PROPOSED WIND TURBINE AT HOLLYWELL FARM, STANWICK, NORTHAMPTONSHIRE

ARCHAEOLOGICAL EVALUATION REPORT

NGR: SP 9823 7048
Planning Ref.: 12/01282/FUL
Archive acc. no.: TBC

Archive acc. no.: TBC
Site code: HFSE 13
PCAS job no.: 1014

Prepared for

J.H. Walter

by

Dr D. Underhill BA(Hons) MA PhD

June 2013



Pre-Construct Archaeological Services Ltd 47, Manor Road Saxilby Lincoln LN1 2HX

Tel. 01522 703800 e-mail info@pre-construct.co.uk

©Pre-Construct Archaeological Services Ltd

Contents

	Summary	1		
1.0	Introduction	2		
2.0	Location and description	2		
3.0	Geology and topography			
4.0	Planning background			
5.0	Archaeological and historical background	3		
6.0	Methodology	4		
7.0	Results			
	7.1 Trench 1	5		
	7.2 Trench 2	5		
	7.3 Trench 3	5		
	7.4 Trench 4	5		
8.0	Discussion and conclusion	5		
9.0	Effectiveness of methodology			
10.0	Project archive	6		
11.0	Acknowledgements	6		
12.0	References			

Illustrations

- Fig. 1: Location map at 1:25,000 scale
- Fig. 2: Ariel view of site location
- Fig. 3: Trench locations and footprint plan at 1:500 scale
- Fig. 4: Trench 1 plan at 1:50 scale
- Fig. 5: Trench 2 plan at 1:75 scale
- Fig. 6: West facing representative section of trench 1 at 1:10 scale
- Fig. 7: North facing representative section of trench 2 at 1:10 scale
- Fig.8: Trench 3 plan at 1:50 scale
- Fig. 9: Trench 4 plan at 1:75 scale
- Fig. 10: West facing representative section of trench 3 at 1:10 scale
- Fig. 11: North facing representative section of trench 4 at 1:10 scale

Appendices

Appendix 1: Colour Plates

Appendix 2: Context Summary

Appendix 3: OASIS summary

Summary

An archaeological evaluation consisting of two trenches was undertaken on land at Hollywell Farm, near Stanwick, Peterbrough, to inform the planning process associated with the construction of a wind turbine and associated buildings.

The site lies south of the ancient village of Stanwick, surrounded by registered find spots, on hills that drain the higher lands to the east down to the River Nene.

The evaluation result was entirely negative.

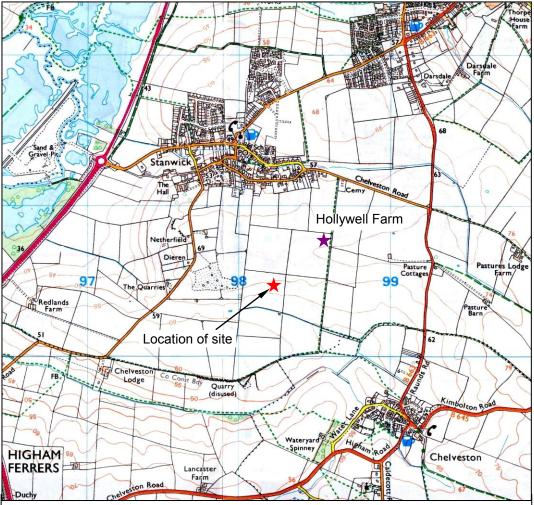


Fig. 1: Site location plan at scale 1:25,000. The proposed wind turbine site is marked in red and the location of Hollywell Farm in purple. OS mapping © Crown copyright. All rights reserved. PCAS Licence No. 100049278.

1.0 Introduction

Pre-Construct Archaeological Services Ltd (PCAS) was requested by J. H. Walter to undertake a scheme of archaeological evaluation trenching on the site of a proposed new wind turbine on land at Hollywell Farm, off Chelveston Road near Stanwick in East Northamptonshire. The development is to consist of a 500kW wind turbine with maximum hub height of 50m, blade diameter of 54m and maximum height to the blade tip of 77m, with a transformer station at the base of the turbine and ancillary works. Initial evaluation groundworks were undertaken in April, 2013, although a mistake in the mapping meant that trenches had been placed in the wrong location, therefore further trenching took place in May, 2013.

2.0 Location and description (fig's. 1 and 2)

Hollywell Farm is situated to the south of the eastern end of the village of Stanwick in the district of East Northamptonshire. The village lies on the south-east side of the valley of the River Nene, roughly 4.5km to the north of the town of Rushden and 8km east-north-east of Wellingborough. The site of the proposed wind turbine is within a field approximately 400m to the south-west of the farm.

The central National Grid Reference of the site is SP 9823 7048.

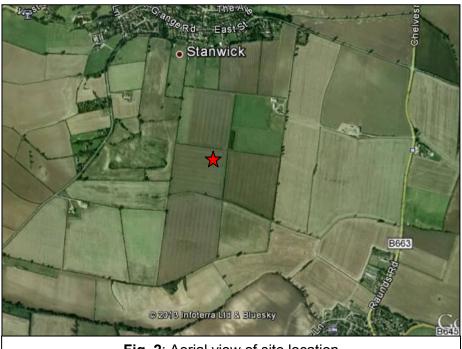


Fig. 2: Aerial view of site location

3.0 Geology and topography

The site is located on a southward-facing slope in undulating topography created by Bothonian (Middle Jurassic) mudstone formations interbedded with sandstone and limestone deposits. The slopes are cut by several small watercourses draining the eastern uplands into the Nene. The site itself lies near the outcropping of both the Limestone Cornbrash Formation and the underlying Blisworth Clay formation that form a hill on top of the Blisworth Limestone Formation found North, South and West of the site. To the east the overlying Oxford Clay stretches away into Bedfordshire (BGS n.d.). No drift geology is recorded in the area.

The village of Stanwick itself is positioned above the valley of the River Nene, at the top of its north-west facing slope. The course of the river is marked by chains of large flooded pits where sand and gravel were formerly extracted.

The site lies at an approximate height of 60-65m OD.

4.0 Planning background

A planning application for the installation of a 500kW wind turbine with maximum hub height of 50m, blade diameter of 54m and maximum height to the blade tip of 77m, with transformer station at the base of the turbine and all ancillary works, is under consideration by East Northamptonshire District Council (planning application no. 12/01282/FUL).

The Assistant Archaeological Adviser to Northamptonshire County Council noted that the area around the proposed site is characterised by scattered archaeological sites, predominantly prehistoric in date and identified either by the presence of worked flint or by cropmark evidence observed on aerial photographs, and that there is, therefore, the potential for remains of archaeological interest to be present on the application site. As the National Planning Policy Framework stresses the importance of pre-application discussions in order to assess the significance of potential heritage assets (NPPF 2012), she recommended that an archaeological field evaluation be carried out before the determination of the planning application. This report represents the culmination of those works.

5.0 Archaeological and historical background

The area around Hollywell Farm is characterised by scattered archaeological sites, predominantly prehistoric in date and identified either by worked flint artefacts found during fieldwalking or by cropmarks identified from aerial photographs. Flints, including several Bronze Age arrowheads and widespread scatters of Neolithic and Neolithic to Bronze Age material, have been retrieved to the north-west, south-east and south-west of the site (Northamptonshire HER refs. 1730/0/0-MNN32888, 6077/0/1-MNN28567, 6729/0/0-MNN30257), while cropmarks interpreted as enclosures, pit alignments and possible barrows have also been recorded in the direct environs (HER refs. 1729/0/0-MNN126864-5, 1729/0/1-MNN32314, 1729/0/2-MNN20895, 1730-MNN771, 1730/0/0-MNN126859-63, 1730/1-MNN9100, 1730/1/1-MNN20896, 1731/0/0-MNN126843 and 20898, 1759-MNN4295, 1759/1-MNN11879, 1759/1/1-MNN20973).

Stanwick itself is likely to be of Roman origin, indicated by the presence of a 4th century Roman villa to the West of the village (Neal 1989), and a concentration of early to middle Saxon pottery (HER refs. 6730-MNN2681, 6730/0/0-MNN30238) tells of continued settlement. The Domesday Book's two listings for Stanewiga (or Stanwige) record the presence of both a Mill and a Manor house, a population of 17 with five and a half carucates (c.660 acres) and 8 acres of Meadow (Williams and Martin 1992). The church of St. Laurence was built c.1225 on an earlier structure of which virtually nothing now remains (Eagle n.d.), although its absence in the Doomsday listings suggests it was not significantly older. However, the Anglo-Saxon Chronicle (Ingram 1823) appears to contradict Doomsday by suggesting that Stanwick was only bought under the control of Peterbrough Abbey around 1140, and it is likely that any new church building would date to this period, and it is unsurprising that it would have been rebuilt with any original building likely to be small due to the drain on the Abbeys finances caused by its need to rebuild the main Abbey following the fire of 1116.

The open-field system of the later medieval village has also been identified from aerial photography (HER ref. 1736-MNN777) and extensive post-medieval quarrying has taken

place in the neighbourhood, with ironstone quarries being worked into the 19th century (HER refs. 8439-MNN7707, 8439/1-MNN17280, 8439/1/1-MNN36121).

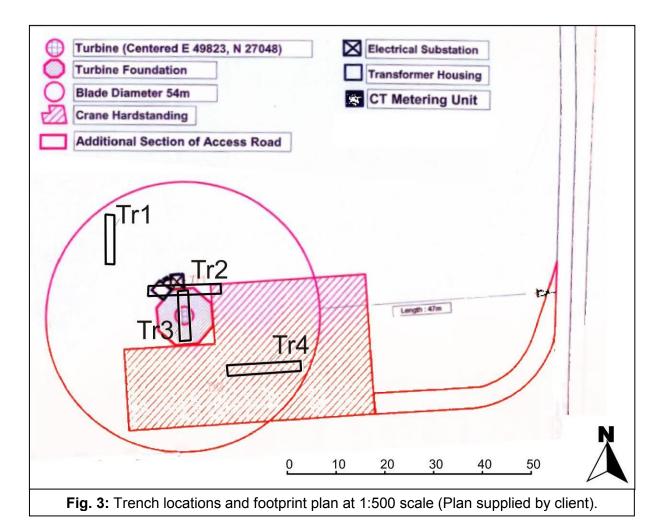
To the west of the site, several decapitated skeletons of unknown date were found in pits hollowed out of the limestone bedrock during quarrying in 1937; the severed heads had been included in the grave pits at the knees of the decapitated bodies (HER refs. 1732-MNN773, 1732/1-MNN15043, 1732/1/1-MNN32315).

6.0 Methodology

Initially, two evaluation trenches were excavated, one $10m \times 2m$ (trench 1) and one measuring $15m \times 2m$ (trench 2). Two further trenches, 3 and 4, measured $12m \times 2m$ and $18m \times 2m$ respectively. Trench positions relative to the proposed footprint are indicated on figure 3.

The purpose of the evaluation was to gather sufficient information to identify the date, nature and state of preservation of any archaeological deposits which might form a constraint on development. All work was carried out by suitably qualified and experienced staff from Pre-Construct Archaeological Service Ltd., namely Simon Savage, who attended the site on the 3rd April 2013.

An online record of the project data has been initiated with the Archaeological Data Service (OASIS database) (Appendix 3).



7.0 Results (figs. 4-7)

7.1 Trench 1 (see fig's. 4 and 6)

After stripping the dark brown silty-clay topsoil (100) a mid-orange brown silty-clay subsoil (101) was discovered. Both these units contain occasional fragments of the limestone bedrock no doubt brought up through weathering and ploughing. Below this was the off-white-yellow Jurassic Limestone Cornbrash Formation that runs from Weymouth to Scarborough. Within this member are patches of grey-blue clay and orange-blue veined clay (fig. 4), sporadically found occurring with this unit in other areas (BGS 2013a). A patch of the underlying Blisworth Limestone Formation is also present in the southern end of the trench.

7.2 Trench 2 (see fig's. 5 and 7)

The topsoil in trench 2 (200) is slightly different to that seen in trench 1, here it is a mid redbrown sandy-clay that is also distinctly drier than its counterpart in trench 1 (100). This difference is probably a reflection of the change in the natural beneath this section of the site. Here no subsoil was encountered with the topsoil resting directly on a mid-reddish-brown sandy-clay, part of the highly variegated Blisworth Clay Formation that underlies the Limestone Cornbrash Formation. Also present in this trench, as is often found with the Bilsworth Clay, are patches of argillaceous limestone and further patches of the underlying Blisworth Limestone Formation (BGS 2013b).

7.3 Trench 3 (see fig's. 8 and 10)

Considering trench 3 cut the edge of trench 2 (see Fig. 3), it is perhaps unsurprising that the same topsoil was present across both. Directly beneath this red-brown sandy-clay (300) was the same mid-reddish-brown sandy-clay of the Bilsworth Clay Formation (301) also seen in trench 2, with again no subsoil present. Within this fundamentally variegated deposit were seen patches of yellow-grey clay and yellow-brown silt-clay.

7.4 Trench 4 (see fig's. 9 and 11)

Bearing further witness to the change in bedrock in this field, trench 4 was remarkably similar to trenches 2 and 3. Showing the same red-brown sandy-clay topsoil (400), a lack of subsoil, and the Bilsworth Clay Formation at its base (401). However, as with trench 2, patches of argillaceous limestone and the Bilsworth Limestone Formation (BGS 2013b) were also observed.

8.0 Discussion and conclusion

No features or artefacts of archaeological significance were discovered during this evaluation. However, the results are of minor geological interest - narrowing the exact area at which the Limestone Cornbrash Formation has been eroded away to reveal underlying Bilsworth Clay Formation as the River Nene cut its course.

9.0 Effectiveness of methodology

Intrusive evaluation was an appropriate method for gathering further information about the site as a follow-up to non-intrusive assessment. Due to the position of the site, just outside a village with at least Roman origins, with an active history up to the present, and with prehistoric remains discovered in the direct environs, their was a high chance of archaeology being present. However, it would seem that if the site was ever utilised in the past, no trace of this activity has survived. The body of data produced here is sufficient to inform the planning and development process.

10.0 Project archive

The site archive shall remain in the custody of PCAS until a suitable repository can be located. No finds were discovered worthy of conservation.

11.0 Acknowledgements

Pre-Construct Archaeological Services would like to thank J. H. Walter for this commission and for their co-operation and assistance before, during and after the groundworks. Thanks are also due to Liz Mordue, Assistant Archaeological Advisor to Northamptonshire County Council, for her advice during the project.

12.0 References

British Geological Survey (BGS). 2013a. Cornbrash Formation. The *BGS Lexicon of Named Rock Units*. Available online. http://www.bgs.ac.uk/lexicon/lexicon.cfm?pub=CB (Accessed 17/04/13)

British Geological Survey (BGS). 2013b. Blisworth Clay Formation. The *BGS Lexicon of Named Rock Units*. Available online. http://www.bgs.ac.uk/lexicon/lexicon.cfm?pub=BWC (Accessed 17/04/13)

British Geological Survey (BGS). n.d. Geology of Britain Viewer. Available online. http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html (Accessed 17/04/13)

Eagle, J. n.d. The Church of St. Laurence. *Stanwick Notes*. Available online. http://www.4spires.org.uk (Accessed 17/04/13)

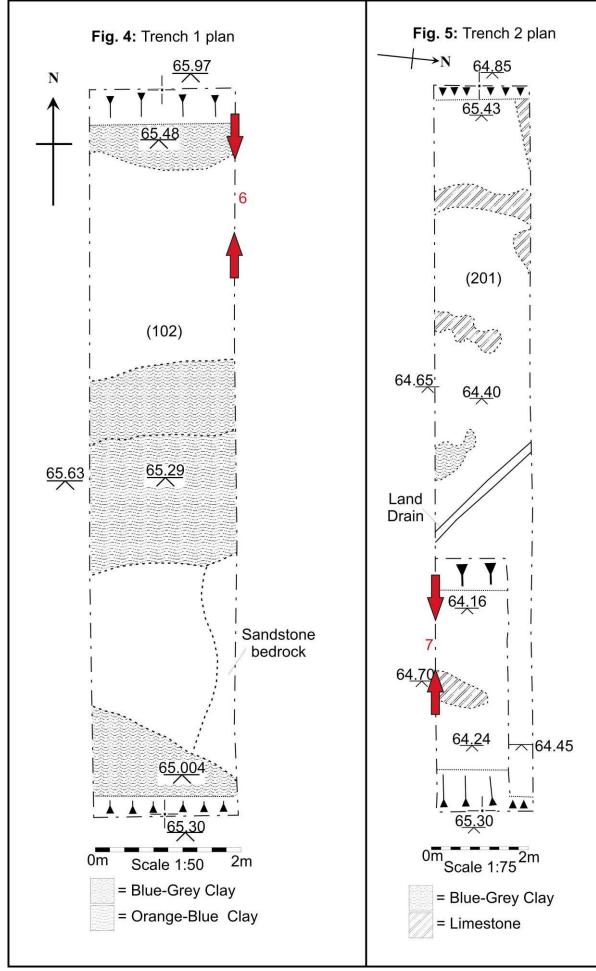
Ingram, J. (trans.). 1823. *The Anglo Saxon Chronicle*. London. Available online. http://avalon.law.yale.edu/subject_menus/angsax.asp (Accessed 17/04/13)

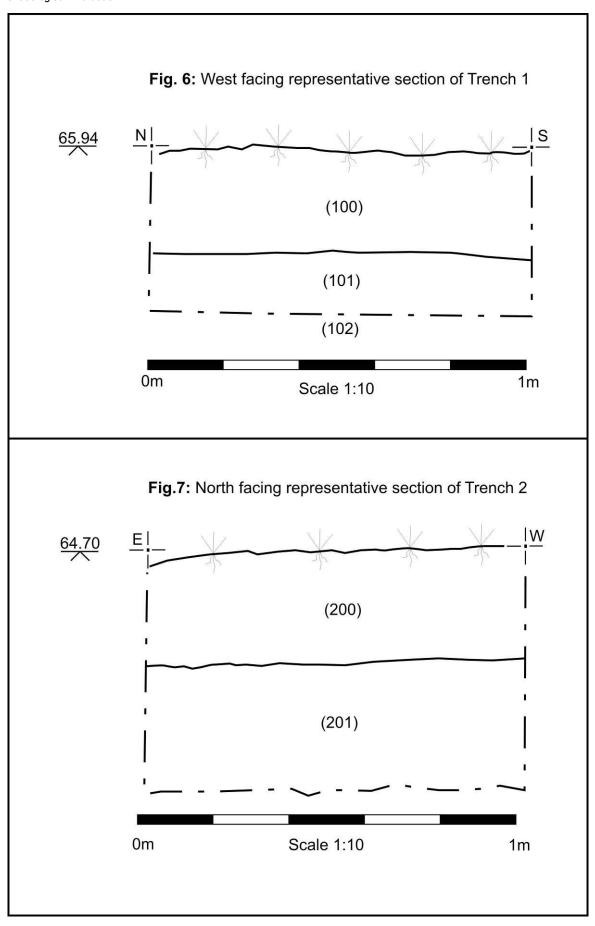
Neal, D.S. 1989. The Stanwick Villa, Northants: An Interim Report on the Excavations of 1984-88. *Britannia* 20: 194-68

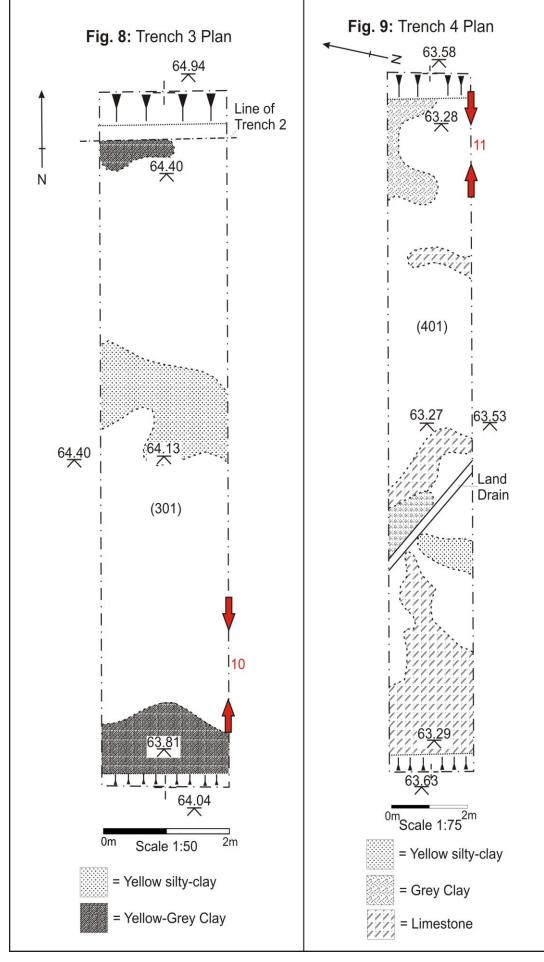
Williams, A. and Martin, G. H. (eds.). 1992. *Domesday Book: A Complete Translation*. London: Penguin Books.

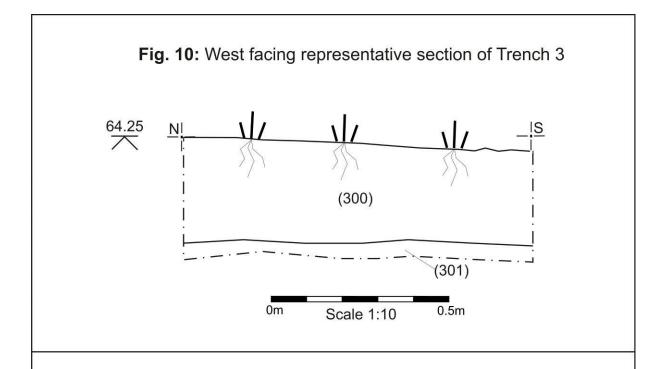
Note:

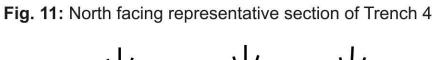
Northamptonshire HER references obtained online via the East Northamptonshire Planning Portal at http://www.east-northamptonshire.gov.uk/viewplanningapplications

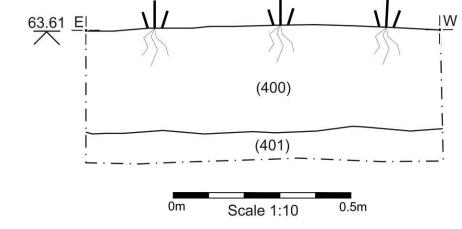












Appendix 1: Colour Plates



Plate 1: General view of the site looking south west (showing the spire of St. Marys the Virgin at Higham Ferrers on the horizon)



Plate 2: General view of the site looking north west



Plate 3: Looking north on trench 1



Plate 4: Looking south on trench 1



Plate 5: Looking east on trench 2



Plate 6: Looking west on trench 2



Plate 7: General view of trench locations looking south east from trench 1 to 4 (trenches 1 and 2 backfilled)



Plate 8: Looking south on trench 3



Plate 9: Looking north on trench 3



Plate 10: Looking east on trench 4



Plate 11: Looking west on trench 4



Plate 12: West facing representative section of trench 1 (fig 6)



Plate 13: North facing representative section of trench 2 (fig 7)



Plate 14: West facing representative section of trench 3 (fig 10)



Plate 15: North facing representative section of trench 4 (fig 11)

Appendix 2: Context Summary

Context	Туре	Description	Finds/Dating
100	Layer	Dark brown silty-clay topsoil	None
101	Layer	Mid orange brown silty-clay subsoil	None
102	Layer	Off-white Jurasic Limestone Cornbrash	None
200	Layer	Dark reddish-brown sandy-clay topsoil	None
201	Layer	Mid reddish-brown sandy clay (Blisworth Clay)	None

Appendix 3: OASIS 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: preconst3-148462

Project details

Project name HFSE13

the project

Short description of Pre-Construct Archaeological Services Ltd (PCAS) was requested by J. H. Walter to undertake a scheme of archaeological evaluation trenching on the

site of a proposed new wind turbine on land at Hollywell Farm, off Chelveston Road near Stanwick in East Northamptonshire. The development is to consist of a 500kW wind turbine with maximum hub height of 50m, blade diameter of 54m and maximum height to the blade tip of 77m, with a transformer station at the base of the turbine and ancillary works. The groundworks were undertaken

in early April, 2013.

Project dates Start: 03-04-2013 End: 03-04-2013

Previous/future

work

No / No

Any associated project reference

codes

12/01282/FUL - Planning Application No.

Type of project Field evaluation

Site status None

Current Land use Cultivated Land 1 - Minimal cultivation

NONE None Monument type NONE None Significant Finds

Methods & techniques "Sample Trenches"

Development type Wind farm developments

Prompt National Planning Policy Framework - NPPF

Position in the planning process Pre-application

Project location

Country **England**

Site location NORTHAMPTONSHIRE EAST NORTHAMPTONSHIRE CHELVESTON CUM

CALDECOTT Hollywell Farm, Stanwick

Postcode NN9 6TZ

Study area 1500.00 Square metres

Site coordinates SP 9823 7048 52 0 52 19 23 N 000 33 30 W Point

Height OD / Depth Min: 64.00m Max: 66.00m

Project creators

Name of Organisation Pre-Construct Archaeological Services Ltd

Project brief

originator

Unitary Authority Archaeologist

Project design originator

Pre-Construct Archaeological Services Ltd

Project

director/manager

Will Munford

Project supervisor

S A Savage Type of Developer

sponsor/funding

body

Name of sponsor/funding

body

J.H. Walter

Project archives

Physical Archive Exists?

No

Digital Archive recipient

"Stratigraphic"

Digital Contents

"Images raster / digital photography", "Text"

Not yet known

Digital Media available

Paper Archive recipient

Not yet known

Paper Contents

"Stratigraphic"

Paper Media available

"Context sheet","Diary","Miscellaneous Material","Plan","Section","Unpublished Text"

Project bibliography 1

Grey literature (unpublished document/manuscript)

Publication type

Title PROPOSED WIND TURBINE AT HOLLYWELL FARM, STANWICK,

NORTHAMPTONSHIRE ARCHAEOLOGICAL EVALUATION REPORT

Proposed Wind Turbine at Hollywell Farm, Stanwick, Northamptonshire Archaeological Evaluation

Saxilby

Author(s)/Editor(s) Underhill, D.

Date 2013

Issuer or publisher Pre-Construct Archaeological Services Ltd

Place of issue or

publication

Entered by Dr David Underhill (info@pre-construct.co.uk)

Entered on 17 April 2013

OASIS:

Please e-mail English Heritage for OASIS help and advice
© ADS 1996-2012 Created by Jo Gilham and Jen Mitcham, email Last modified Wednesday 9 May 2012
Cite only: http://www.oasis.ac.uk/form/print.cfm for this page