

Site & Landscape Survey

Interpretation, Design & Display

# Spicer Hill Wind Farm, Penistone **South Yorkshire**

**Archaeological Watching Brief** 

**Report No. Y049/12** 







## CFA ARCHAEOLOGY LTD

Unit 22 Moorlands Business Centre Balme Road Cleckheaton BD19 4EZ

Tel: 01274 864 245 Fax 01274 878494

email: yorks@cfa-archaeology.co.uk web: www.cfa-archaeology.co.uk

| Author          | Mark Bell BA                |
|-----------------|-----------------------------|
| Illustrator     | Shelly Werner BA MPhil PhD  |
| Editor          | Martin Lightfoot BA MA MIfA |
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#### **Summary**

An archaeological watching brief was undertaken by CFA Archaeology at Spicer Hill, Penistone, South Yorkshire. The archaeological monitoring was undertaken during the removal of topsoil for three wind turbine bases, crane pads and associated infrastructure including access tracks and cabling. Other than cultivation furrows, plough scars evidence for quarrying, and a number of post-medieval gullies, no archaeological features were recorded and no finds were recovered.

#### 1. INTRODUCTION

This report presents the results of an archaeological watching brief undertaken by CFA Archaeology Ltd (CFA) between February and August 2012, on land adjacent to Whitley Road, Penistone, South Yorkshire.

A specification for archaeological monitoring was prepared by South Yorkshire Archaeology Service (SYAS 2011) prior to the groundworks commencing.

### 1.1 Site Location and Description

Spicer Hill Wind Farm lies in the Metropolitan Borough of Barnsley, South Yorkshire near to the village of Penistone (Fig. 1, NGR: SE 20449 04915).

The site is within an upland area of Pennine landscape which has been improved for pasture. The development area is characterised by enclosed fields bordered by dry stone walls. The site is bounded to the south by Whitley Road, to the west by a former quarry and to the east and north by enclosed fields. In the field to the south-east, there is Royd Moor Wind Farm consisting of 13 turbines in two staggered parallel rows.

The underlying geology of the site is characterised as Carboniferous Lower Coal Measures, comprising inter-bedded coal measures, shales and sandstones overlain with silts and weathered clays (BGS 2012). The soils of the area are described as loam to sandy loam' (NERC 2009).

#### 1.2 Previous Archaeological work

No previous archaeological fieldwork is known to have taken place within the proposed development area prior to this evaluation.

#### 1.3 Historical and Archaeological Background

The environmental statement states that there were no recorded archaeological features within the development area (Pears 2009). In the surrounding area known sites include flint assemblages and the remains of a WWII bombing decoy. The area was enclosed from Whitley Common in the latter half of the nineteenth century. Historically the land has been used as pasture, although there is evidence of sandstone quarrying on areas within the site boundary, including a disturbed area 200m West of Turbine 1.

# 1.4 Objectives

The general objective of the watching brief was to establish the presence or absence of archaeological remains; assess their character, and produce a report on the findings.

The specific objectives were to:

- to determine the form and function of any archaeological features encountered;
- to determine the spatial arrangement of any archaeological features encountered;
- as far as is practicable, to recover dating evidence from the archaeological features, and;
- to establish the sequence of any archaeological remains present on site.

#### 2. WORKING METHODS

All work was undertaken according to the Institute for Archaeologists' Code of Conduct, relevant Standards and Guidance documents (IfA 1994) the WSI and the specification (SYAS 2011).

### 2.1 Watching Brief

All machine excavation was undertaken under constant archaeological supervision. The archaeological works on the crane pads, turbine base and access tracks monitored the removal of topsoil deposits down to the natural substrate or the first significant archaeological horizon, whichever was reached first (Fig. 2). The work was carried out by a mechanical excavator equipped with a smooth bladed ditching bucket. The excavation of all cable trenches was also monitored (Fig. 3).

#### 2.2 Standards and Guidance

CFA Archaeology is a registered organisation (RO) with the Institute for Archaeologists (IfA). All work was conducted in accordance with relevant IfA Standards and Guidance documents (IfA 1994, 2001), English Heritage guidance (EH 2005, 2006, 2008a, 2008b and 2008c), and CFA's standard methodology.

#### 2.3 Monitoring

The project was monitored by the South Yorkshire Archaeological Service who were informed in advance of the works taking place.

# 2.4 Archiving

The archive will be ordered, indexed and conform to the requirements of the depositing museum and to all relevant professional guidance (MGC 1994, SMA 1995, and Brown 2011). Appropriate forms to enable deposition have been procured from Sheffield Galleries and Museums Trust. A summary of the results of the archaeological works will be submitted for inclusion in OASIS (Ref: cfaarcha1-125255).

#### 3. RESULTS

A thin layer of topsoil 0.2m deep was present across the site (001). The topsoil was friable, organic mid-grey clayey-silt. No subsoils were identified. The natural substrate was light yellowish-grey, silty-clay containing sandstone fragments of varying size and angularity (000). Extensive plough scarring was evident across the site and attested to the intensive cultivation of the development site as a whole.

The remains of three truncated furrows were recorded on the access road between the compound and Crane Pad 3. The furrows were spaced 6m apart centre to centre and the best preserved was 2m wide by 0.1m deep (Fig. 4). The relict furrows attest to the agricultural use of the area prior to Whitley Common being enclosed in the late nineteenth century.

A series of heavily truncated gullies were uncovered on the access track to Turbine 1. The gullies ran roughly parallel to a dry stone wall which was removed in order to construct Crane Pad 3. The gullies were 0.25m deep and were 0.3 wide and were probably post-medieval, running parallel to a field boundary present on the First Edition OS map (1851). They probably acted as drainage within the agricultural landscape although they may have served a similar purpose to a small quarry scoop located 20m to the south (Figs 5, 6).

No other archaeological remains were uncovered during the watching brief.

#### 4. **CONCLUSION**

The watching brief revealed remains related to post-medieval agricultural activity, predating enclosure and the use of the area for pasture. Archaeological remains where they were present showed up well just beneath the thin soils. As well as agricultural activity there was also some evidence for quarrying on the site and though undated is likely to be from the post medieval or early modern period as evidenced from 19th century Ordnance Survey maps.

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## **Online Resources**

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NERC, 2007, *Land Cover Map*, http://www.bgs.ac.uk/nercsoilportal, Natural Environment Research Council, (Accessed 10/08/12)

Old Maps, http://www.old-maps.co.uk, (Accessed 10/08/12)

# **APPENDICES**

# **Appendix 1: Context Summary**

| Context no. | Area            | Fill of | Type    | Description                              |
|-------------|-----------------|---------|---------|------------------------------------------|
| 000         | Site            |         | Deposit | Natural substrate; comprising firm light |
|             |                 |         |         | yellowy-grey boulder clay with sandstone |
|             |                 |         |         | fragment inclusions.                     |
| 001         | Site            |         | Deposit | Topsoil; light, brown-grey, clayey-silt. |
| 002         | Crane Pad 1     | 003     | Deposit | Light greyish-brown clayey-silt.         |
| 003         | Crane Pad 1     |         | Cut     | Shallow base. >4m L 2m W 0.1m D          |
| 004         | Crane Pad 1     | 005     | Deposit | See (002).                               |
| 005         | Crane Pad 1     |         | Cut     | See (003).                               |
| 006         | Access track to | 007     | Deposit | See (002)                                |
|             | Crane Pad 1     |         |         |                                          |
| 007         | Access track to |         | Cut     | See (003).                               |
|             | Crane Pad 1     |         |         |                                          |

# **Appendix 2: Photographic Register**

| Digi No | Contexts/description                                                                      | Facing     | Conditions |
|---------|-------------------------------------------------------------------------------------------|------------|------------|
| 1       | General shot of site entrance showing alterations to                                      | North      | Overcast   |
|         | existing dry stone wall.                                                                  |            |            |
| 2       | Working shot of topsoil removal and plough-scars in                                       | North-east | Overcast   |
|         | natural substrate (000).                                                                  |            |            |
| 3       | Ridge-and-furrow cultivation looking north-east towards                                   | North-east | Overcast   |
|         | Crane Pad 3.                                                                              |            |            |
| 4       | Shot of Crane Pad 3 after topsoil removal.                                                | South-east | Overcast   |
| 5       | Shot of ploughscar in natural substrate at Crane Pad 3.                                   | South-east | Overcast   |
| 6       | Shot of excavated ploughscar at Crane Pad 3.                                              | South-east | Overcast   |
| 7       | General shot of stripped trackway.                                                        | South-west | Overcast   |
| 8       | Working shot of topsoil removal at the junction for turbines 1 and 2.                     | North      | Overcast   |
| 9       | Working shot of topsoil removal at Crane Pad 3 showing plough scars in natural substrate. | North-west | Overcast   |
| 10      | General shot of Crane Pad One after topsoil removal.                                      | North-west | Bright     |
| 11      | Pre-excavation shot of gully features at Crane Pad 1.                                     | North-west | Bright     |
| 12      | Two excavated drainage gullies at Crane Pad 1 (003) and (005).                            | North-west | Bright     |
| 13      | Working shot of topsoil removal on access road to Crane Pad 1.                            | North      | Overcast   |
| 14      | General shot of access track to Crane Pad 1 after topsoil removal.                        | South-east | Overcast   |
| 15      | Pre-excavation shot of gully at access track to Crane Pad 1.                              | North-east | Overcast   |
| 16      | Excavated gully at access track to Crane Pad 1 (007).                                     | South-east | Overcast   |
| 17      | Working shot of topsoil removal at location of substation.                                | South-east | Overcast   |
| 18      | Working shot of topsoil removal at access track to Crane Pad 1.                           | South-east | Overcast   |
| 19      | Working shot of topsoil removal at access track to Crane Pad 2.                           | North-east | Bright     |
| 20      | General shot of Crane Pad 2 after removal of topsoil.                                     | North-east | Bright     |
| 21      | Working shot of access road to Crane Pad 2 after topsoil removal.                         | North-east | Bright     |
| 22      | Shot of Turbine Base 3 after topsoil removal.                                             | South-east | Overcast   |
| 23      | Shot of Turbine Base 2 after topsoil removal.                                             | North-east | Bright     |
| 24      | Shot of Turbine Base 1 after topsoil removal.                                             | East       | Bright     |
| 25      | Shot of Turbine Base 1 after topsoil removal.                                             | South-east | Bright     |
| 26      | Cable trenching beyond Turbine 2.                                                         | North      | Bright     |
| 27      | Cable trenching beyond Turbine 2.                                                         | North      | Bright     |
| 28      | Cable trenching beyond Turbine 2.                                                         | North      | Bright     |
| 29      | Cable trenching beyond Turbine 2.                                                         | South      | Bright     |
| 30      | Cable trenching beyond Turbine 2.                                                         | South      | Bright     |
| 31      | Cable trench alongside access track to Crane Pad 1                                        | North-west | Overcast   |
| 32      | Cable trench alongside access track to Crane Pad 1                                        | South-east | Overcast   |
| 33      | Cable trench alongside access track to Crane Pad 2                                        | South-west | Overcast   |

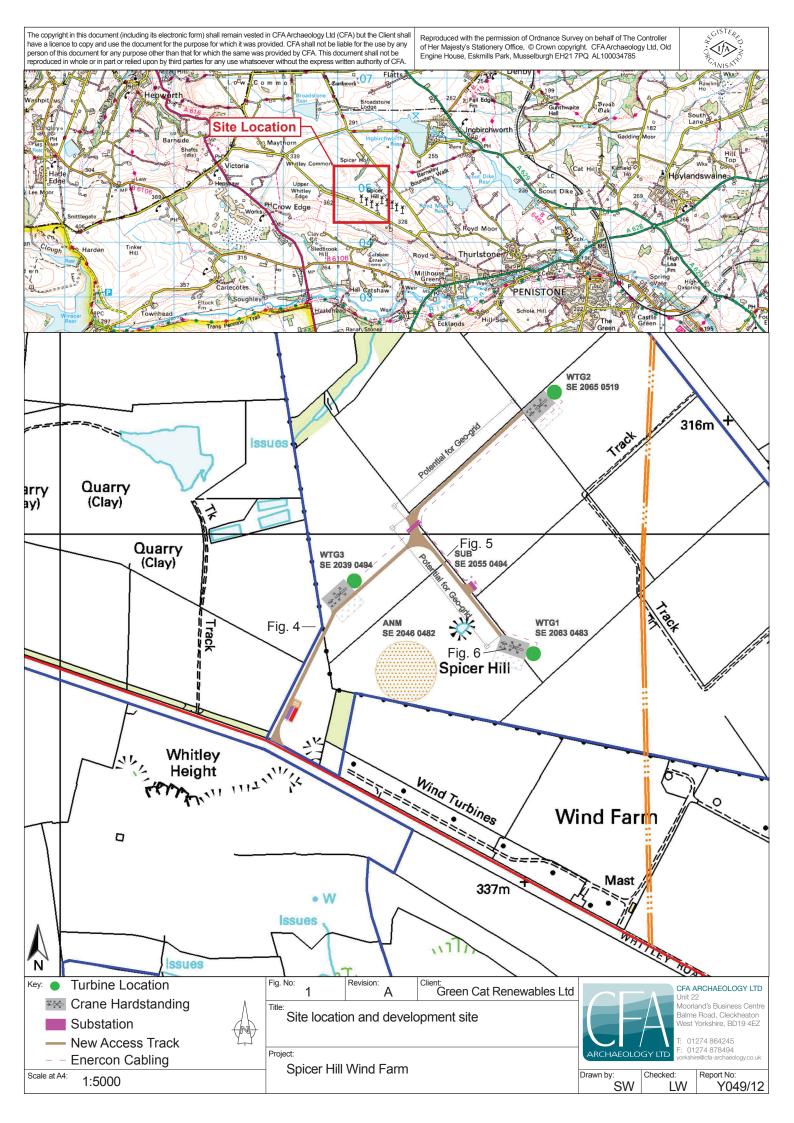




Fig 2 - Shot of Turbine Base 1 facing east



Fig 3 - Cable trench alongside access track to Crane Pad 1



Fig 4 - Ridge-and-furrow cultivation looking north-east towards Crane Pad Three



Fig 5 - Two excavated drainage gullies at Crane Pad 1 [003] and [005]



Fig 6 - Excavated gully at access track to Crane Pad 1 [007]

| Fig. No: Revision                                                                                                                                                                       |          | Revision:  | Project: Spicer Hill Wind Farm | & CISTER S |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------|--------------------------------|------------|--|
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Balme Road, Cleckheaton West Yorkshire, BD19 4EZ