



NORTHLIGHT HERITAGE	Green Burn Wind Farm Met Mast
REPORT: 114	Bridge of Cally, Perth and Kinross
PROJECT ID: 4429161	
DATA STRUCTURE REPORT	Archaeological Watching Brief

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Green Burn Wind Farm

Bridge of Cally

Perth & Kinross

NGR: NO 1601 5587

Data Structure Report

on behalf of

ABO Wind UK Ltd.

Cover Plate: View of Drumderg from hut circle to north of met mast

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Approved by:



Date: 01/09/2014

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Abstract

An archaeological watching brief was undertaken on behalf of ABO Wind UK Ltd. during the erection of a meteorological mast within the site of the proposed Green Burn Wind Farm, Bridge of Cally, Perth and Kinross. The work was conducted by Northlight Heritage on the 11th and 12th of August 2014. A total of 10 trenches were monitored during the works. No archaeological remains were discovered during the watching brief.

1. Introduction

1.1

This report presents the results of an archaeological watching brief undertaken on the site of the proposed Green Burn Wind Farm, Bridge of Cally, Perth and Kinross in response to a planning condition (ref.: 14/00861/FLL) placed on the erection of a meteorological mast. The watching brief was conducted by Northlight Heritage, on behalf of ABO Wind UK Ltd., between the 11th and 12th of August 2014. Ten trenches, each approximately two metres square in size, were excavated.

2. Location, Geology and Topography

2.1

The location of the meteorological mast (NGR NO 16012 55871) sits at an elevation of 374 m AOD. It is situated on rough grazing land on the south-western slopes of Seabeg, some 5 km to the north-east of Bridge of Cally, Perth and Kinross (Figure 1).

2.2

The underlying geology consists of Southern Highland Group Psammite and Pelite while the superficial deposits consist of Diamicton Till (1:50000, British Geological Survey online data).

3. Archaeological and Historical Context

3.1

In general the location of the meteorological mast lies within a relatively well preserved prehistoric landscape not untypical of similar locations in north-eastern Perthshire.

3.2

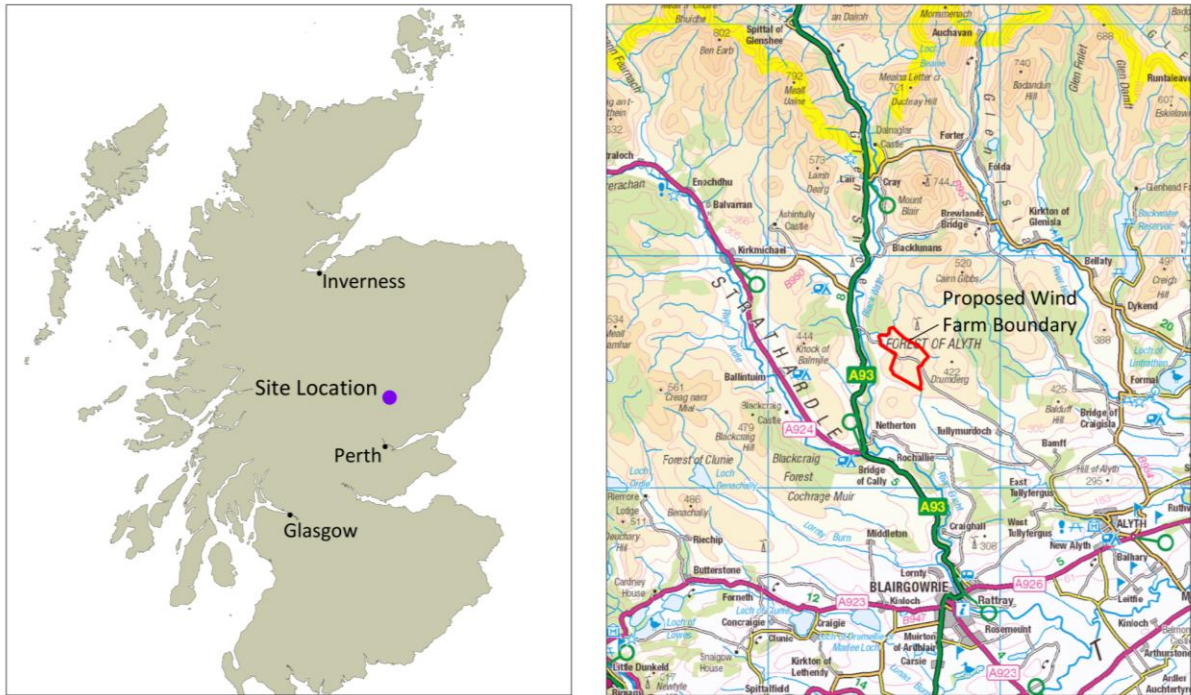
Just to the north of the mast location a series of Dalrulzion-type hut circles have been recorded along with a stony bank and a series of small cairns (MPK 4025, centred NO 1605 5609). The concentration of archaeological features here is located some 300 m to the north of the mast. Similarly, to the south of the mast location, a concentration of Dalrulzion-type hut circles, field banks and small cairns have been recorded (MPK3993, centred NO 162 555).

3.3

Some 300 m to the west of the mast location two small cairns have been previously recorded (MPK4003, NO1574 5583).

3.4

Further from the mast, although still in relatively close proximity, other prehistoric remains including hut circles, cairns and a kerb-cairn (MPK4024) exist.



Map Source: OS Open Data TM Ordnance Survey Data Crown Copyright and Database right (2014)

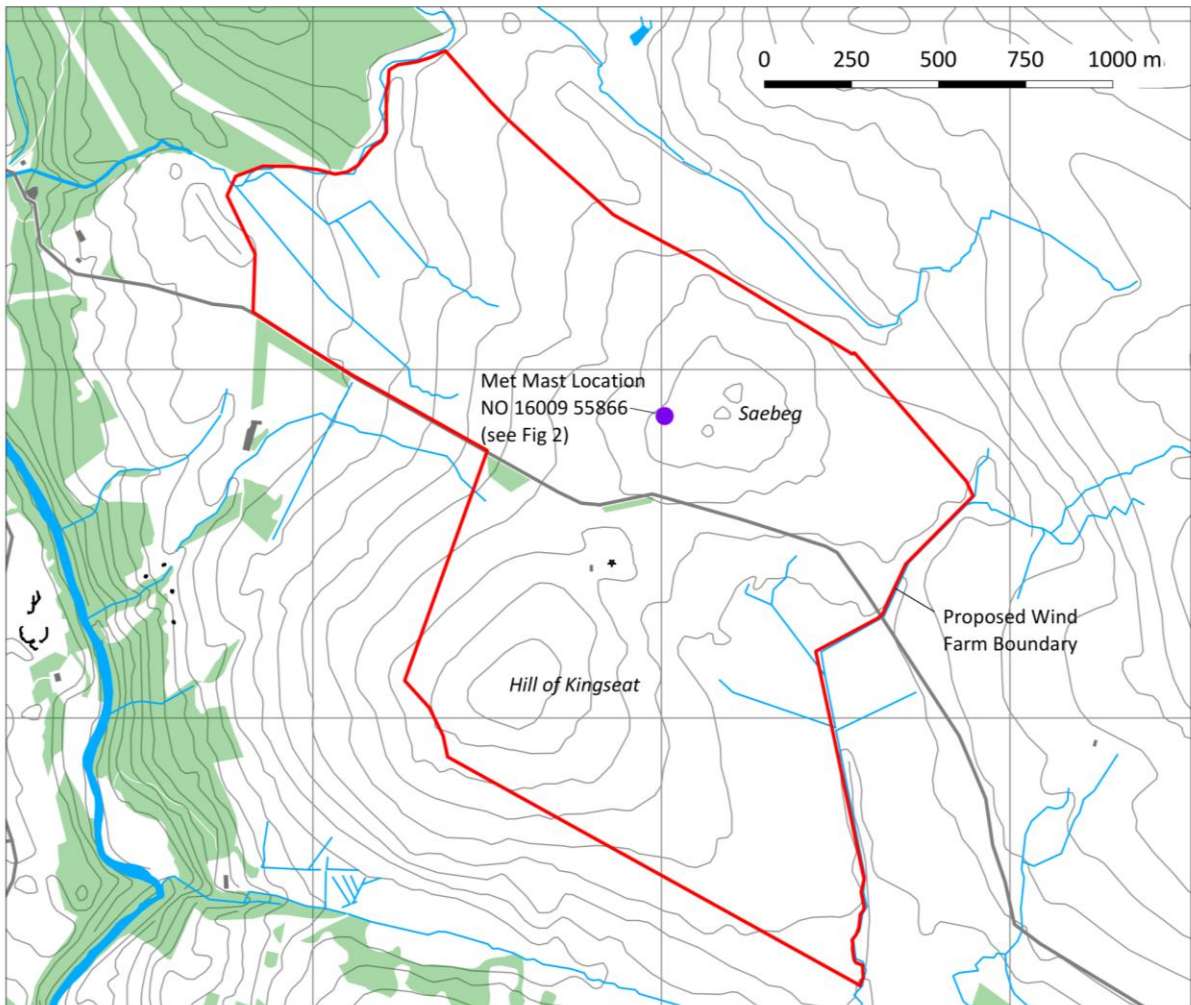


Figure 1: Site Location

4. Summary Objectives

The project objectives were to:

- through an archaeological watching brief establish the presence or absence of any archaeological remains which may be present on site;
- determine the character, extent and significance of any archaeological deposits encountered;
- and, where preservation in-situ was not feasible, provide sufficient information to develop a stage 2 mitigation strategy to excavate and record any significant archaeological features or sites encountered during the watching brief to ensure preservation through record.

5. Methodology

5.1

All archaeological sites visible on the surface in the immediate vicinity of the proposed access route, working area and stock proof fencing were identified prior to works commencing and, where present, were clearly demarcated to ensure they were avoided during the works.

5.2

An archaeological watching brief was maintained during all ground breaking works relating to the erection of the met mast. This related primarily to the excavation of guy rope anchor points, winch locations and ground levelling required for the instillation of the mast base pad.

5.3

Excavations were undertaken by a mechanical excavator using a toothless ditching bucket, where appropriate, under direct archaeological supervision. Given the nature of the deposits the use of a toothless bucket was not always possible.

5.4

The topsoil and subsoil interfaces were removed in spits to the level required for the construction works. Trenches were recorded by digital photograph and written description.

5.5

The location of all trenches were recorded allowing them to be accurately tied in to the OS grid.

6. Results

6.1

The results of the watching brief are given below. In the following paragraphs numbers in brackets indicate unique context numbers issued in the field.

6.2

Ten trenches, each measuring approximately 2m by 2 m and up to 2 m in depth, were excavated around the meteorological mast, eight of which (Trenches 1-6, 9 & 10) were for the installation of steel base plates to anchor the guy ropes (Figure 2). Due to the angle that the ropes would sit the trenches need a small 'V' shaped extension to one side which were approximately 1m in depth. The remaining two trenches (Trenches 7 & 8, Figure 2) provided level areas for a winch and a small additional area was stripped of topsoil in order to level the area for the mast base pad.

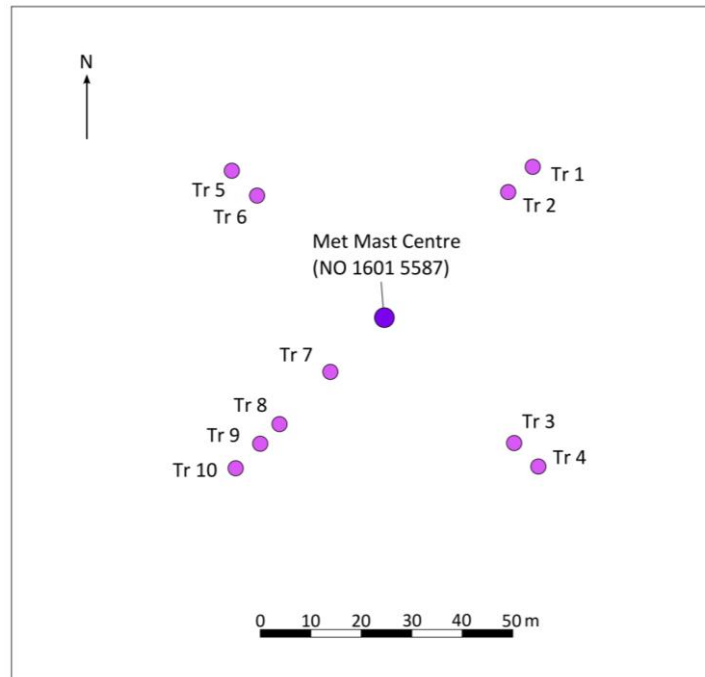


Figure 2: Trench Location

6.3

Each of the ten trenches had a topsoil layer (001) of dark brown/black silty sand, approximately 0.30m in depth, containing a moderate amount of sub-rounded and rounded cobbles up to 300 mm in size. The natural subsoil in the western and northern trenches comprised an orange/grey clay sand deposit (002) containing occasional large rounded cobble inclusions up to 400 mm in size. Immediately beneath the topsoil in the remaining trenches lay sandstone bedrock (003).

6.4

The stock proof fencing was not erected during the watching brief, however, the area around the site where the fencing would be erected along with the area immediately beyond it was checked for any signs of archaeological remains. There was no sign of any archaeological remains and it was clear the fencing would not impact on any remains visible on the surface.

6.5

No archaeological deposits of any description were uncovered during the course of the watching brief.

7. Discussion and Summary

7.1

It would appear that the land on which the met mast was located has not been subject to any form of intensive agriculture which is evident in the concentration of prehistoric remains visible on the surface in the area around the mast.

7.2

Despite the mast being located within a prehistoric landscape no archaeological features, artefacts or deposits were uncovered during the watching brief.

8. Recommendations

8.1

Given no archaeological remains were uncovered during the watching brief and the mast is now erected it is recommended that no further archaeological works are required in relation to the meteorological mast.

9. List of Sources

Maps and Online Sources

<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html> (Accessed 13th August 2014)

10. Appendices

APPENDIX 1: Tables / Concordances

Table 1: Context Information

<i>Context No.</i>	<i>Type</i>	<i>Length (m)</i>	<i>Width (m)</i>	<i>Depth (m)</i>	<i>Description/Interpretation</i>	<i>Stratigraphy and/or phasing info</i>
001	Topsoil	n/a	n/a	c. 0.30m	Dark brown/black silty sand topsoil	Above (002)
002	Subsoil	n/a	n/a	n/a	Orange/grey clayey sand natural	Below (001)
003	Bedrock	n/a	n/a	n/a	Sandstone bedrock	Below (001)

Table 2: Digital Photographs

<i>Photo No.</i>	<i>Context No.</i>	<i>Description</i>	<i>From (Compass)</i>
1	n/a	Pre excavation shot of site	SW
2	n/a	Pre excavation shot of site	W
3	n/a	Pre excavation shot of site	NW
4	n/a	Pre excavation shot of site	NNW
5	n/a	Pre excavation shot of trench 1	NW
6	001, 002	Mid excavation shot of trench 1 with topsoil removed	W
7	001, 002	Post excavation shot of trench 1	W
8	001, 002	Post excavation shot of trench 1	NW
9	n/a	Pre excavation shot of trench 2	NW
10	001, 002	Mid excavation shot of trench 2 with topsoil removed	W
11	001, 002	Post excavation shot of trench 2	W
12	001, 002	Post excavation shot of trench 2	NW
13	001, 003	Mid excavation shot of trench 3 with topsoil removed	E
14	001, 003	Post excavation shot of trench 3	E
15	n/a	Pre excavation shot of trench 4	W
16	001, 003	Mid excavation shot of trench 4 with topsoil removed	S
17	001, 003	Post excavation shot of trench 4	W
18	n/a	Pre excavation shot of trench 5	NE
19	001, 002	Mid excavation shot of trench 5 with topsoil removed	E
20	001, 002	Post excavation shot of trench 5	W
21	001, 002	Mid excavation shot of trench 6 with topsoil removed	N
22	001, 002	Post excavation shot of trench 6	N
23	n/a	Pre excavation shot of trench 7	N
24	001, 003	Mid excavation shot of trench 7 with topsoil removed	E
25	001, 003	Post excavation shot of trench 7	E
26	n/a	Pre excavation shot of trench 8	E
27	n/a	Pre excavation shot of trench 9	E
28	n/a	Pre excavation shot of trench 10	E
29	001, 003	Mid excavation shot of trench 8 with topsoil removed	E
30	001, 003	Post excavation shot of trench 8	E
31	001, 003	Mid excavation shot of trench 9 with topsoil removed	E
32	001, 003	Post excavation shot of trench 9	S
33	001, 003	Mid excavation shot of trench 10 with topsoil removed	E
34	001, 003	Post excavation shot of trench 10	S

APPENDIX 2: Written Scheme of Investigation

1.0 Introduction

This document sets out a written scheme of investigation for archaeological works at the site of a meteorological mast (Planning Reference No: 14/00861/FLL) on land 1000 m south-west of The Corb, Bridge of Cally, Perth and Kinross on the behalf of ABO Wind UK Ltd. In the first instance the requirement is for archaeological watching brief (Stage 1) of the mast site.

Should significant archaeological deposits be present on site there may be requirement for a staged programme of archaeological works (which could include archaeological excavation, watching brief and/or evaluation as appropriate). The detailed methodology to be employed during any Stage 2 mitigation works and Stage 3 post excavation analysis and publication would, if required, be specified in addenda to this document. These addenda would be called project designs for any proposed fieldwork at Stage 2 and post-excavation research designs for any work required at Stage 3.

These addenda, if required, will be submitted by the applicant for the agreement of Perth and Kinross Heritage Trust's Heritage Officer prior to the commencement of any archaeological work which may be specified in the addenda documents. The Council will not discharge any planning condition which requires a programme of archaeological work until such time as it is satisfied that all stages of archaeological fieldwork have been completed (in the cases of Stages 1 and 2) or secured by contract (in the case of Stage 3).

All phases of work will be funded by the client, ABO Wind UK Ltd.

2.0 Site Location

The location of the met mast is at NGR 316012 755871 at an elevation of 374 m AOD. It is situated to the south-west of the summit of Seabeg, some 5 km to the north-east of Bridge of Cally, Perth and Kinross.

Access to the site will utilise the existing farm track which exits a minor road at NGR 315830 755611. A tracked excavator will access the location of the mast by tracking across approximately 100 m of open ground between the farm track and the mast.

It is proposed that the mast itself will not require any foundations. The mast will stand on a steel base plate seated on a bed of sleepers attached to the surface using pins up to 1 m in length. At four locations around the mast guy ropes, anchored with wooden sleepers set into the ground to a maximum depth of 2 m, will be used to support the mast. As the mast lies on rough grazing land a post and wire stock proof fence will be erected around the installation along the planning application boundary (approximately 70 m by 70 m).

3.0 Archaeological Background

Just to the north of the mast location a series of Dalrulzion-type hut circles have been recorded along with a stony bank and a series of small cairns (MPK4025, centred NO 1605 5609). The concentration of archaeological features here is located some 300 m to the north of the mast, however, a small amount of the stock proof fencing and anchor points may encroach on the southern edge of the area defined as with the Perth and Kinross Historic Environment record (HER).

Similarly, to the south of the mast location, a concentration of Dalrulzion-type hut circles, field banks and small cairns have been recorded (MPK3993, centred NO 162 555). The planning application boundary lays out with the Perth & Kinross HER area for this site.

Some 300 m to the west of the mast location two small cairns have been previously recorded (MPK4003,

NO1574 5583).

Further from the mast, although still in relative close proximity, other prehistoric remains including hut circles, cairns and a kerb-cairn (MPK4024) exist.

Given the concentration of particularly prehistoric remains in the area potential exists for further archaeological remains to be present both on the surface and buried.

4.0 Project Objectives

The project objectives are to:

- through an archaeological watching brief establish the presence or absence of any archaeological remains which may be present on site;
- determine the character, extent and significance of any archaeological deposits encountered;
- and, where preservation in-situ is not feasible, provide sufficient information to develop a stage 2 mitigation strategy to excavate and record any significant archaeological features or sites encountered during the evaluation to ensure preservation through record.

5.0 Methodology

All archaeological sites visible on the surface in the immediate vicinity of the proposed access route and mast working area (including the stock proof fencing) will be clearly demarcated prior to works commencing to ensure the sites are avoided during the works.

An archaeological watching brief will be maintained during all ground breaking works relating to the erection of the met mast. This is likely to relate primarily to the excavation of the guy rope anchor points and any ground levelling required for the installation of the mast base pad.

The strategy to be employed during the evaluation is outlined below:

- Excavations will be undertaken by a mechanical excavator using a toothless ditching bucket, where appropriate, under direct archaeological supervision. Given the nature of the topography the use of a toothless bucket may not always be feasible.
- The topsoil and any subsoil interfaces will be removed in spits to the level required for the construction works or the first archaeological horizon. Any archaeological features encountered will be cleaned by hand to help determine the date of the deposits, their character and extent. Such features will be recorded by written description on pro forma recording sheets, by photograph and by measured drawing.
- The number of archaeologists required during the watching brief will be dependent on the number of machines employed. Given the scale of this development it is very likely that one archaeologist on site will be sufficient to carry out the watching brief.
- Any archaeological features encountered will be investigated by the on-site archaeologists. Should negative-cut features be encountered a representative sample of them will be 50% excavated in order to determine their significance, date and function.

- Where archaeological deposits or features prove to be present, particularly if extensive, numerous or complex remains are encountered, the client will be informed and a site meeting will be held between all relevant parties to agree the most appropriate strategy. Where preservation in-situ is not feasible this will generally comprise a need to develop a stage 2 mitigation strategy to excavate and record any significant archaeological features or sites to ensure preservation through record.

6.0 Reporting

Should the watching brief encounter no or limited archaeology a single data structure report will be produced outlining the circumstances and results of the project. Should extensive, numerous or complex archaeological deposits or features prove to be present the results of any Stage 2 works will take the form of data structure report for each area or concentration of features as appropriate. Drafts of these reports will be submitted to Perth and Kinross Heritage Trust's Heritage Officer in digital editable formats for agreement. These reports will outline the main results of the fieldwork and incorporate lists of all features, finds, samples, photographs and drawings. They will be produced in-house by Northlight Heritage as a desk-top published document and disseminated in digital formats.

Where significant archaeological remains have to be excavated a post-excavation research design will be produced making recommendations for Stage 3 work including further analysis and publication. Implementation of any recommendations offered would, however, be conditional on meeting the approval of Perth and Kinross Heritage Trust's Heritage Officer.

Final decisions on the need for further Stage 2 or 3 works and on the detailed specification and nature of that work rest with Planning Authority.

Northlight Heritage will implement the standards and requirements of the Online Access to the Index of Archaeological Investigations (OASIS) and Discovery and Excavation in Scotland.

Copies of the reports will be provided to the developer, Perth and Kinross Heritage Trust and to the National Monuments Record for Scotland. Further copies can be distributed to other recipients if requested and specified.

7.0 Copyright

Unless otherwise agreed copyright for any report resulting from the archaeological work undertaken as part of the project will be deemed the intellectual property of Northlight Heritage as part of York Archaeological Trust.

8.0 Human Remains, Archive Arrangements and Finds Disposal

In the unlikely event that human remains are encountered during the fieldwork the client, local police and Perth and Kinross Heritage Trust will be notified immediately and no further work will take place on site until agreement on how to proceed has been reached by all parties.

Northlight Heritage will ensure that the project archive is prepared and ready for submission within six months of the completion of all fieldwork or post-excavation work as appropriate. The resultant site archive will be deposited with the National Monuments Records for Scotland.

The laws relating to Treasure Trove and Bona Vacantia in Scotland apply to all finds where the original owner cannot be identified. This includes all material recovered during archaeological fieldwork. Accordingly, all assemblages recovered from archaeological fieldwork are claimed automatically by the Crown and must be reported to the Scottish Archaeological Finds Allocation Panel through its secretariat, the Treasure Trove Unit. In the event of the discovery of small finds during the programme of archaeological works a filled-out copy of

the form "Declaration of an Archaeological Assemblage from Fieldwork" and two copies of the pertinent Data Structure Report will be submitted to the Panel at the conclusion of the fieldwork. The Panel will then be responsible for recommending to the Queen's and Lord Treasurer's Remembrancer (QLTR) which museum should be allocated the finds.

All artefacts will be stored temporarily by Northlight Heritage until a decision has been made by the Panel regarding the museum which will be allocated the finds for permanent curation. All finds will be transferred to the appropriate museum within six months of completion of the fieldwork, if no post-excavation work is required, or at the end of the post-excavation programme.

In the event that unallocated finds recovered from the site require to be removed from Scotland, for the purposes of post-excavation analysis, Northlight Heritage will be legally required to obtain the consent of the QLTR, in the form of a loan agreement. Initially, an indication of intent would be registered with the Treasure Trove Secretariat at the National Museums of Scotland after which formal consent would be applied for using the form "Application for authority to borrow unallocated Treasure Trove for research purposes". A consent form, signed by the QLTR and specifying conditions (such as the period during which finds may be held outside Scotland) would then be issued. Northlight Heritage will require to be in receipt of this signed consent form before items may be removed from the country.

9.0 Timetable

The watching brief will be conducted during August 2014.

10.0 Staffing

The project will be directed by Steven Black or Peta Glew. The project will be managed for Northlight Heritage by David Sneddon. A full CV for individuals concerned can be made available on request.

11.0 Health and Safety and Insurance

Prior to fieldwork commencing a risk assessment of the project will be undertaken. Northlight Heritage, as part of York Archaeological Trust, adheres to all standard Health and Safety regulations governing fieldwork projects.

Northlight Heritage also possess appropriate third party/public liability insurance cover, proof of which may be supplied upon request.

12.0 Standards and Monitoring Procedures

Northlight Heritage adheres to standards set by the Institute of Archaeologists Standards and Guidance Notes and Historic Scotland's various Operational Policy Papers.

Perth and Kinross Heritage Trust's Heritage Officer will have a formal monitoring role on behalf of Perth and Kinross Council.

All discoveries of significant archaeology, or other unexpected events which may occur which might significantly affect the archaeological work and/or the development, will be immediately reported by the site director to the Northlight Heritage project manager. The manager will in turn inform Perth and Kinross Heritage Trust's Heritage Officer and the developer (or the developer's designated agent) in order to allow any necessary discussion and planning for appropriate actions arising to take place.

David Sneddon will be the dedicated archaeological project manager for all the works outlined above and will be the first point of contact for any project-related liaison with Perth and Kinross Heritage Trust and the developer for all formal logistical, administrative and financial aspects of the archaeological project.

It will be important to ensure that all formal communication, requests (including any proposed amendments to on-site strategies) and contacts be made in the first instance to the project manager (as opposed to the site director or other members of the on-site team) and ultimately in writing to ensure organisational, administrative and financial efficiency.

Any site visitors, including Council representatives and employees on official business, will be required to conform to the health and safety regime in place during the fieldwork programme.

David Sneddon
Northlight Heritage

7 August 2014

APPENDIX 3: DES

LOCAL AUTHORITY:	Perth and Kinross
PROJECT TITLE/SITE NAME:	Green Burn Wind Farm, Bridge of Cally
PROJECT CODE:	4429161
PARISH:	Kirkmichael
NAME OF CONTRIBUTOR:	Steven Black
NAME OF ORGANISATION:	Northlight Heritage
TYPE(S) OF PROJECT:	Archaeological watching brief
NMRS NO(S):	MPK4025, MPK3993, MPK4003, MPK4024
SITE/MONUMENT TYPE(S):	Cairns, hut circles, field banks
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NO 16012 55871
START DATE (this season)	11 th August 2014
END DATE (this season)	12 th August 2014
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological watching brief was undertaken at Green Burn Wind Farm, Bridge of Cally on behalf of ABO Wind UK Ltd. The work was conducted on the 11 th and 12 th of August 2014. No archaeological remains were uncovered during the excavation of 10 trenches associated with the erection of a meteorological mast.
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	ABO Wind UK Ltd
ADDRESS OF MAIN CONTRIBUTOR:	Northlight Heritage, Studio 406, South Block, 64 Osborne Street, Glasgow, G1 5QH.
EMAIL ADDRESS:	northlight@yorkat.co.uk
ARCHIVE LOCATION (intended/deposited)	National Monuments Record for Scotland (intended)