

**Peattie Farm Wind Turbine,
Inverbervie:
Archaeological Mitigation**

Data Structure Report



by Peter Klemen

issued 28th August 2015

on behalf of Green Cat Renewables

RATHMELL 
ARCHAEOLOGY LTD

Quality Assurance

This report covers works which have been undertaken in keeping with the issued brief as modified by the agreed programme of works. The report has been prepared in keeping with the guidance of Rathmell Archaeology Limited on the preparation of reports. All works reported on within this document have been undertaken in keeping with the Institute for Archaeologists' Standards and Policy Statements and Code of Conduct.

Signed  Date28/08/2015....

In keeping with the procedure of Rathmell Archaeology Limited this document and its findings have been reviewed and agreed by an appropriate colleague:

Checked  Date28/08/2015.....

Copyright Rathmell Archaeology Limited. All rights reserved.

No part of this report may be copied or reproduced by any means without prior written permission from Rathmell Archaeology Limited. If you have received this report in error, please destroy all copies in your possession or control and notify Rathmell Archaeology Limited.

This report has been prepared for the exclusive use of the commissioning party and unless otherwise agreed in writing by Rathmell Archaeology Limited, no other party may use, make use of or rely on the contents of the report. No liability is accepted by Rathmell Archaeology Limited for any use of this report, other than the purposes for which it was originally prepared and provided.

Opinions and information provided in the report are on the basis of Rathmell Archaeology Limited using due skill, care and diligence in preparation of the same and no explicit warranty is provided as to their accuracy. It should be noted and it is expressly stated that no independent verification of any of the documents or information supplied to Rathmell Archaeology Limited has been made.

Contents

Introduction	3
Historical and Archaeological Background	3
Project Works	7
Findings	7
Discussion	12
Recommendations	12
Conclusion	12
References	13
Documentary	13
Cartographic	13
Appendix 1: Registers	14
Context Register	14
Photographic Register	14
Appendix 2: Discovery & Excavation in Scotland	17
Contact Details	18

Figures

Figure 1a: Extract from Roy's <i>Highland Military Survey</i> (1747-52)	4
Figure 1b: Extract from Garden A <i>Map of Kincardineshire</i> (1774)	4
Figure 2a: Extract from Thomson <i>Kincardine Shire</i> (1822)	5
Figure 2b: Extract from the <i>6-inch 1st edition Ordnance Survey</i> (1868)	5
Figure 3a: Extract from the <i>6-inch 2nd edition Ordnance Survey</i> (1904)	6
Figure 3b: Pre-excavation of the route for the haul road	6
Figure 4a: Excavating the haul road showing context (001)	8
Figure 4b: Fully excavated crane pad area showing context (002)	8
Figure 5a: Field rubble drain (003)	9
Figure 5b: Top WNW section of cable trench, showing context (002)	9
Figure 6a: Middle section of cable trench, showing context (002)	10
Figure 6b: Lower ESE section of cable trench	10
Figure 7: Location of the monitored areas: turbine base, crane pad, haul and cable trench.	11

Introduction

1. This Data Structure Report has been prepared for Green Cat Renewables Ltd in support of the Erection of 1 No. 500kW Wind Turbine (Amendment to Previously Approved APP/2013/1555), with ancillary infrastructure including electrical housing unit, access track and hardstanding at Peattie Farm, Inverbervie, DD10 0PP (Planning App: APP/2014/2573).
2. The archaeological works are designed to mitigate the impact on any archaeological remains within the development area to the agreement of Aberdeenshire Council Archaeology Service who advise Angus Council on archaeological matters. Rathmell Archaeology Limited has been appointed by Green Cat Renewables Ltd to undertake the development and implementation of archaeological mitigation works.
3. Aberdeenshire Council Archaeology Service (ACAS) has specified that the developer shall secure the implementation of an archaeological watching brief on any groundbreaking and development work following a 'Watching-brief' Condition (PAN 2/2011, SPP, SHEP). They have provided guidance on the structure of archaeological works required on this site during development. All works and reporting will comply with Aberdeenshire Council Archaeology Services Standard for Archaeological Fieldwork.

Historical and Archaeological Background

4. Peattie Farm is located 2.5 miles to the west of Inverbervie and the development area is located in an arable field 500m south of Peattie Farm. As a county, Aberdeenshire has had a considerable number of surveys that have recorded its changing character.
5. Regarding Peattie Farm and the development area, William Roy's Military Survey of Scotland, Highlands (1747-52) (Figure 1a) is the first to provide a detailed depiction of the area of Peattie Farm. The farm is depicted as three small rectilinear buildings with a square shaped enclosure under the name 'Petty' situated to the east of ploughed farmland and to the south of a trackway.
6. By the time of William Garden's A Map of Kincardineshire (1774) (Figure 1b) the individual buildings depicted in Roy (1747-52) have merged to become a single building in the landscape with cultivated land now situated to the east of the farmstead. Both the name of the farmstead and the trackway have also changed from Roy (1747-52); with the name being either 'Patie' or 'Palie' and the track now running north to south to the west of the farmstead.
7. The only notable changes between Garden's (1774) map and Thomson's Kincardine Shire (1822) (Figure 2a) are the lack of cultivated land in the surrounding area of the farmstead and the name, which was recorded as 'Palie'.
8. The area around the farmstead changes significantly between Thomson's (1822) map and the 6-inch 1st edition Ordnance Survey (1868) (Figure 2b). The landscape has become increasingly enclosed with the present day field boundaries, road alignment and woodland all present. The present Peattie farmstead is depicted on the 6-inch 1st edition Ordnance Survey (1868) as an 'E-shaped' steading with an associated sluice to the northwest, a small wooded area to the southwest and an 'L-shaped' cottage to the southeast.
9. By the 6-inch 2nd edition Ordnance Survey (1904) (Figure 3a) the 'E-shaped' steading has been extended to form a more rectilinear building. The only major change that has occurred is the sluice to the northwest of the farmstead which has been converted to a dam for a mill.
10. The farmstead of Peattie farm (Canmore ID: 122219) lies north of the development area. Current mapping shows that the rectangular shaped farmstead sits within a collection of other agricultural buildings that make up the farm.



Figure 1a: Extract from Roy's *Highland Military Survey* (1747-52)



Figure 1b: Extract from Garden A *Map of Kincardineshire* (1774)

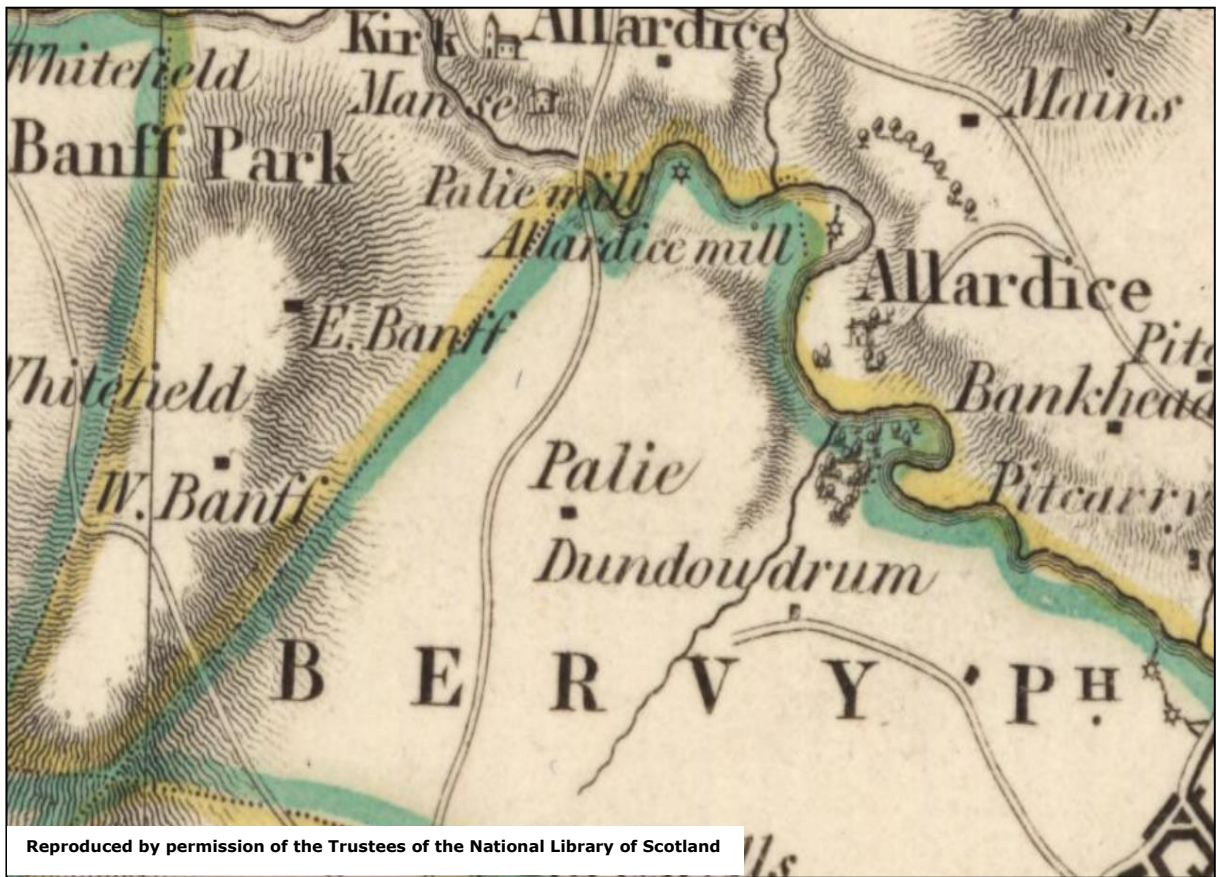


Figure 2a: Extract from Thomson *Kincardine Shire* (1822)

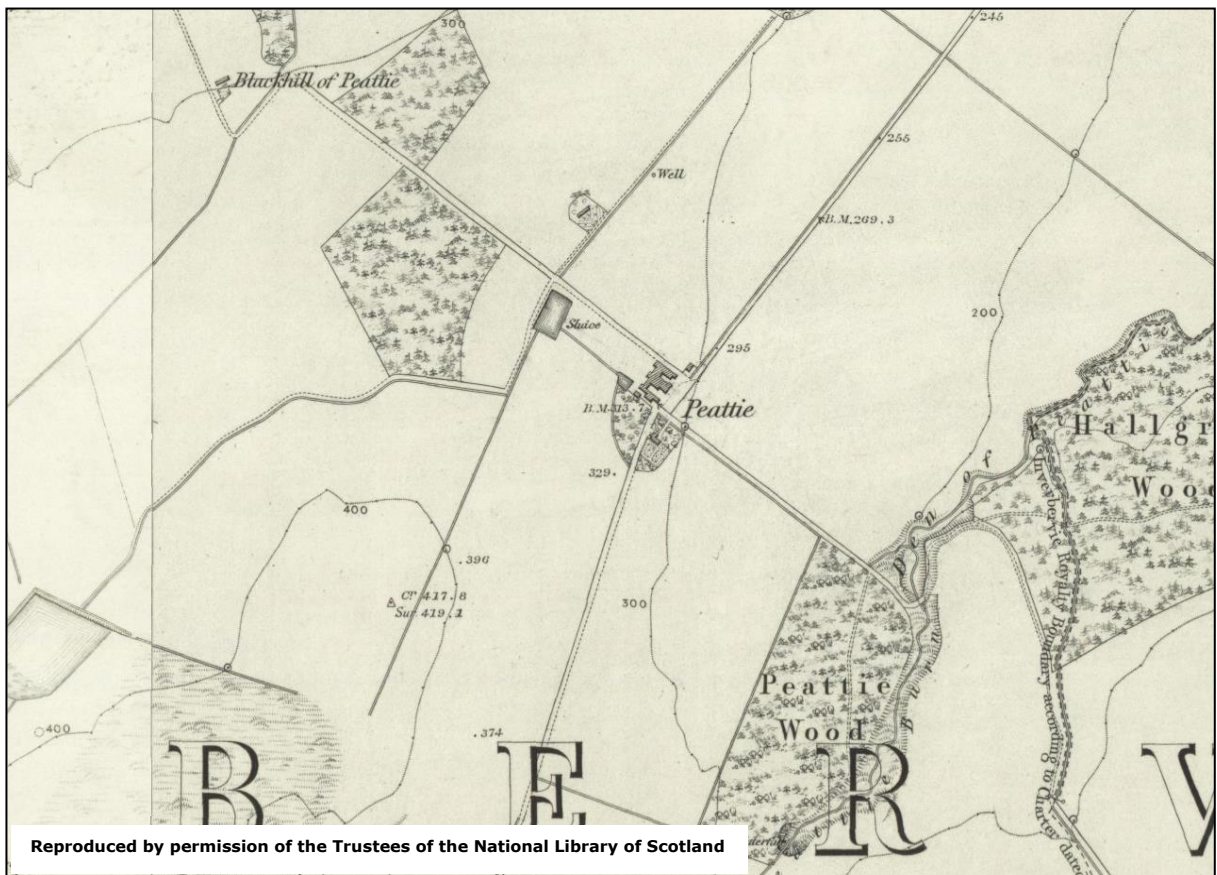


Figure 2b: Extract from the 6-inch 1st edition *Ordnance Survey* (1868)

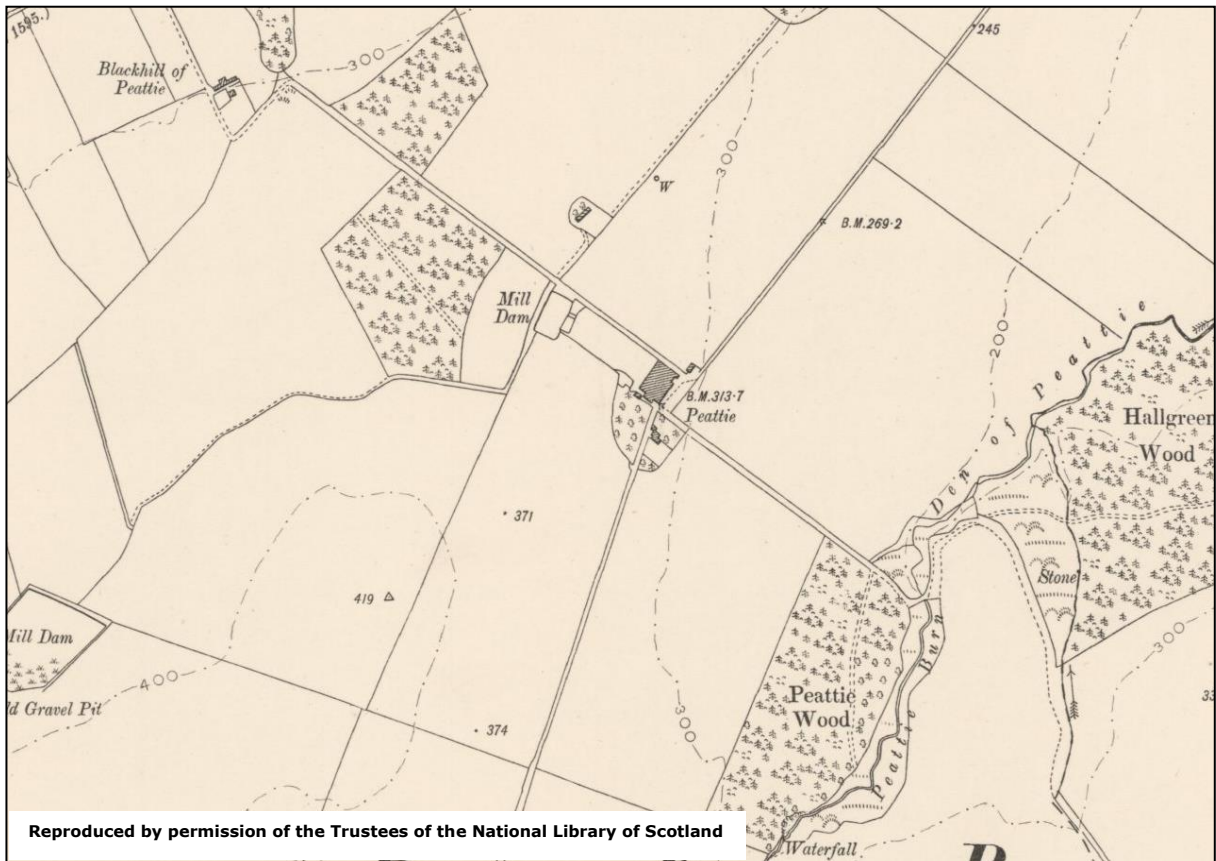


Figure 3a: Extract from the 6-inch 2nd edition Ordnance Survey (1904)



Figure 3b: Pre-excavation of the route for the haul road

11. There are three separate recordings of prehistoric evidence near the development area. Firstly, a potential circular pit approximately 2m in diameter, a collection of smaller pits and a possible 6m long by 3m wide souterrain have been recorded on aerial photographs (RCAHMSAP 2001) to the south of the development area (Canmore ID: 251445). Secondly, a possible lithic working site has been recorded to the north of the development area (Canmore ID: 36856) where a large collection of flint chippings and a blue flint axe were discovered after ploughing. A number of arrowheads have also been recovered from the surrounding landscape (Brodie 1873). Thirdly, to the west of the development area are a "large number" of clearance cairns in an area of woodland (Canmore ID: 143926).
12. No known archaeological sites have been recorded within the proposed development area although there has been a lack of any previous development. The close proximity of the prehistoric remains described above, and the lack of any previous development within the area, demonstrates the potential for archaeological features to have survived.

Project Works

13. The programme of mitigation consisted of the archaeological monitoring of the excavation of foundation trenches and cable trenches associated with a single wind turbine. Works were undertaken by Rathmell Archaeology Ltd and consistent with the terms described in the Written Scheme of investigation (Klemen 2015). Monitoring, recording and excavation were carried out in conjunction with the terms of this document.
14. Archaeological monitoring works were undertaken over two phases. Site investigation works consisting of the excavation of the haul road, turbine base and crane area were undertaken on the 11th, 12th and 15th June 2015. Excavations were carried out by a Volvo EC180 DL tracked excavator.
15. Monitoring of the cable trench was undertaken on the 25th August 2015. Excavations were carried out by Volvo EC180 DL tracked excavator.
16. Any potentially significant archaeological features, structures or deposits encountered were recorded by the archaeologist on site, using Rathmell Archaeology Ltd standard methods. All contexts, small finds and environmental samples were given unique numbers with bulk finds collected by context.
17. All works complied with Aberdeenshire Council Archaeological Services *Standard for Archaeological Fieldwork*, the Chartered Institute for Archaeologists' Standards and Policy Statements and Code of Conduct and Historic Scotland Policy Statement.

Findings

18. The first stage of archaeological monitoring works covered the machine digging of the haul road, turbine base and crane pad area. The excavation started along from the edge of the private track leading to Peattie Farm and headed in an approximately WNW direction up hill to the location of the wind turbine (Figures 3b, 4a & 7).
19. The width of the road was 4m with 250mm-300mm of (001) topsoil removed and exposing in areas (002) the natural subsoil. Context (001) was characterised by a moderately compacted dark brown loam silty sand with very frequent rounded stones ranging in size from 50mm-100mm (Figure 4a). Context (002) was formed of a moderately compacted dark red brown silty sand with very frequent rounded and sub-rounded stones ranging in size from 50mm-300mm (Figure 4b).
20. The crane pad area was an area of 35m by 35m with the turbine area excavated to a size of 15m by 15m.
21. The only feature recorded was (003) which consisted of a rubble field drain aligned northeast-southwest measuring 300mm in width with 1.7m exposed/observable (Figure 5a).



Figure 4a: Excavating the haul road showing context (001)



Figure 4b: Fully excavated crane pad area showing context (002)



Figure 5a: Field rubble drain (003)



Figure 5b: Top WNW section of cable trench, showing context (002)



Figure 6a: Middle section of cable trench, showing context (002)



Figure 6b: Lower ESE section of cable trench

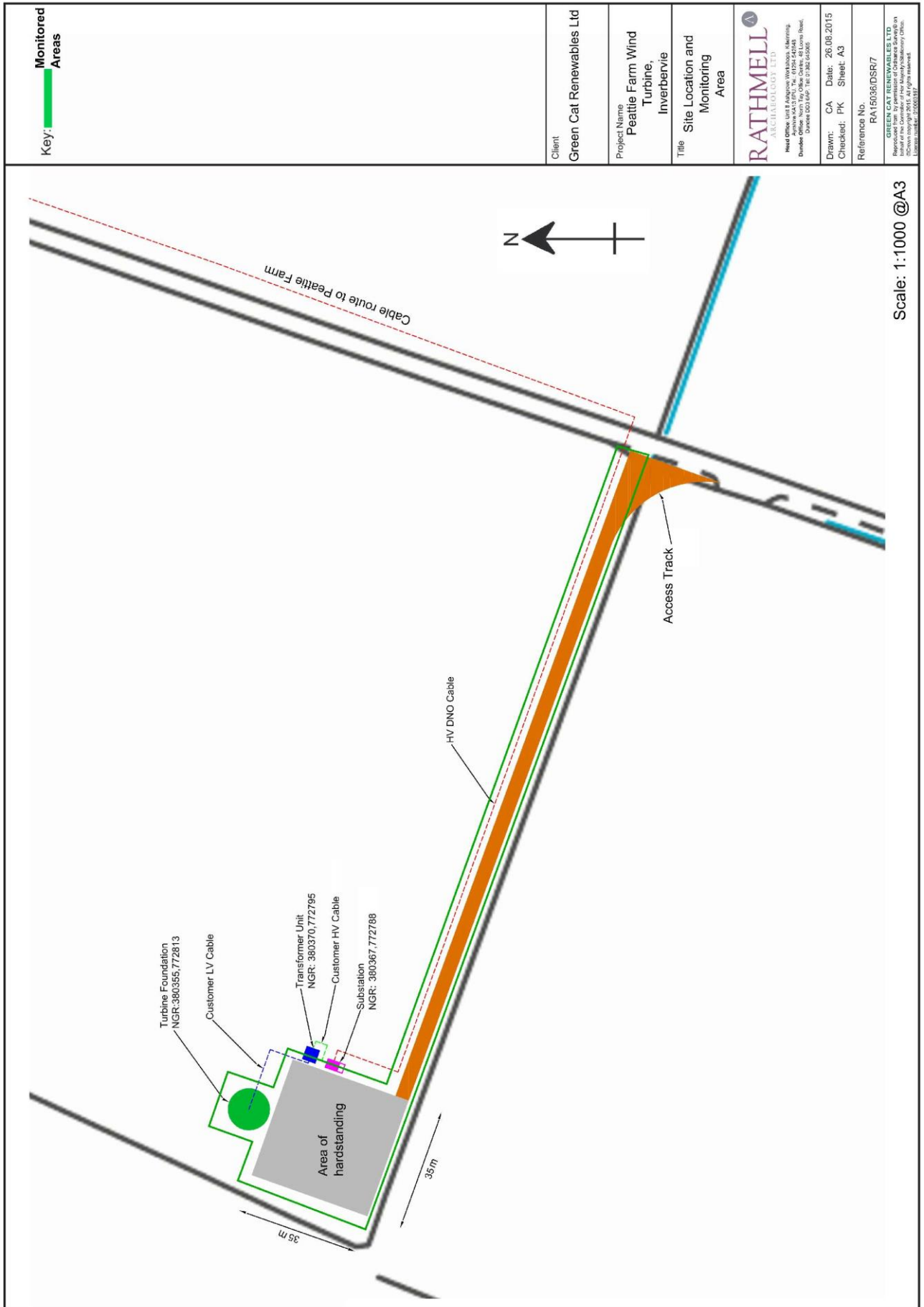


Figure 7: Location of the monitored areas: turbine base, crane pad, haul and cable trench.

22. The second stage of works comprised the excavation for the cable trench which ran parallel to the haul road on its north side (Figures 5b, 6a & 6b). Context (001) comprised the same topsoil/ploughsoil as that recorded for the haul road and at the same thickness. The dimensions for the cable trench were 4m in width and approximately 200m in length. Context (002) formed the natural subsoil and the same as that recorded along the length of the haul road.
23. No significant archaeological features were recorded during the course of the excavation works for either the haul pad, turbine bases, crane pad area or the cable trench.

Discussion

24. In the immediate and wider landscape there are a number of sites that have been recorded representing archaeological activity in the form of Prehistoric features. However during each stage of monitoring works no significant archaeological features were uncovered.
25. The only anthropic feature recorded was in the form of a rubble-filled drain partially exposed near to the lower eastern end of the haul road. This form of field drain is considered to represent 18th to early 19th century agricultural activity and would have been inserted during a period when the landscape across much of Scotland was under a regime of '*improvement*'.

Recommendations

26. The archaeological mitigation works did not reveal any significant archaeological material from within the development area. Those features that were revealed are considered to be of recent origin.
27. As such it is the recommendation of Rathmell Archaeology Ltd that no further works are appropriate. The appropriateness and acceptability of our recommendations rest with Aberdeenshire Council Archaeology Service on behalf of Aberdeenshire Council.

Conclusion

28. A programme of archaeological monitoring was carried over two phases on the 11th, 12th, 15th June and 25th August 2015 on behalf of Green Cat Renewables in support of the construction of a single wind turbine at Peattie Farm, Inverbervie, Aberdeenshire (Planning Ref: APP/2014/2573). This Data Structure Report covers the monitoring works requested by Aberdeenshire Council Archaeology Service who advise Aberdeenshire Council on archaeological matters.
29. In the course of the archaeological monitoring no significant archaeology was uncovered, only one feature relating to agricultural activities was recorded in the form of a rubble filled drain and representing potentially 18th to 19th century activity.

References

Documentary

Klemen, P. 2015 *Peattie Farm Wind Turbine: Archaeological Mitigation, Written Scheme of Investigation*. Unpublished commercial report by Rathmell Archaeology Ltd.

Brodie, J. 1873 'Notice of a collection of flint implements found in the neighbourhood of Fordun, Kincardineshire, now presented to the Museum', *Proceedings of the Society of Antiquities Scotland*, vol.9 Page: 500

Cartographic

Roy, W. 1747-52 *Military Survey of Scotland Highlands*

Garden, W. 1774 *A Map of Kincardineshire*

Thomson, J. 1822 *Kincardine Shire*

Ordnance Survey 1868 *6-inch First Edition Sheet 25*

Ordnance Survey 1904 *6-inch Second Edition Sheet 2*

Appendix 1: Registers

Context Register

Context No.	Area/ Trench	Type	Description	Interpretation
001	Whole area (haul road, crane pad, turbine base, cable trench)	Deposit	Moderately compacted dark brown loam silty sand with very frequent rounded stones ranging in size from 50mm-100mm.	Topsoil/ploughsoil
002	Whole area (haul road, crane pad, turbine base, cable trench)	Deposit	Moderately compacted dark brown red brown silty sand with very frequent rounded and sub-rounded stones ranging in size from 50mm-300mm.	Natural subsoil
003	Haul road	Feature	E-W orientated, 300mm wide and 1.7m exposed, with rounded stones 50mm-100mm in size.	Rubble field drain

Photographic Register

Image No.	Digital	Description	From	Date
01	1	Pre-ex of start of haul road (east end)	SE	11/06/15
02	2	Pre-ex of haul road	E	11/06/15
03	3	Pre-ex of haul road (approximately central)	E	11/06/15
04	4	Pre-ex of haul road upper western end	W	11/06/15
05	5	Area of hardstanding & turbine pre-ex	SW	11/06/15
06	6	Area of hardstanding & turbine pre-ex	S	11/06/15
07	7	Working shot and showing small area of (002)	SW	11/06/15

Image No.	Digital	Description	From	Date
08	8	Working shot of haul road	E	11/06/15
09	9	Working shot of haul road	E	11/06/15
10	10	Rubble field drain (003)	N	11/06/15
11	11	Working shot of haul road	E	12/06/15
12	12	Haul road looking east	SW	12/06/15
13	13	Working shot on haul road	S	12/06/15
14	14	Demonstrating (002) in crane pad area	S	12/06/15
15	15	Working shot excavation crane pad	SE	15/06/15
16	16	Half crane pad area extended	SW	15/06/15
17	17	Completed topsoil strip of haul road from the east end	E	15/06/15
18	18	Crane pad fully excavated	SW	15/06/15
19	19	Crane pad fully excavated and turbine pad, working shot	SE	15/06/15
20	20	Crane pad fully excavated	NE	15/06/15
21	21	Working shot excavating turbine area	NW	15/06/15
22	22	Excavated turbine area	E	15/06/15
23	23	Excavated turbine area	SW	15/06/15
24	24	Working Shot	W	25/08/15
25	25	Working Shot	N	25/08/15
26	26	Middle section of cable trench	E	25/08/15
27	27	Upper section of cable trench	E	25/08/15
28	28	Upper section of cable trench	E	25/08/15
29	29	Top section of cable trench	NW	25/08/15
30	30	Upper section of cable trench	NW	25/08/15

Image No.	Digital	Description	From	Date
31	31	Bottom ESE start of the Haul road	E	25/08/15

Appendix 2: Discovery & Excavation in Scotland

LOCAL AUTHORITY:	Aberdeenshire
PROJECT TITLE/SITE NAME:	Peattie Farm Wind Turbine, Inverbervie
PROJECT CODE:	RA15041
PARISH:	Inverbervie
NAME OF CONTRIBUTOR:	Peter Klemen
NAME OF ORGANISATION:	Rathmell Archaeology Limited
TYPE(S) OF PROJECT:	Monitoring
NMRS NO(S):	None
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NO 8035 7276 (Centred)
START DATE (this season)	01 st May 2015
END DATE (this season)	25 th August 2015
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (may include information from other fields)	<p>A programme of archaeological monitoring was carried over two phases on the 11th, 12th, 15th June and 25th August 2015 on behalf of Green Cat Renewables in support of the construction of a single wind turbine at Peattie Farm, Inverbervie, Aberdeenshire (Planning Ref: APP/2014/2573). This Data Structure Report covers the monitoring works requested by Aberdeenshire Council Archaeology Service who advise Aberdeenshire Council on archaeological matters.</p> <p>In the course of the archaeological monitoring no significant archaeology was uncovered, only one feature relating to agricultural activities was recorded in the form of a rubble filled drain and representing potentially 18th to 19th century activity.</p>
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	Green Cat Renewables
ADDRESS OF MAIN CONTRIBUTOR:	Unit 8 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU
EMAIL ADDRESS:	contact@rathmell-arch.co.uk
ARCHIVE LOCATION (intended/deposited)	Report to Aberdeenshire Council Archaeology Service and archive to RCAHMS Collections.

Contact Details

30. Rathmell Archaeology can be contacted at our Registered Office or through the web:

Ayrshire Office:

Rathmell Archaeology Ltd
Unit 8 Ashgrove Workshops
Kilwinning
Ayrshire
KA13 6PU

www.rathmell-arch.co.uk
t.: 01294 542848
f.: 01294 542849
e.: contact@rathmell-arch.co.uk

Dundee Office:

Rathmell Archaeology Ltd
North Tay Office Centre
48 Loons Road
Dundee
DD3 6AP

www.rathmell-arch.co.uk
t.: 01382 339277
m.: 07827 913796
e.: peter.klemen@rathmell-arch.co.uk

31. The Aberdeenshire Council Archaeology Service can be contacted at their office or through the web:

Archaeology Service
Aberdeenshire Council
Woodhill House
Westburn Road
Aberdeen
AB16 5GB

www.aberdeenshire.gov.uk
t.: 01224 664221
e.: archaeology@aberdeenshire.gov.uk

End of Document