

BCRM15-02

**Beatrice Offshore Windfarm,
Blackhillock Substation, Moray**

Result of an Archaeological Evaluation

**Planning Application Reference 15/00631/EIA
Client Report Reference: LF000005-REP-945**

Client: The Environment Partnership on behalf of Beatrice Offshore Windfarm Ltd

May 2016

**Headland Archaeology (UK) Ltd
Scotland**

**BEATRICE OFFSHORE WINDFARM,
BLACKHILLOCK SUBSTATION, MORAY**

archaeological evaluation

*for The Environment Partnership on behalf of Beatrice Offshore
Windfarm Ltd*

May 2016

HA Job no.:	BCMR15/002
NGR:	NJ 4298 4864
Parish:	Keith
Council:	Moray Council
OASIS ref.:	Headland1-252168

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SUMMARY

An application for development by Beatrice Offshore Windfarm Ltd (BOWL) for construction of an HVAC substation near Blackhillock, Moray was submitted to Aberdeenshire Council. In accordance with the Written Scheme of Investigation (WSI), The Environment Partnership on behalf of BOWL commissioned an archaeological evaluation prior to development. This report presents the results of the evaluation.

The works took place on 5th May 2016 and comprised excavation of two 35m long trenches within the proposed development area. A series of cultivation furrows were exposed in one trench indicating the area had been used for agricultural activity in the past, but no other features of archaeological significance were present. In light of these results, the archaeological potential of the development area is considered to be low.

INTRODUCTION

A programme of trial trenching was undertaken by Headland Archaeology Ltd at the site of a proposed HVAC substation near Keith, Aberdeenshire for The Environment Partnership on behalf of Beatrice Offshore Windfarm Ltd (BOWL). The programme was carried out as part of Aberdeenshire Council Archaeology Service's (ACAS) customary requirements for such work, in response to Condition 23 for the onshore transmission works associated with the Beatrice Offshore Windfarm.

Condition 23 states:

No works shall take place within any agreed phase until a written scheme of archaeological investigation for that phase has been submitted to and approved in writing by the Council as planning authority in consultation with Aberdeenshire Council Archaeology Service. Thereafter the development within that phase shall be undertaken in accordance with the approved scheme unless otherwise agreed in writing by the Council as Planning Authority.

Reason – To safeguard and record the archaeological potential of the area.

A written scheme of investigation was prepared by BOWL and approved by ACAS prior to work commencing (BOWL 2016).

The trial trenching was undertaken to assess the archaeological potential of the development area. The fieldwork was carried out on the 5th May 2016.

SITE LOCATION AND DESCRIPTION

The site is located to the west of Blackhillock, near Keith, Aberdeenshire (Illus 1). The site is centred on NGR NJ 429 486. It is currently used for pasture and grassland. The site is underlain by superficial geological deposits of Devensian Till formed in the Quaternary Period. The local environment was previously dominated by Ice Age glaciers resulting in the deposition of a boulder clay geological subsoil (British Geological Survey Website; <http://www.bgs.ac.uk>).

ARCHAEOLOGICAL BACKGROUND

There are no known sites within the substation development area. Baseline studies (Headland 2012) and a Desk Based Assessment (Arcus 2015) established that there were recorded assets within the proposed windfarm

cabling route and there was potential for archaeological remains within the development area as a whole. A watching brief of geotechnical ground investigations was subsequently carried out by Headland Archaeology in September 2014 (Headland 2015), and encountered no archaeological remains. The ground investigations closest to the proposed substation development, approximately 500m north-west of the substation site, were not monitored as there were no known heritage assets in close proximity.

Therefore, prior to the proposed trial trenching works the potential for archaeological remains in the substation location was considered moderate.

OBJECTIVES

The aims of the evaluation were to

- a) Establish the location, extent, nature and date of archaeological features or deposits that may be present within the proposed development area.
- b) Establish the integrity and state of preservation of archaeological features or deposits that may be present within the areas proposed to be disturbed during the development.

METHOD

Two evaluation trenches 35m in length were excavated under direct archaeological supervision using a tracked machine with a 1.8m wide ditching bucket (Illus 1).

Topsoil was removed and machining continued in small spits until either clean geological sediments or archaeological deposits were encountered. The resulting surfaces were hand-cleaned where necessary and any potential archaeological features investigated. Where numerous features of similar types were identified, a suitable sample of them was investigated. All trenches were hand drawn at a scale of 1:100 on pro-forma sheets. Any features and deposits were recorded using standard archaeological methods and pro-forma record sheets. Photographs were taken using a digital camera and trench locations surveyed using a differential GPS.

RESULTS

The stratigraphy was consistent throughout both trenches. Across the field, a deposit of mid-brown loamy topsoil with occasional stones was observed to a maximum thickness of 0.25m, interpreted as ploughsoil. Underlying this, a light greyish-brown silty loam was observed to a maximum thickness of 0.15m. This deposit was interpreted as a subsoil interface layer and directly overlay the geological subsoil, a brownish-orange sandy clay with frequent small and medium angular stones (Illus 2 & 3).

The only features of archaeological significance identified during the evaluation were a series of shallow linear features interpreted as the remains of cultivation furrows. The furrows were only present in Trench 2, were all aligned north-west to south-east and were between 0.70m and 0.98 m wide (Illus 4). The furrows were irregularly spaced – between 7.90m and 15.34m apart. The furrows were also heavily truncated with a maximum depth of 80mm.

Two modern features were also identified, comprising a borehole in Trench 1 and a rubble drain in Trench 2.

DISCUSSION

The evaluation did not identify extensive significant archaeological features within the trenches. Remains of rig and furrow cultivation was recorded in Trench 2 and it is likely that the whole site was once similarly covered. Later agricultural activity, however, will have removed above ground evidence of rig as well as account for the truncation of the remaining furrows. In addition, the boulder clay geological subsoil is not generally conducive to settlement and this would account for both the lack of archaeological remains and the presence of agricultural activity in an area more suited to pasture and agriculture. In light of these findings, the potential for archaeological remains in the area of the proposed development is considered low.

REFERENCES

Arcus Consultancy Services Ltd 2015 *Beatrice Onshore Transmission Works Environmental Statement, Chapter 9: Archaeology and Cultural Heritage*, Unpublished client report.

Beatrice Offshore Wind Farm Ltd 2016 *Onshore Transmission Works Written Scheme of Investigation*, Unpublished client report

Headland Archaeology 2012 *Beatrice Offshore Windfarm Archaeology and Cultural Heritage Baseline Technical Report: Onshore Transmission Works*. Unpublished client report

Headland Archaeology 2015 *Beatrice Onshore Grid Connection: Archaeological Monitoring of Ground Investigation Works*, Unpublished client report.

APPENDICES

Appendix 1: Registers

- 1.1: Trench Register
- 1.2 Context Register
- 1.3 Photographic Register

Appendix 2: DES summary

APPENDIX 1

1.1 Trench Register

Trench Number	Orientation	Description
1	NE-SW	Excavated across flat cropped field. Contained modern bore hole. No archaeological finds or features. 35m long, 0.48m deep
2	N-S	Excavated across flat cropped field. Remains of furrows identified. Rubble drain running east-west. 35m long, 0.45m deep.

1.2 Context Register

Context No	Area	Description
001	-	Turf & topsoil. Mid-brown loam with occasional small and medium stones. 0.25m depth.
002	-	Subsoil. A light greyish-brown fairly compact silty loam with occasional small and medium unsorted stones. 0.15m depth.
003	-	Geological subsoil. Orangish-brown sandy stony clay with occasional grey clay banding.
004	Trench 2	Cut of furrow running NW-SE at southern extent of TR02. Extends beyond limit of excavation. . Shallow with almost imperceptible sides and flat base. 1.8m (observed in trench) x 0.70m x 0.08m
005	Trench 2	Fill of furrow [004]. Light greyish-brown sandy silt, very similar to (002). 1.8m (observed in trench) x 0.70m X 0.08m

1.3 Photographic Register [heading level 1]

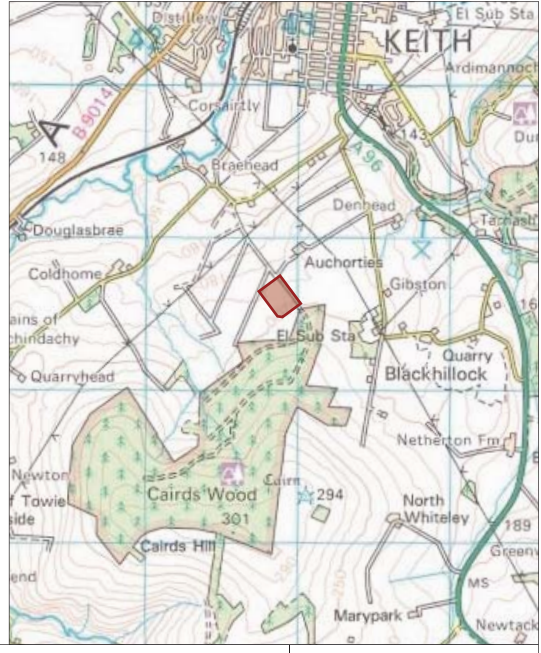
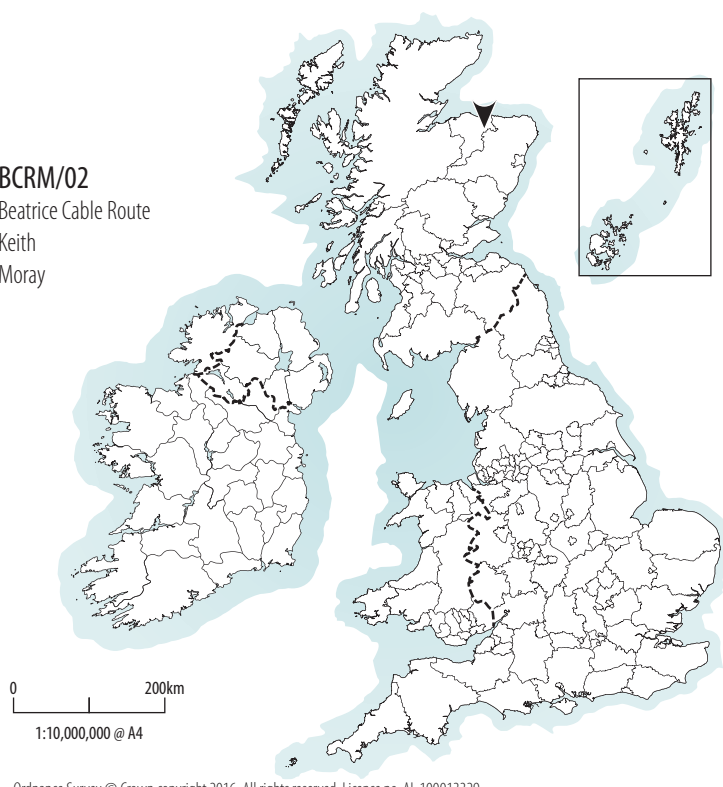
Photo No	Facing	Description
BCRM15-02-01	NW	Record Shot of Trench 01
BCRM15-02-02	SE	NW Facing Section of furrow [004]
BCRM15-02-03	N	Record shot of Trench 02
BCRM15-02-04	W	Section of Trench 02
BCRM15-02-05	SE	General shot of furrow [004]
BCRM15-02-06	NE	Section of Trench 001
BCRM15-02-07	E	West Facing Section through rubble drain

APPENDIX 2

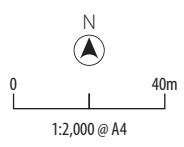
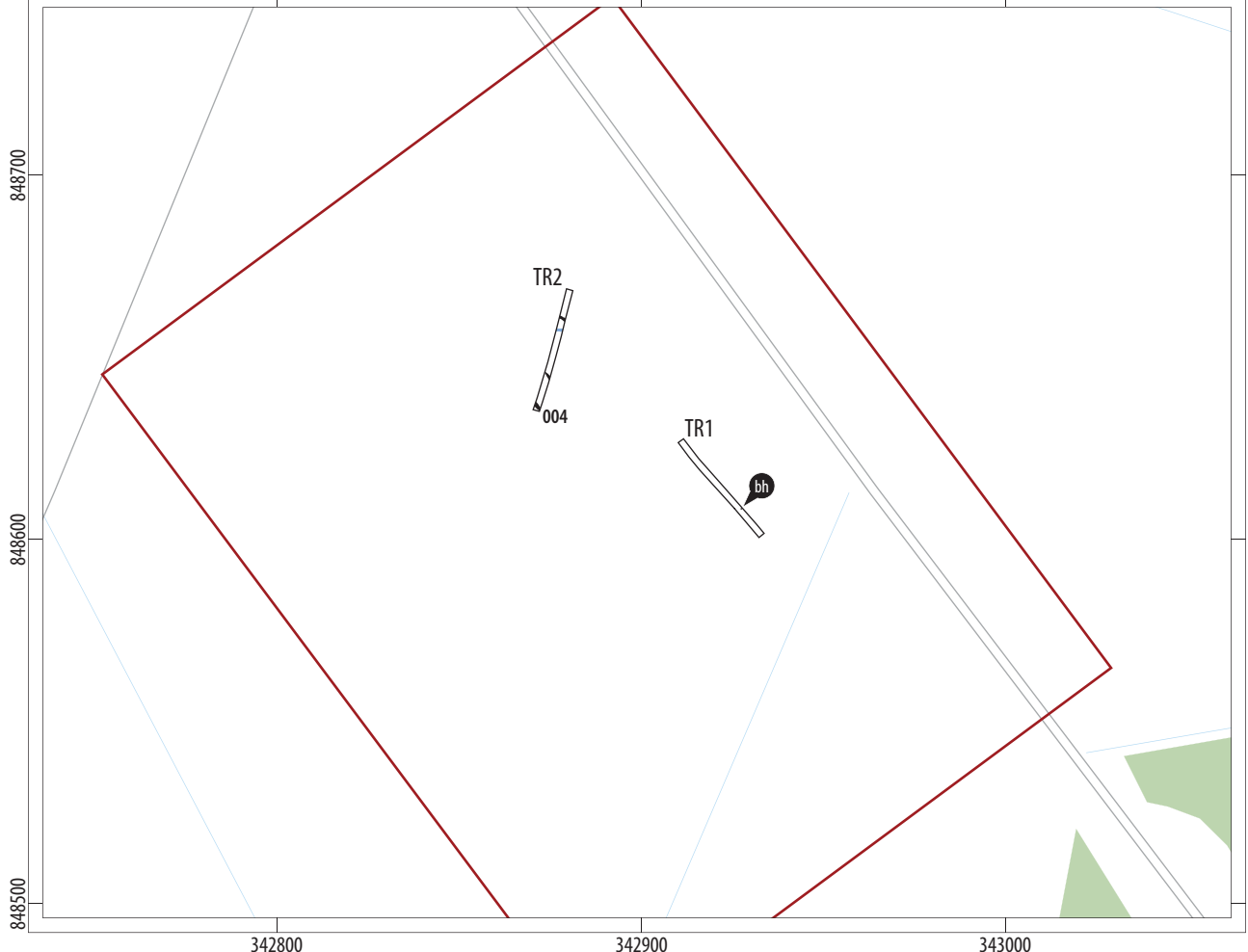
2.1 DES summary text

An evaluation was undertaken on 5th May 2016 on the site of a proposed HVAC substation within the development area of the Beatrice Offshore Windfarm cable route, Keith, Aberdeenshire. Two trial trenches were excavated across the development area and identified the poorly preserved remains of rig and furrow cultivation. No other features of archaeological significance were present.

BCRM/02
 Beatrice Cable Route
 Keith
 Moray



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- KEY
- proposed development boundary
 - trench location
 - furrows
 - rubble drain
 - bh bore hole



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ILLUS 1 Site location



ILLUS 2 View of Trench 1 looking NW **ILLUS 3** View of Trench 2 looking N **ILLUS 4** View of NW facing section of furrow [004] in Trench 2