natural geology or the first significant archaeological horizon, whichever is encountered first. Landfill material will not be excavated. Any further excavation required to satisfy the objectives of the evaluation will continue by hand. On completion of machine excavation, all faces of the trench that require examination or recording will be cleaned using appropriate hand tools. The stratigraphic sequence will be recorded in full in each of the trenches, even where no archaeological deposits have been identified.

All identified features will be investigated and recorded. Features not suited to excavation in narrow trenches will be investigated in plan only or localised extension of trenches will be undertaken to allow their investigation. Sondages will be excavated through alluvial sequences to identify any buried archaeological/palaeo deposits. All other features exposed will be sample excavated. This will typically involve excavation of 50% of discrete features, 25% of linear features with a non-uniform fill and 10% of linear features where a uniform fill is present. Where features form a definite arrangement a sample of features within the arrangement will be sample excavated. No features will be wholly excavated; similarly, structures and features worthy of preservation will not be unduly excavated.

Due to Health and Safety considerations, excavations will be limited to a maximum depth of 1.2m below existing ground level. Should archaeological deposits extend to a depth in excess of 1.2m below the existing ground surface; shoring or battering the trench edges will be considered.

Recording

All recording will follow *IfA Standards and Guidance* for conducting archaeological evaluations. All contexts, small finds and environmental samples will be given unique numbers. All recording will be undertaken on *pro forma* record cards. In the event that stratified deposits are encountered, a 'Harris' matrix will be compiled. 35mm colour transparencies and black-and-white prints will be taken; a graduated metric scale will be clearly visible.

An overall site plan will be recorded digitally using a Total Station linked to a field PC running TheoLT/AutoCAD software using standard Headland Archaeology methodology (available on request). The site plan will be accurately linked to the National Grid. If additional detailed recording of features and sections is required then plans and sections will be hand-drawn on permatrace at an appropriate scale (normally 1:20 or 1:50 for plans and 1:10 for sections).

Samples and artefacts

Headland has contacted the Collections Officer of North Lincolnshire Museum (Rose Nicholson) to agree a finds recovery, recording and conservation strategy. Finds will be hand collected from topsoil and archaeological contexts; samples will be taken to allow for the recovery of small objects. Finds will be routinely recorded by context and recorded 3-dimensionally where appropriate (*i.e.* where their position within a context can provide further significant information or the find is of particular significance). Any artefacts retrieved during the evaluation will be cleaned using appropriate techniques and packaged and stored in accordance with

First Aid for Finds (Watkinson & Neal 1998). All artefacts recovered during the evaluation will be cleaned, marked and catalogued. Headland's in-house finds specialists will be available to provide advice remotely or on site if necessary. Conservation will be undertaken by Scottish Conservation Studio (for metalwork) and AOC Ltd (for organics).

The terms of the Treasure Act 1996 will be followed with regards to any finds which might fall within its scope. Any finds will be removed to a safe place and reported to the local coroner as required by the procedures laid down in the 'Code of Practice'. Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft. The find will also be reported to the Portable Antiquities Scheme Finds Liaison Officer at North Lincolnshire Museum (from 14/9/09 martin.foreman@northlincs.gov.uk, tel.: 01742 843533).

Deposits identified as archaeologically significant (e.g. fills from negative features such as pits and postholes) will be sampled for environmental material and other finds (e.g. bone, pottery etc.). Bulk samples will be taken from deposits for wet sieving and floatation in order to recover any environmental material. A bulk sample ranges from 40 to 60 litres; however, where large deposits are encountered more than one bulk sample may be taken. Similarly, small deposits such as the fill of postholes may contain less than 10 litres of sediment and will be fully sampled. A representative proportion of samples taken on site will be processed and assessed with the results and recommendations for any further work included in the evaluation report.

Where waterlogged deposits are encountered (such as peat) appropriate sampling techniques will be employed so as to maximise the environmental information gained from such deposits. This may include the taking of monolith or core samples for pollen and non-pollen palynomorphs (e.g. testates and fungal spores) and large specialist samples for plant macrofossil, wood (including waterlogged wood) and insect analyses.

Headland's Environmental Specialist, Dr Scott Timpany, will liaise with English Heritage's Regional Advisor on Archaeological Sciences (EHRSA) to agree the strategy for the recovery and sampling of environmental remains when appropriate. A contingency for undertakingscientific dating where appropriate and as agreed in discussions with NLSMR has been provided. A geoarchaeologist will be a member of the field team and will advise on the interpretation of sediments on-site.

Monitoring

Access to the site will be afforded to representatives of NLSMR & EHRSA for monitoring purposes.

Reporting and archive

All aspects of reporting and archive will be undertaken in accordance with guidelines published by the IfA on behalf of the Archaeological Archives Forum (July 2007). On completion of the evaluation Headland will produce a site archive in line with the MAP2 specification, including all specialist assessments of excavated material. An online OASIS report will be completed. If an interim report is required by NLSMR it will be provided within two weeks of the completion of fieldwork.

Final report contents and format will be in line with NLSMR requirements. Copies of the report will be sent to the client for onward transmission to the local planning authority; copies (paper & electronic) will also be submitted to the SMR Officer, to be deposited in the North Lincolnshire and Monuments Record. An electronic copy will be sent to EHRSA. All reports will be submitted within one month of the completion of fieldwork.

The finds and archive will be deposited with the North Lincolnshire Museum (NLM Archaeology Site Code: XXXXXX), as per standard conditions, and arrangements have been put in place provision has been made for storage costs. Deposition will be undertaken within one year of the completion of fieldwork.

If publication of the results of the evaluation is required then a specification will be agreed with NLSMR and costs will be provided for agreement by the client.

Human remains

All finds of human remains will be reported to the client, the coroner and the SMR Officer. None will be excavated during the course of the present program of work. If human remains are to be excavated during subsequent work, a license will be gained from the Home Office in accordance with Section 25 of the 1857 Burial Act. All excavation and treatment of cremated and inhumed human remains will be undertaken in cognisance of IfA Technical Paper Number 13 (Brickley & McKinley 2004) and relevant English Heritage guidelines (2005).

Reinstatement

Upon completion of fieldwork and after any monitoring visit by the council's archaeological advisors, all trenches will be backfilled by machine and tamped down as tidily as practicable.

Copyright

Copyright will be retained by Headland Archaeology (UK) Ltd. Headland will licence the client, NLSMR and other bodies as necessary for use in matters relating to the project and for use of the project archive by the



relevant museum. This licence will also extend to non-commercial use by the NLSMR.

Publicity

Beattie Communications Ltd (01324 602 550) deal with PR and media relations on behalf of Headland Archaeology (UK) Ltd. No press releases or publicity material will be issued without prior approval of the client. NLSMR will be offered the opportunity to be acknowledged in any press release etc.

Bibliography

Archaeological Archives Forum, 2007, *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation*, IfA.

Brickley M & McKinley J, 2004, *Guidelines to the standards for recording human remains*, IfA, paper no. 7.

English Heritage, 2005, *Guidance for best practice for treatment of human remains from Christian burial grounds in England*, Church Archaeology Human Remains Working Group Report 2005.

IfA, 1994 (revised October 2008), *Standards and Guidance for archaeological field evaluation*.

NLSMR, *Template for archaeological evaluation by trial trench*. Issued by NLSMR 08/09.

Watkinson D & Neal V, 1998 (3rd edition), *First aid for finds*.

WYAS, 2010, *Winterton Windfarm, North Lincolnshire*, unpublished client report.



Headland Archaeology (UK) Ltd
© Headland Archaeology (UK) Ltd 2011

13 Jane Street, Edinburgh, EH6 5HE
T 0131 467 7705 • **F** 0131 467 7706 • **E** office@headlandarchaeology.com
www.headlandarchaeology.com

North East
Edinburgh

North West
Glasgow

Midlands & West
Hereford

South & East
Leighton Buzzard

Ireland
Cork, Galway & Dublin