

WIND TURBINES AT SHIPPING HILL PLANTATION LUDCHURCH ARCHAEOLOGICAL APPRAISAL 2006



Distant view of the proposed site of the turbines from the southeast

Prepared by Cambria Archaeology
For EnergyTech Ltd on behalf of
Westerton Energy



ARCHAEOLEG CAMBRIA ARCHAEOLOGY

RHIF YR ADRODDIAD / REPORT NO. 2006/66

RHIF Y PROSIECT / PROJECT RECORD NO. 56898

Mehefin 2006
June 2006

**WIND TURBINES AT SHIPPING HILL PLANTATION
LUDCHURCH
ARCHAEOLOGICAL APPRAISAL
2006**

Gan / By

K Murphy

*Archaeoleg Cambria yw enw marchnata Ymddiriedolaeth Archaeolegol Dyfed Cyfyngedig.
Cambria Archaeology is the marketing name of the Dyfed Archaeological Trust Limited.*

Paratowyd yr adroddiad yma at ddefnydd y cwsmer yn unig. Ni dderbynnir cyfrifoldeb gan Ymddiriedolaeth Archaeolegol Dyfed am ei ddefnyddio gan unrhyw berson na phersonau eraill a fydd yn ei ddarllen neu ddibynnu ar y gwybodaeth y mae'n ei gynnwys

The report has been prepared for the specific use of the client. The Dyfed Archaeological Trust Ltd can accept no responsibility for its use by any other person or persons who may read it or rely on the information it contains.

ARCHAEOLEG CAMBRIA
Ymddiriedolaeth Archaeolegol Dyfed Cyf
Neuadd y Sir, Stryd Caerfyrddin, Llandeilo, Sir
Gaerfyrddin SA19 6AF
Ffon: Ymholiadau Cyffredinol 01558 823121
Adran Rheoli Treftadaeth 01558 823131
Ffacs: 01558 823133
Epost: cambria@cambria.org.uk
Gwefan: www.cambria.org.uk

CAMBRIA ARCHAEOLOGY
Dyfed Archaeological Trust Limited
The Shire Hall, Carmarthen Street, Llandeilo,
Carmarthenshire SA19 6AF
Tel: General Enquiries 01558 823121
Heritage Management Section 01558 823131
Fax: 01558 823133
Email: cambria@cambria.org.uk
Website: www.cambria.org.uk

Cwmni cyfyngedig (1198990) ynghyd ag elusen gofrestredig (504616) yw'r Ymddiriedolaeth. The Trust is both a Limited Company (No. 1198990) and a Registered Charity (No. 504616) CADEIRYDD CHAIRMAN: C R MUSSON MBE B Arch FSA MIFA. CYFARWYDDWR DIRECTOR: E G HUGHES BA FSA MIFA

CONTENTS

SUMMARY	2
INTRODUCTION	2
OBJECTIVE	2
THE STUDY AREA	2
METHODOLOGY	2
THE ARCHAEOLOGICAL RESOURCE	3
ASSESSMENT OF IMPORTANCE AND POTENTIAL IMPACTS OF THE PROPOSED SCHEME ON THE ARCHAEOLOGICAL RESOURCE	5
SUGGESTIONS FOR FURTHER WORK	5
SOURCES	6

FIGURES AND PHOTOGRAPHS

Figure 1. Location map, based on the Ordnance Survey.

Figure 2. Boundary of study area and proposed turbine location showing archaeological sites mentioned in text. Based on a map supplied by EnergyTech Ltd.

Figure 3. Extract from the 1839 Ludchurch tithe map.

Figure 4. Extract from the Ordnance Survey 1890 6" 1st Edition map, showing boundary of study area and approximate location of proposed turbines.

Figure 5. Extract from the Ordnance Survey 1908 6" 2nd Edition map, showing boundary of study area and approximate location of proposed turbines.

Photograph 1. General location of turbine 1.

Photograph 2. General location of turbine 2.

APPENDIX 1. BRIEF

APPENDIX 2. SPECIFICATION

SUMMARY

This archaeological desk-based assessment of the Shipping Hill Plantation, Ludchurch, has demonstrated that there is no archaeological dimension to plans to construct two wind turbines. There are no known archaeological sites close to the sites of the proposed turbines, and the only known sites within the plantation are of post-medieval date.

INTRODUCTION

The archaeological advisors (Cambria Archaeology Heritage Management) to Pembrokeshire County Council required an archaeological desk-based appraisal in order to determine whether or not there is an archaeological dimension to plans to construct two wind turbines at Shipping Hill Plantation, Ludchurch, Pembrokeshire (Planning Application No. 05/1309/PA). A brief for the appraisal was prepared and is attached here as Appendix 1. EnergyTech Ltd acting on behalf of Westerton Energy commissioned Cambria Archaeology Field Services to undertake this desk-based archaeological appraisal in late May 2006 following the submission of a specification of works (Appendix 2).

The appraisal has been guided by *Standard and Guidance for Archaeological Desk-Based Assessments* (Institute of Field Archaeologists, 1999).

OBJECTIVE

The objective of this study is to determine whether or not there is an archaeological dimension to the proposed development.

THE STUDY AREA

The overall study area of this desk-based archaeological appraisal consists of approximately 109 ha of forestry (Figs. 1 and 2), known as Shipping Hill Plantation in the parish of Ludchurch, Pembrokeshire (centred at SN13136 10509). Low rounded hills rising up to 120m to 150m and small open valleys, with dispersed farms and small villages characterise this part of south Pembrokeshire. Shipping Hill Plantation achieves a maximum height of 120m at its northwest and northeast corners. From these two rounded high points the land falls away quite steeply to the south, less so on other sides. The forestry plantation is surrounded by farmland, mostly improved pasture.

The location of the two turbines is towards the northeast corner of the plantation, alongside existing forestry tracks.

METHODOLOGY

This is essentially a desk-based study. The following sources have been consulted:

The County Sites and Monuments Record housed with Cambria Archaeology.

Cartographic sources and other material held by Cambria Archaeology.

Databases compiled by the Royal Commission on Ancient and Historic Monuments in Wales (RCAHMW) and Cadw.

Vertical and oblique aerial photographs held by the RCAHMS and Cambria Archaeology.

A site visit was undertaken. As the site lies adjacent to a public road and is visible from the road entry onto the site itself was not necessary. The purpose of the visit was to:

Review the current state of archaeological features and deposits identified during the documentary research.

Identify new archaeological features and deposits, or areas that may contain them.

Carry out rapid recording of archaeological sites, features and deposits by photography, site notes and sketch plans, if required.

Assess the vulnerability of archaeological sites, features and deposits to the proposed redevelopment of the site.

Because of the afforested nature of the study area, only the sites of the two proposed turbines were visited, and because these locations were heavily overgrown with scrub and brambles detailed archaeological examination was not possible.

THE ARCHAEOLOGICAL RESOURCE

Numbers referred to are Primary Record Numbers on the Historic Environment Record housed with Cambria Archaeology.

Prehistoric sites

There are no recorded prehistoric sites within 500m of the proposed turbines, or within the overall Shipping Hill Plantation study area.

Roman sites

There are no recorded Roman sites within 500m of the proposed turbines, or within the overall Shipping Hill Plantation study area.

Medieval sites

There are no recorded medieval sites within 500m of the proposed turbines, or within the overall Shipping Hill Plantation study area.

Post-medieval sites

A sheep fold (29555), a deserted farmstead known as Rosemary Green (29556) first recorded in 1813 (Charles 192, 511), and a field system (29557) are the only recorded sites within 500m of the proposed turbines and within the overall Shipping Hill Plantation study area. These three sites lie 200m - 300m south and downhill of the proposed turbines.

Scheduled Ancient Monuments and Listed Buildings

There are no Scheduled Ancient Monuments or Listed Buildings within 1 km of the proposed turbines. Within 1km and 2km of the proposed turbines there is one Scheduled Ancient Monument - Longstone Camp (3653) to the east - and five Listed Buildings - 1 domestic property, 2 limekilns, 1 footbridge and Ludchurch parish church.

The historic landscape of Shipping Hill Plantation

The historic landscape of the area has not been researched. However, historic maps and other sources provide some useful pointers as to how the current landscape has evolved. Essentially prior to afforestation Shipping Hill comprised several large regular fields with two small farmsteads/cottages on the south side - Shipping Hill itself and Rosemary Green (29556). These fields and farms are shown on the earliest known large-scale map of the area, the Ordnance Survey Original Surveyors' Drawings of 1809-10, but are best seen on the parish tithe map of 1839 (Fig. 3). It is not known when these farms and fields were established, but their absence in historical records prior to the early 19th century (Charles 1992, 511) suggests that they are of fairly recent origin, perhaps the late 18th century. This suggestion is supported by the large, regular fields, which are characteristic (though not necessarily a defining trait) of 18th- and 19th-century enclosure of common land and moorland. There is no private Act of Parliament for this enclosure, and therefore it must have been carried out by a private individual, probably the largest local landowner.

Aerial photographs taken before the forestry was established (Meridian 1955) indicate an episode of farming predating the large, regular fields. Towards the south of the study area on south-facing slopes some distance from the proposed turbines a field system with ridge and furrow cultivation (29557) is visible on the photographs. The date of this system is unknown, but its character suggests a medieval or, more likely, post medieval origin. It probably represents a short-term episode of cultivation of what has probably open moorland.

Later maps, such as the Ordnance Survey 1890 6" 1st Edition (Fig. 4), show a similar pattern to the tithe survey. A few points of interest are shown on this map - most of the fields are under rough pasture/moor, although a small coniferous plantation had been established, a circular pond is shown between the locations of the two proposed turbines, and a small disused quarry is located on the northwest corner of the study area. The pond is still present (although virtually dry at the time of the site visit - late May 2006). It is unclear whether it is a natural feature or constructed, perhaps as a result of quarrying/mining. Later editions of Ordnance Survey maps show little change to the landscape (Fig. 5). By 1957 aerial photographs show that the small coniferous plantation had gone and that the whole of the study area had reverted to rough pasture/moorland and was being grazed as one unit. By the time of the publication of the 1971 Ordnance Survey map a coniferous plantation complete with access tracks had been established over the whole of the study area. Today the eastern section of the forestry (the location of the proposed turbines) seems to have been clear-felled and left to regenerate whilst the western part is maturing coniferous trees.

ASSESSMENT OF IMPORTANCE AND POTENTIAL IMPACTS OF THE PROPOSED SCHEME ON THE ARCHAEOLOGICAL RESOURCE

A range of criteria has been used to consider the importance of the archaeological resource and the likely impacts on that resource in order to determine the significance of the impact and suggest possible mitigation measures.

Importance

The importance of all sites visited will be categorised according to the following criteria:

- A** - sites of national importance - usually Scheduled Ancient Monuments and listed buildings
- B** - sites of regional or county importance
- C** - sites of district or local importance
- D** - minor sites or sites so badly damaged that too little now remains to justify their inclusion in a higher grade
- E** - sites about insufficient is known to assign them to a higher grade

Likely impacts

The likely physical impacts of the proposed road on each site have been assessed according to the following criteria:

- Total** - complete destruction of the site
- Very severe** - loss of most of the major components of a site
- Severe** - loss of some of the major components of a site
- Medium** - loss of some components of a site
- Slight** - some loss of some minor components of a site
- None**
- Beneficial**
- Unknown**

Impact assessment

<i>Site PRN</i>	<i>Importance</i>	<i>Likely Impact of The development</i>	<i>Suggestions for further work</i>
29555	E	None	None
29556	E	None	None
29557	E	None	None

No known archaeological sites will be affected by the proposed development.

SUGGESTIONS FOR FURTHER WORK

No further archaeological work is required.

SOURCES

Databases

The Regional Historic Environment Record, housed with Cambria Archaeology

CARN - Core Archaeological Record Index hosted by the Royal Commission of Ancient and Historic Monuments in Wales

Cadw - Listed Building database and Scheduled Ancient Monument database

Maps

Ludchurch parish tithe map and apportionment, 1839

Ordnance Survey 1809-10, Original Surveyors' Drawings, 2" to 1 mile, Sheet 181

Ordnance Survey 1819, 1" to 1 mile

Ordnance Survey 1890, 6" to 1 mile, Pembrokeshire 35.NE, 1st Edition, surveyed 1886-87

Ordnance Survey 1908, 6" to 1 mile, Pembrokeshire 35.NE, 2nd Edition, revised 1904

Aerial photographs

Meridian 1957 frames 24237-24241

Published sources

Charles B G 1992, *The Place-names of Pembrokeshire*, Aberystwyth: National Library of Wales



Figure 1. Location map, based on the Ordnance Survey.

Reproduced from the 1995 Ordnance Survey 1:50,000 scale Landranger Map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Cambria Archaeology, The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF. Licence No AL51842A

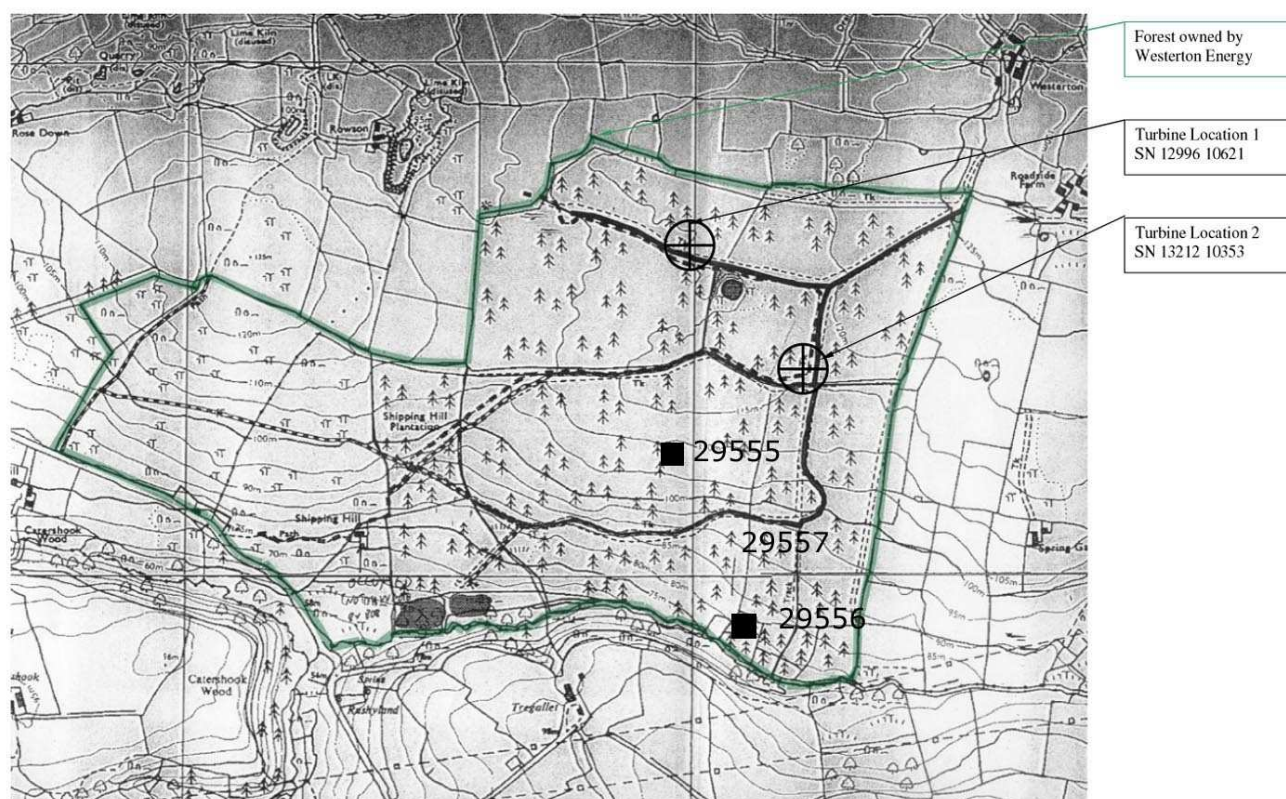


Figure 2. Boundary of study area and proposed turbine location showing archaeological sites mentioned in text. Based on a map supplied by EnergyTech Ltd.



Figure 3. Extract from the 1839 Ludchurch tithe map.

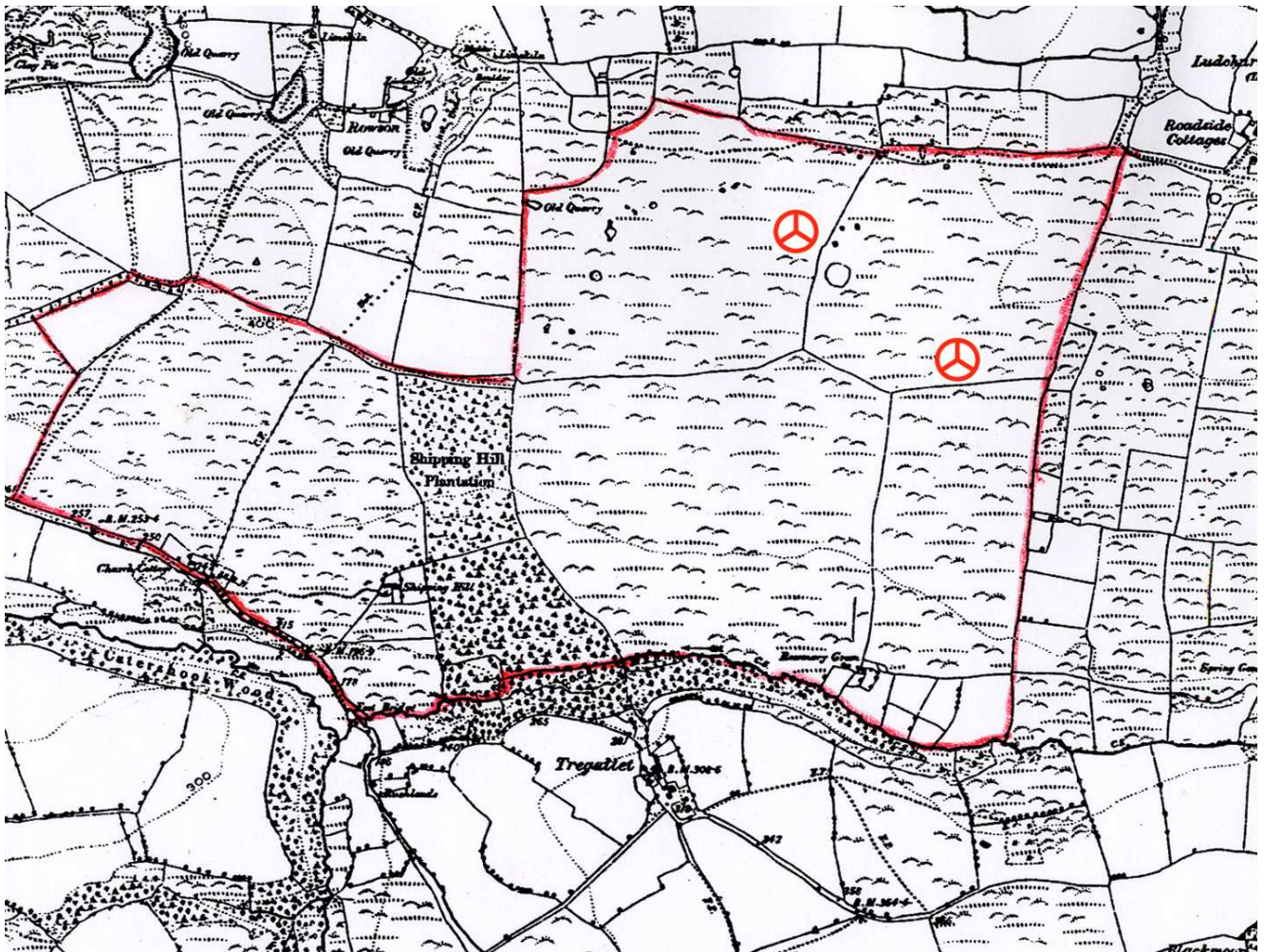


Figure 4. Extract from the Ordnance Survey 1890 6" 1st Edition map, showing boundary of study area and approximate location of proposed turbines.

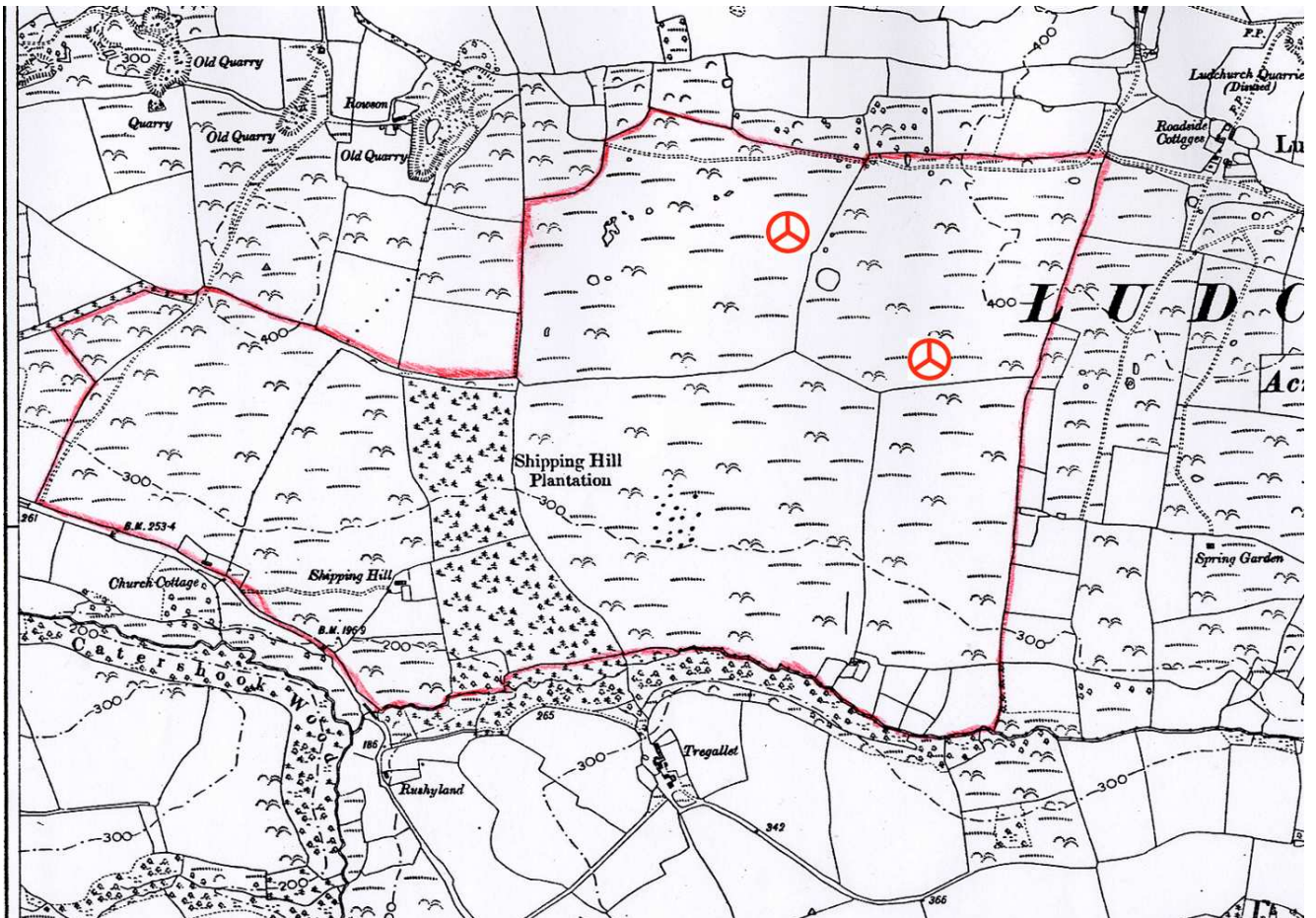


Figure 5. Extract from the Ordnance Survey 1908 6" 2nd Edition map, showing boundary of study area and approximate location of proposed turbines.



Photo. 1. General location of turbine 1.



Photo. 2. General location of turbine 2.



Brief

for the preparation of an

Historic Environment Appraisal

at

Shipping Hill Plantation
Templeton, Narberth
Pembrokeshire

Prepared at the request of

Westerton Energy

by

Cambria Archaeology – Heritage Management

On behalf of

Pembrokeshire County Council

Brief for Archaeological Appraisal

Site: Shipping Hill Plantation, Templeton, Narberth
Prepared for: Westerton Energy
On behalf of Pembrokeshire County Council
Site NGR: SN 13136 10509
Planning ref: 05/1309/PA

*[This archaeological brief is only valid for six months from the issue date. After this period Cambria Archaeology - Heritage Management should be contacted. Any specification resulting from this brief will only be considered for the same period. Please note that this document is written for archaeological project managers to facilitate the production of a detailed archaeological specification of works, it is not a tender document. **The response to this brief must follow IFA Standards and Guidelines.**]*

[The archaeological project manager is strongly advised to visit the site before completing the required specifications as there may be implications for accurately costing the project. The project manager must consult the Regional Historic Environment Record held by Cambria Archaeology as part of the appraisal]

Introduction

This brief has been prepared by Cambria Archaeology – Heritage Management, acting as the archaeological advisers to the planning authority. This brief has been prepared at the request of Westerton Energy, the applicants. Cambria Archaeology-Heritage Management has been consulted by the planning authority on the archaeological potential of the application area. The regional Historic Environment Record, which contains over 39000 entries of archaeological and historical interest, was consulted. The portion of these records pertaining to Pembrokeshire has been adopted by resolution of the Authority for the purposes of the Town and Country Planning (General Permitted Development) Order 1995. As a result it was advised that an important archaeological resource could exist in the application area. Consequently the historic environment is a dimension and constraint to the planning application. Therefore, Cambria Archaeology – Heritage Management recommended that an archaeological desk-based appraisal is required to further inform the planning process. This recommendation is in line with Welsh Office Circular 60/96 – *Planning and the Historic Environment – Archaeology*. The results of the appraisal will be used to determine whether further work is required to clarify the archaeological resource potential and enable further heritage management advice to be provided to the planning authority to protect archaeological interests.

2.0 Objectives

- 2.1 The objective of the archaeological appraisal is to provide an informed answer to the question whether there is an archaeological dimension to be considered in the determination of the application, and whether this needs to be clarified through further investigation.**
- 2.2 The appraisal will consider the potential and condition for archaeological material of all types and periods, including the potential for buried wetland archaeological and palaeoenvironmental deposits.
- 2.3 The appraisal will consider the impact of development on historic landscape areas and on nationally important ancient monuments.

3.0 Site description

- 3.1 The regional Historic Environment Record contains no information on archaeological sites within the proposed development area, which is currently afforested.
- 4.0 The Scope of the Work

The archaeological appraisal is required to assess the whole of the application area. The resulting report should provide information which is sufficiently detailed to protect

archaeological interests and allow informed decisions to be made in the on-going planning processes This work should include the following key elements which should be carried out in the following order:

- a. Consult and interrogate the Regional Historic Environment Record including the detailed further information files and other readily available sources of information, including the National Monuments Record and early O.S and Tithe maps, aerial photographs, etc. (Stage 1)**
- b. Make a visit to the site to assess the presence/absence and condition of archaeological material and its potential. (Stage 2)**
- c. Archive and Reporting (Stage3)**

4.0 Specifications

The detailed specifications for the archaeological work must be submitted by the applicant, and approved by Cambria Archaeology – Heritage Management on behalf of Pembrokeshire County Council before the work commences.

5.0 The Report

The report must include the following:

- a) The report should be fully representative of the information gained from Stages 1-2 above, even if there should be negative evidence.
- b) A concise non-technical summary of the appraisal results.
- c) The report will contain at least one plan showing the sites location in respect to the local topography.
- d) Where necessary, the report will also contain suitably selected plans and sections of significant archaeological features. All plans and sections should be related to Ordnance Datum.
- e) Written descriptions of all archaeological features observed during the site visit.
- f) Statement of the local and regional context of the archaeological remains identified.
- g) Consideration of the impact of the development on any historic landscape area and on any ancient monuments of national importance.
- h) An impact appraisal of the proposed development on the potential archaeological resource can be considered and presented for

consideration. This could include a mapped archaeological potential of the site in relation to the proposed development.

- i) Once completed, a copy of the report should be submitted to the LPA for the consideration of their archaeological advisers. A further copy of the report should also be provided to Cambria Archaeology – Heritage Management for deposition with the Regional Historic Environment Record (HER)¹.
- j) A summary report on any new significant archaeological discovery should be submitted for publication to a national journal (e.g. Archaeology in Wales) no later than one year after the completion of the work.
- k) Although there may be a period during which client confidentiality should be maintained, the report and the archive should be deposited in the appropriate repository not later than six months after completion of the work².

6.0 Suitable Archaeological Contractors

- a) The work will be undertaken by the staff of a competent and professional archaeological body (hereafter the archaeological contractor) which shall be formally acknowledged by Cambria Archaeology – Heritage Management, advisors to the Planning Authority. Details, including the name, qualifications and experience of the project director and all other key project personnel (including specialist staff) will be specified to Cambria Archaeology – Heritage Management as part of the detailed project specification.
- b) The archaeological contractor will have considerable and relevant archaeological experience, be preferably managed by a Member of the Institute of Field Archaeology. Details of other archaeological staff involved should also be provided.
- c) The archaeological contractor will adhere to the Institute of Field Archaeologists' Code of Conduct and the Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology.
- d) The body commissioning the report will satisfy themselves of the ability of the archaeological contractor to undertake the necessary work³.

7.0 MONITORING⁴

¹ As well as the bound report, a digital version of the report (preferably IBM compatible and in Word) should be submitted for inclusion on the computerised database.

² Any document submitted to the LPA as part of a planning application will be treated as a public domain document.

³ It is recommended that, in the best interest of those commissioning archaeological work, that they ensure that potential contractors have professional indemnity insurance

⁴ See Appendix A for details of monitoring procedures.

- a) Cambria Archaeology – Heritage Management are the archaeological advisors to the Planning Authority and will monitor the work on their behalf to ensure compliance with planning requirements.
- b) Any changes to the specification that the contractor may wish to make after approval should be communicated to the Cambria Archaeology – Heritage Management and approved on behalf of Planning Authority.**
- c) Cambria Archaeology – Heritage Management should be kept regularly informed about development both during the site works and subsequent post-excavation work.**

As part of our desire to provide a quality service to all of our clients we would welcome any comments you may have on the contents or presentation of this document. Please address them to the author below.

Charles Hill,
Planning Archaeologist,
Cambria Archaeology – Heritage Management.
Date of Issue: 19th April, 2006

Appendix A

Monitoring Requirements

In general the purposes of monitoring by the regional archaeological curator on behalf of the Local Planning Authority, may be summarised as follows: -

To ensure the maintenance of high archaeological standards and best practice based on the Standards in British Archaeology issued by the Institute of Field Archaeologists (copies available on request).

To ensure compliance with planning regulations and requirements.

To ensure compliance with the brief provided by the archaeological curator and the Specifications submitted by the applicant for the approval of the Local Planning Authority.

To ensure the relevance of the further information gained by the work to the on-going planning process.

To ensure that any recommendations made by the archaeological contractor are reasonable in planning terms.

To ensure that any further recommendations resulting from the work that are made by the Local Planning Authority (based on the advice of their curatorial archaeological advisers) are founded on detailed knowledge and are reasonable in planning terms.

To help formulate, where required, an archaeological mitigation strategy, which could protect the archaeological resource whilst enabling the permitted development.

Monitoring is carried out by Cambria Archaeology – Heritage Management in their recognised role as the archaeological advisor to all the regional Planning Authorities. All of its work is carried out to the Welsh Archaeological Trusts' *Curator's Code of Conduct* (copies of which are available on request). The Division's officers have considerable field experience and are available to discuss any aspect of monitoring.

Monitoring will normally consist of a site visit by one of the Section's Officers, who will inspect the on-going work and the exposed archaeological resource. The visit will enable local knowledge to be provided to the archaeological contractor and a discussion on any additional evaluation work or variances to the specification that may be required.

In normal circumstances a report on the monitoring, copied to the Local Planning Authority, will be sent to the developer inside 48 hours of the visit. This report will give a short summary of the exposed archaeological resource and recommend any additional works or variations from the

specifications which should be carried out whilst the archaeological contractor is still on site. The applicant will be informed of any breaches to the specification, which may invalidate the results of the evaluation at that time, so that the matter can be raised and resolved prior to the completion of the fieldwork.

Appendix B

Glossary of Terms

Archaeological Contractor

A professionally qualified individual or an organisation containing professionally qualified archaeological staff, able to offer an appropriate and satisfactory treatment of the archaeological resource, retained by the developer to carry out archaeological work either prior to the submission of a planning application or as a requirement of the planning process. A list of Archaeological Contractors available for work in Wales, has been prepared by the Welsh Archaeological Trusts and this is available on request from any of the regional archaeological curators.

Archaeological Curator

A person, or organisation, responsible for the conservation and management of archaeological evidence by virtue of official or statutory duties. In Wales the archaeological advisors to the Local Planning Authorities are the Heritage Management of the Regional Archaeological Trusts, all of whom work to the Welsh Archaeological Trust's *Curators' Code of Practice*. Cambria Archaeology – Heritage Management provides archaeological planning services to five Unitary Authorities in South-west Wales

Archive

An ordered collection of all documents and artefacts from an archaeological project, which at the conclusion of the work should be deposited at a public repository, such as the local museum.

Appraisal

An appraisal is a rapid reconnaissance of site and records to identify whether a development proposal has a potential archaeological dimension requiring further clarification.

Assessment

A desk-based assessment is a detailed consideration of the known or potential archaeological resource within a specified area or site (land-based, intertidal or underwater), consisting of a collation of existing written and graphic information in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource in a local, regional or national context as appropriate.

Brief

An outline framework of the archaeological situation which has to be addressed, together with an indication of the scope of the works that will be required.

Bronze Age

A chronological division of the prehistoric period, which sees the introduction of copper and the eventual widespread adoption of bronze for use in weapons, jewellery etc. In Britain it is dated between circa 2300 and 700 BC.

Cadw

An executive agency of the Welsh Office, Cadw are responsible for the planning issues which affect statutorily protected ancient monuments and buildings. They also grant aid repairs to historic buildings and monuments and manage ancient monuments which are in direct State care.

Early Medieval

The period after the break down of Roman rule and the Norman invasion (circa 410 to 1066 AD).

Evaluation

A limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site; ad, if present, defines their character and extent, and relative quality. It enables an assessment of their worth in a local, regional, national or

international context as appropriate. The programme of work will result in the preparation of a report and ordered archive

Later Medieval

The period after the Norman invasion nominally finishing at the Battle of Bosworth and the commencement of the reign of Henry VII (1066 to 1485 AD).

Mesolithic

A chronological division of the prehistoric period spanning the period from the end of the last ice age to the introduction of farming. It is dated between circa 10,000 and circa 4,000 BC.

Modern

The period since 1900 AD

Natural

Archaeological term for undisturbed natural geology on a site.

Neolithic

A chronological division of the prehistoric period during which agriculture and domestic animals are introduced to Britain. It is dated circa 4,000 to circa 2,300 BC.

NGR

National Grid Reference

Palaeolithic

The earliest division of the prehistoric period, from the first evidence of tool making by humans to the final retreat of glacial ice from Britain. It is dated circa 500,000 to circa 10,000 BC.

Post-Medieval

Period between 1485 and 1900 AD.

Risk Assessment

A document prepared to meet the requirements of *The Management of Health and Safety at Work Regulations 1992* assessing all risks to the health and safety of employees and others arising from a work activity.

Roman

Period when Britain was ruled by Rome circa 45 - 410 AD

Romano-British

Term used to describe a fusion of indigenous late Iron Age traditions with Roman culture

Sites and Monuments Record (SMR)

A record of known sites of archaeological and historical interest in a given area. In South-west Wales Cambria archaeology – Heritage Management currently maintain over 39000 records.

Specification

A written schedule of works required for a particular project (by a curator, planning archaeologist or client), set out in sufficient detail to be quantifiable, implemented and monitored. Normally prepared by an archaeological contractor and agreed with the relevant planning archaeologist.

Watching Brief

An archaeological watching brief is defined as a programme of observation, investigation and recording conducted during any operation carried out for non-archaeological reasons within a specified area or site, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme of work will result in the preparation of a report and ordered archive.

Welsh Archaeological Trusts

There are 4 Welsh Archaeological Trusts, Clwyd-Powys, Dyfed (Cambria Archaeology), Gwynedd and Glamorgan-Gwent. The Trusts were established between 1974 and 1975 in order to carry out rescue archaeological work in Wales. They are all charities but are also limited companies.

**ARCHAEOLOGICAL DESK-BASED APPRAISAL
SPECIFICATION
SHIPPING HILL WIND FARM, TEMPLETON, PEMBROKESHIRE**

Introduction

This tender has been prepared by Cambria Archaeology Field Operations in accordance with the following codes of practice: *Standard and Guidance for Archaeological Desk-Based Assessments* (Institute of Field Archaeologists, 1999); Appendix 10 of *The Preparation of Environmental Statements for Planning Projects that Require Environmental Assessment: A Good Practice Guide* (DoE 1995); Welsh Office Circular 60/96, *Planning and the Historic Environment: Planning and the Historic Environment: Archaeology*; *Planning Policy Wales* (NAW 2002).

Cambria Archaeology Field Operations has considerable experience of this type of project and always operates to best professional practice. The conclusions will be based on a considered assessment of the collected data. Cambria Archaeology Field Operations has its own Health and Safety Policy, and all works are covered by appropriate Employer's Liability and Public Liability Insurances. Copies of all are available on request.

Cambria Archaeology is an Institute of Field Archaeologists Registered Archaeological Organisation.

1. PROJECT OBJECTIVES

The objective of this archaeological appraisal is to provide an informed answer to the question whether there is an archaeological dimension to be considered in the determination of the application, and whether this needs to be clarified through further investigation. This will be achieved through:

The examination of existing written, cartographic, pictorial and technical information to assess the character, extent, significance and vulnerability of the archaeological resource within the survey area.

The identification of new archaeological features and deposits within the survey area.

The preparation of a report fully representative of the information recovered, which places the archaeological resource of the survey area in its local, regional and national contexts.

2. DOCUMENTARY AND CARTOGRAPHIC RESEARCH

A search will be undertaken of the County Sites and Monuments Record and National Monuments Record for relevant archaeological information on known sites within, and around, the survey area.

Cartographic sources and other material such as aerial photographs held by Cambria Archaeology will be examined to provide a history of the development of the site.

A search will be made of databases held by the Royal Commission on Ancient and Historic Monuments in Wales (RCAHMW) and Cadw.

3. FIELD VISIT

A rapid field visit will appraise the site. Because of the forested character of the site it will not be possible to conduct a systematic walk-over survey. Instead areas of archaeological potential identified during documentary and cartographic research will be targeted as well as the possible sites for the turbines and access tracks.

4. ASSESSMENT AND REPORTING

An assessment will be made of the information gathered during the documentary research and fieldwork.

A report that is fully representative of the information gathered during the documentary research and the fieldwork will be compiled. The report will detail the known and potential archaeological resource of the development site, outline the likely impacts of the proposed scheme on that resource and provide a suggested mitigation strategy. All legal constraints such as Scheduled Ancient Monuments and Listed Buildings will be identified in the report.

A summary report of the results of the project, excluding any confidential information, will be prepared for publication in an appropriate local, national, special interest or period-specific archaeological journal.

Three copies of the final report will be sent to the client. A copy of the report will also be deposited with the County Sites and Monument Record within six months of completion, unless otherwise requested.

K Murphy
Principal Archaeologist - Field Services

**WIND TURBINES AT SHIPPING HILL PLANTATION LUDCHURCH
ARCHAEOLOGICAL APPRAISAL
2006**

RHIF YR ADRODDIAD / REPORT NUMBER 2006/66

**Mehefin 2006
June 2006**

Paratowyd yr adroddiad hwn gan / This report has been prepared by K Murphy

Swydd / Position: Principal Archaeologist - Field Services

Llofnod / Signature Dyddiad / Date

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by E G Hughes

ar ran Archaeoleg Cambria, Ymddiriedolaeth Archaeolegol Dyfed Cyf.
on behalf of Cambria Archaeology, Dyfed Archaeological Trust Ltd.

Swydd / Position: Director

Llofnod / Signature Dyddiad / Date

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau
sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any
comments you may have on the content or presentation of this report