

Report by: Trysor

For: Mr Dilwyn Thomas

September 2013



By

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Trysor Project No. 2012/321

For: Mr Dilwyn Thomas

September 2013

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Cover photograph: Foundation trench (Trench 1) for the southwestern turbine, looking east-southeast.

RHIF YR ADRODDIAD - REPORT NUMBER: Trysor 2012/321

DYDDIAD 29^{ain} Medi 2013

DATE

29th September 2013

Paratowyd yr adroddiad hwn gan bartneriad Trysor. Mae wedi ei gael yn gywir ac yn derbyn ein sêl bendith.

This report was prepared by the Trysor partners. It has been checked and received our approval.

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Jenny Hall

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Paul Sambrook

DYDDIAD DATE

29/09/2013

Croesawn unrhyw sylwadau ar gynnwys neu strwythur yr adroddiad hwn.

We welcome any comments on the content or structure of this report.

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Trysor is a Registered Organisation with the Institute for Archaeologists and both partners are Members of the Institute for Archaeologists, www.archaeologists.net.

Jenny Hall (BSc Joint Hons., Geology and Archaeology, MIfA) had 12 years excavation experience, which included undertaking watching briefs prior to becoming the Sites and Monuments Record Manager for a Welsh Archaeological Trust for 10 years. She has been an independent archaeologist since 2004 undertaking a variety of work that includes upland survey, desk-based appraisals and assessments, and watching briefs.

Paul Sambrook (BA Joint Hons., Archaeology and Welsh, MIfA, PGCE) has extensive experience as a fieldworker in Wales. He was involved with Cadw's pan-Wales Deserted Rural Settlements Project for 7 years. He also undertook Tir Gofal field survey work and watching briefs. He has been an independent archaeologist since 2004 undertaking a variety of work including upland survey, desk-based appraisals/assessments, and watching briefs.

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1. Summary

In July 2013, Trysor undertook a watching brief in two fields at SN2729140145 and SN2719940044 to the northeast of Pengwern Isaf, Cenarth, Carmarthenshire. Whilst being observed by Trysor, the foundation trenches for two turbines were stripped of topsoil down to natural rock, a depth of 0.10m -0.20m. No archaeological features/layers were observed.

2. Copyright

Trysor hold the copyright of this report and of the paper and digital archive. Further paper copies may be made of this report without gaining permission to reproduce but it must be noted that Figure 3, & 4 include other copyright material and should not be copied.

3. Introduction

Mr Dilwyn Thomas, of Pengwern Isaf, Cenarth, Newcastle Emlyn, SA38 9LD commissioned Trysor heritage consultants to undertake an archaeological watching brief on groundworks for two 55kW wind turbines relating to planning application number: W/26372.

The location of the turbines lay in fields to the northeast of the Pengwern Isaf farm complex, Cenarth, Carmarthenshire.

4. The development

The development consisted of two 55Kw wind turbines in two separate fields to the northeast of Pengwern Isaf farm complex. One turbine is at SN2729140145 and the other at SN2719940044 and both required concrete bases 9 metres by 9 metres. A single cable trench runs from one to the other and then southwestwards to the farm complex.

5. Conditions on the consent

In granting approval for the application, the Local Planning Authority imposed a condition on the outline consent; the condition specified the actions necessary to mitigate the impact of the development on the archaeological resource.

The developer shall ensure that a professionally qualified archaeologist is present during the undertaking of any ground works in the development area, so that an archaeological watching brief can be carried out. The archaeological watching brief will be undertaken to the standards laid down by the Institute for Archaeologists. The Planning Authority will be informed, in writing at least two weeks prior to the commencement of the development, of the name of the said archaeologist.

Reason: to protect the historic environment interests whilst enabling development.

6. Specification

Trysor prepared a specification for the watching brief, see Appendix A.

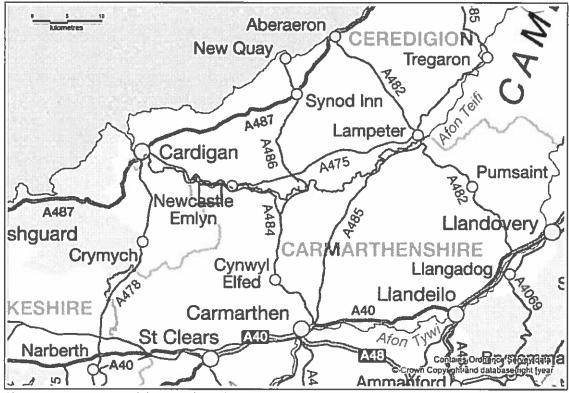


Figure 1: Location of the watching brief within southwest Wales.

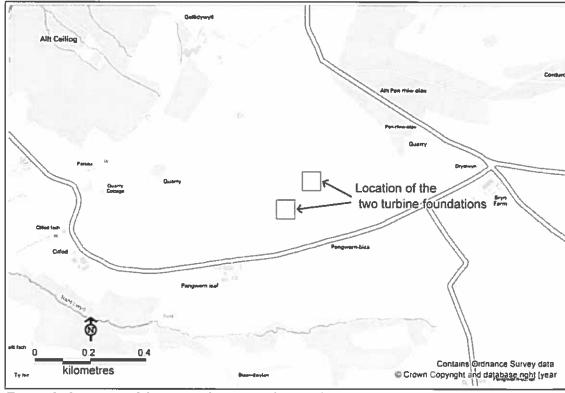


Figure 2: Location of the two turbines, northeast of Pengwern Isaf.

7. Historical and Archaeological Overview

Dyfed Archaeological Trust undertook an archaeological appraisal in May 2012 (Murphy, 2012) which was submitted as part of the planning application.

They concluded that the potential for archaeological remains of Palaeolithic, Mesolithic, Iron Age, Roman, Early Medieval, Medieval, and Post Medieval date was low. However a probable Bronze Age round barrow was identified during their field visit, 120 metres from the northernmost turbine. It was therefore thought possible that other Bronze Age features may be found nearby.

8. Methodology

On Wednesday 24th July 2013, the two foundation trenches, each being 9 metres by 9 metres, was stripped of topsoil down to subsoil using a mechanical excavator and a grading bucket. This process was observed by Trysor.

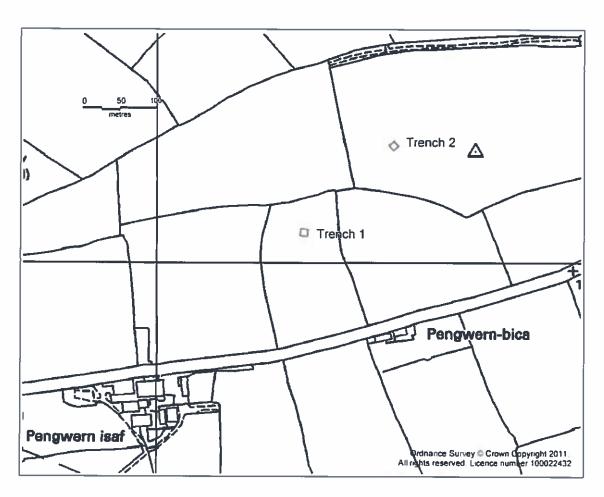


Figure 3: The location of the two foundation trenches for the turbines



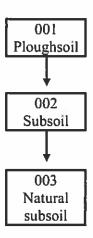
9. Site Stratigraphy

The watching brief was carried out in accordance with the Institute for Archaeologists' *Standard and Guidance for an Archaeological Watching Brief* (Institute for Archaeologists, 2008). The mechanical topsoil strip of the foundation trenches for the two turbines was watched by Trysor and the stratigraphy of the site recorded.

9.1 Context Catalogue

a) Trench 1 at SN2719540038

Context Number	Depth	Description	Interpretation
001	0.10m -	10YR4/3, dry, friable with small	Topsoil
	0.20m	stones	
002		10YR4/4, dry, friable with small	Subsoil
	-	stones	
003		Vertically bedded shale with an undulating surface, some quartz in	Natural rock
		the eroded surface of the shale, part	
		1	
		of a natural quartz vein.	

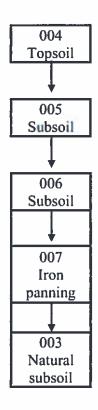


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Pengwern Isaf, Cenarth, Carmarthenshire, Watching Brief

a) Trench 2 at SN2731740158

Context Number	Depth	Description	Interpretation
004	0.20m	10YR4/2, dry, friable with small	Topsoil
	0.2011	stones	
005		5YR4/6	Subsoil
006		10YR3/2, a 1 metre wide layer in natural hollow	Subsoil, probably coloured by iron panning
007	-	IOR3/4, layer of iron panning	Natural iron panning
003	-	Vertically bedded shale with an undulating surface, some quartz in the eroded surface of the shale, part of a natural quartz vein.	Natural rock



10. Photographs

Colour digital photographs were taken of topsoil stripping and excavation of trenches using a 14M pixel camera. The following table describes the content of each photograph included in the project archive and their locations are provided in the following map, see Figure 4. The photographs are included in Appendix B at the end of the report.

Photo Number	Description	Date Taken	Direction
PGI2013_101	Trench 1, after removal of topsoil	24/07/2013	Looking east
	from the underlying shale		southeast
PGI2013_102	Trench 1, after removal of topsoil	24/07/2013	Looking south
	from the underlying shale		southwest
PGI2013_103	Trench 2 after removal of topsoil	24/07/2013	Looking northeast
	from the underlying shale		
PGI2013_104	Round barrow PRN 100717 with a concrete triangulation pillar on top	24/07/2013	Looking northeast
	of it. The barrow lies on the		
	highest point of the rounded hill		
	and 110 metres east of the closest		
	turbine base		

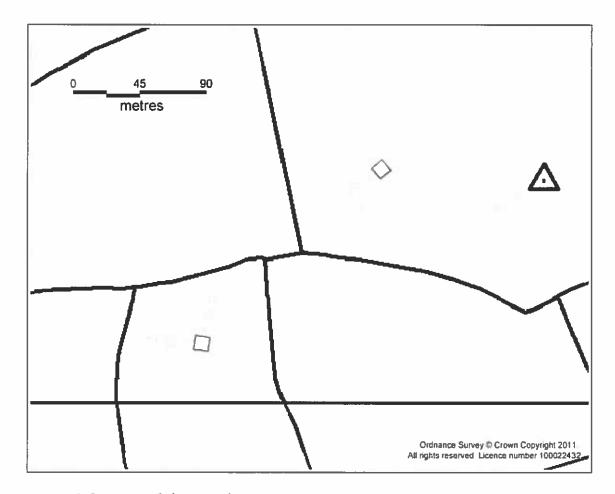


Figure 4: Location of photographs



11. Conclusion

No archaeological contexts were seen during the removal of the thin layer of soil covering the natural shale in either turbine foundation trench.

12. Archive

The archive and a copy of the report and photographs will be deposited with the National Monuments Record, Aberystwyth. Photographs are in TIFF format, following the standard required by the RCAHMW.

Further copies of the report have also been supplied to Mr Dilwyn Thomas, and the Historic Environment Record at Dyfed Archaeological Trust, Llandeilo.

13. Sources

13.1 Unpublished sources

Murphy, F, 2012, Pengwern Isaf, Cenarth, Carmarthenshire: Archaeological Appraisal 2012 - Revised

13.2 If A Standard and Guidance

Institute for Archaeologists, 2008 (revised), Standard and Guidance for an Archaeological Watching Brief, available online from the IfA website, www.archaeologists.net

13.3 Online Sources

Archwilio – Online access to regional Historic Environment Record (HER) for Pembrokeshire, <u>www.archwilio.org.uk</u> (Primary Reference Numbers or PRNs of sites recorded in the HER are provided in point 11).



APPENDIX A - Watching Brief Specification

PENGWERN ISAF, CENARTH, CARMARTHENSHIRE ARCHAEOLOGICAL WATCHING BRIEF SPECIFICATION

Planning permission – W/26372

1. Introduction

Mr Dilwyn Thomas, of Pengwern Isaf, Cenarth, Newcastle Emlyn, SA38 9LD has commissioned Trysor heritage consultants to undertake an archaeological watching brief on groundworks for two 55kW wind turbines relating to planning application number: W/26372.

The proposed location of the turbines lies in fields to the northeast of the Pengwern Isaf farm complex, Cenarth, Carmarthenshire.

2. The development

The development consists of two 55Kw wind turbines in two separate fields to the northeast of Pengwern Isaf farm complex. One turbine is at SN2729140145 and the other at SN2719940044 and both will have concrete bases 9 metres by 9 metres. A single cable trench will run from one to the other and then southwestwards to the farm complex.

Nature of the archaeological resource

Dyfed Archaeological Trust undertook an archaeological appraisal in May 2012 (Murphy, 2012) which was submitted as part of the planning application.

They concluded that the potential for archaeological remains of Palaeolithic, Mesolithic, Iron Age, Roman, Early Medieval, Medieval, and Post Medieval date was low. However a possible Bronze Age round barrow, 120 metres from the northernmost turbine, was identified during their field visit. It is therefore possible that other Bronze Age features may be found nearby.

4. Conditions on the consent

In granting approval for the application, the Local Planning Authority imposed a condition on the outline consent; the condition specifies the actions necessary to mitigate the impact of the development on the archaeological resource.

The developer shall ensure that a professionally qualified archaeologist is present during the undertaking of any ground works in the development area, so that an archaeological watching brief can be carried out. The archaeological watching brief will be undertaken to the standards laid down by the Institute for Archaeologists. The Planning Authority will be informed, in writing at least two weeks prior to the commencement of the development, of the name of the said archaeologist.

Reason: to protect the historic environment interests whilst enabling development.

5. Field methodology

The watching brief will be carried out in accordance with Institute for Archaeologists' Standard and Guidance for an Archaeological Watching Brief (IfA, 2008a)



A two-person team will watch the mechanical excavation for the turbine foundations and will examine the exposed stratigraphy of the groundworks undertaken in association with the development. All trenches will be examined and features of archaeological interest recorded. Excavation of any features will be limited to that necessary to establish their extent and character, unless their excavation is required to allow the development to proceed.

6. Contingency arrangements if archaeological features are discovered

In the event that archaeological remains are encountered, where appropriate investigation falls outside the scope of this watching brief specification, a meeting between Trysor, the applicant, Dyfed Archaeological Trust Heritage Management Section and the Local Planning Authority case officer will be convened in order to agree a course of action. The applicant will be responsible for paying for any further work necessary.

7. Health & Safety

Trysor will undertake a risk assessment in accordance with their health and safety policy.

8. Recording

A plan of the groundworks, and representative sections if appropriate, will be drawn, at an appropriate scale, recording all features of archaeological interest. The plan will be based on the applicants' survey drawings of the development area.

A written record of all activity will be kept in a project specific notebook. If archaeological contexts are encountered they will be recorded following the *Central Excavation Unit Manual: Part 2: Recording*, 1986, using a consecutive numbering system.

Any artefacts will be dealt with in accordance with the guidance provided in the Institute for Archaeologists Standard and Guidance for the collection, documentation, conservation and research of archaeological materials (IfA 2008b). Any artefacts will be retained, cleaned and stored. Following reporting they will be returned to the applicant.

Should any human remains be encountered, the Coroner and Regional Archaeological Trust will be immediately informed and the remains left *in situ*.

Colour digital photographs will be taken, as appropriate, using a 14M pixel camera. A written record will be made on site of the photographs taken. Appropriate photographic scales will be used.

9. Reporting

A report on the watching brief will be prepared according to the requirements of Annexe 1 of the Institute for Archaeologists' *Standard and Guidance for an Archaeological Watching Brief* (IfA, 2008a, p.7) following the completion of the work. Copies of the report will be provided to the client, the Regional Historic Environment Record and the National Monuments Record.

10. Dissemination

A summary of the work undertaken and its findings will be submitted to Archaeology in Wales.

11. Archive

The paper archive will be deposited with the National Monuments Record, including a copy of the final report in accordance with the IfA's Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives (IfA, Undated). This archive will include all written, drawn and photographic records relating directly to the investigations undertaken. Photographs will be supplied in TIFF format in a file size greater than 11MB, following the standard required by the RCAHMW for Upland Survey (RCAHMW, 2011).

12. Resources to be used

Two members of staff will undertake the watching brief. They will be equipped with standard field equipment, including digital cameras, GPS and first aid kits.

Trysor have access to the computer hardware and software required to deliver the completed final report and archive to a professional standard.

13. Qualification of personnel

Trysor is a Registered Organisation with the Institute for Archaeologists and both partners are Members of the Institute for Archaeologists, www.archaeologists.net

Jenny Hall (BSc Joint Hons., Geology and Archaeology, MIfA) had 12 years excavation experience, which included undertaking watching briefs prior to becoming the Sites and Monuments Record Manager for a Welsh Archaeological Trust for 10 years. Since 2004 she has been an independent archaeologist undertaking a variety of work that includes upland survey, desktop assessments and watching briefs.

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14. Insurance & Professional indemnity

Trysor has Public Liability and Professional Indemnity Insurance.

15. Project identification

The project has been designated Trysor Project No. 2012/266

16. Sources

16.1 Non-published

Central Excavation Unit, 1986, Central Excavation Unit Manual: Part 2: Recording, 1986

Murphy, F, 2012, Pengwern Isaf, Cenarth, Carmarthenshire: Archaeological Appraisal 2012 - Revised

RCAHMW, 2011, Form AB12: "Notes for Guidance" in the preparation of applications for Uplands Archaeology Initiative projects 2012-13



16.2 Published

IfA, 2008a, Standard and Guidance for an archaeological watching brief

IfA, 2008b, Standard and Guidance for the collection, documentation, conservation and research of archaeological materials.

IfA, Undated, Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives

Jenny Hall & Paul Sambrook Trysor October 2012



APPENDIX B



Plate 1: PGI2013_101, Stripping of Trench 1, looking east southeast.



Plate 2: PGI2013_102, The stripped surface of Trench 1, looking south southwest.



Plate 3: PGI2013_103, Stripping of trench 2, looking northeast.



Plate 4: PGI2013_104, Round barrow, PRN 100717, with a concrete triangulation pillar on top of it. The barrow lies on the highest point of the rounded hill and 110 metres east of the closest turbine base, trench 1, looking northeast.