

# Pen-y-Graig, Ystradmeurig Ceredigion

Archaeological Desk Based Assessment & Site Visit



Ву

Chris E Smith BA (Hons) MA MIfA Report No. 1151

Archaeology Wales Limited, Rhos Helyg, Cwm Belan, Llanidloes, Powys, SY18 6QF Tel: +44 (0) 1686 440371 Email: admin@arch-wales.co.uk

# Archaeology Wales

# Pen-y-Graig, Ystradmeurig Ceredigion

Desk Based Assessment and Site Walkover

Prepared For:

Dulas Engineering Ltd

Edited by: Philip Poucher Signed: *PfpM* Position: Project Manager Date: 15/07/14 Authorised by: Mark Houliston Signed: Mark Hoult Position: Managing Director Date: 16/07/14

By

#### Chris E Smith BA (Hons) MA MIfA

Report No: 1151

Date: August 2013 Revised July 2014

Archaeology Wales Limited, Rhos Helyg, Cwm Belan, Llanidloes, Powys, SY18 6QF Tel: +44 (0) 1686 440371 Email: admin@arch-wales.co.uk

# CONTENTS

| 1 | Intro                  | oduction  | 1  |  |  |  |  |
|---|------------------------|---|----|--|--|--|--|
|   | 1.1                    | Location and scope of work  | 1  |  |  |  |  |
|   | 1.2                    | Geology   |    |  |  |  |  |
|   | 1.3                    | Site Description  | 1  |  |  |  |  |
|   | 1.4                    | Study Area  | 2  |  |  |  |  |
| 2 | Issu                   | es and Constraints  | 2  |  |  |  |  |
| 3 | Desl                   | K Based Assessment Results  | 4  |  |  |  |  |
|   | 3.1                    | Sources Consulted   | 4  |  |  |  |  |
|   | 3.2                    | HER Data  | 4  |  |  |  |  |
|   | 3.3                    | HER Data Summary  | 12 |  |  |  |  |
|   | 3.4                    | SAM Data  |    |  |  |  |  |
|   | 3.5                    | LB Data   | 14 |  |  |  |  |
|   | 3.6                    | Historic Landscape Characterisation                               | 15 |  |  |  |  |
|   | 3.7                    | Historic Maps   | 17 |  |  |  |  |
|   | 3.8                    | Historic Map Regression Summary                                   | 17 |  |  |  |  |
|   | 3.9                    | Aerial Photographs  |    |  |  |  |  |
|   | 3.10                   | Portable Antiquities Scheme                                       | 18 |  |  |  |  |
| 4 | Site                   | Visit   | 18 |  |  |  |  |
|   | 4.1                    | Aims  | 18 |  |  |  |  |
|   | 4.2                    | Site Visit Summary  | 19 |  |  |  |  |
| 5 | Impa                   | act Assessment  | 19 |  |  |  |  |
|   | 5.1                    | Criteria for assessing impact                                     | 19 |  |  |  |  |
|   | 5.2                    | Assessment of impact on SAM sites                                 | 22 |  |  |  |  |
|   | 5.3                    | Assessment of impact on LB sites                                  | 25 |  |  |  |  |
|   | 5.4                    | Assessment of impact on Historic Landscape Characterisation areas | 32 |  |  |  |  |
| 6 | Disc                   | cussions and Conclusions  | 33 |  |  |  |  |
|   | 6.1                    | Overall Interpretation  | 33 |  |  |  |  |
|   | 6.2                    | Conclusions   | 33 |  |  |  |  |
| 7 | Miti                   | gation Proposals  | 34 |  |  |  |  |
| 8 | Ack                    | Acknowledgements  |    |  |  |  |  |
| 9 | Bibliography & Sources |   |    |  |  |  |  |

### **List of Figures**

- Figure 1 General location map
- Figure 2Site location map
- Figure 3 HER data point locations
- Figure 4 SAM locations
- Figure 5 CD214 & CD033 Cadw location maplet
- Figure 6 Ystradmeurig Castle map
- Figure 7 Cwm Meurig motte map
- Figure 8 LB locations
- Figure 9 1845 Ystrad Meurig Parish Tithe map
- Figure 10 1890 1<sup>st</sup> Edition 6 Inch OS map
- Figure 11 1905 2<sup>nd</sup> Edition 6 Inch OS map
- Figure 12 SAM sites on ZTV map
- Figure 13 LB sites on ZTV map
- Figure 14 HER sites on ZTV map

### **List of Plates**

- Plates 1-3 Oblique aerial photographs of CD033
- Plate 4Cadw photographs of CD214
- Plate 5 Oblique aerial photograph of CD032
- Plate 6 Oblique aerial photograph of CD031
- Plate 7 1946 RAF aerial photograph
- Plate 8 1973 OS aerial photograph
- Plate 92013 Google Earth image
- Plates 10-34 Site visit photograph

# List of Appendices

| Appendix 1 | Figures                             |
|------------|-------------------------------------|
| Appendix 2 | Plates                              |
| Appendix 3 | Wire Frame Images of/from SAM sites |
| Appendix 4 | Specification                       |
| Appendix 5 | Full HER Gazetteer                  |
| Appendix 6 | Archive Cover Sheet                 |

#### **List of Tables**

| Table 1 | Importance of Receptors          |
|---------|----------------------------------|
| Table 2 | Archaeological Potential         |
| Table 3 | Magnitude of Impact              |
| Table 4 | Assessing Significance of Impact |
| Table 5 | SAM ZTV Data                     |
| Table 6 | Significance of Impact on SAMs   |
| Table 7 | LB ZTV Data                      |
| Table 8 | Significance of Impact on LBs    |
| Table 9 | ZTV HER Data                     |

Table 10Significance of Impact on HER Sites

Copyright Notice:

Archaeology Wales Ltd. retain copyright of this report under the Copyright,

Designs and Patents Act, 1988, and have granted a licence to Dulas Engineering Ltd, to use and reproduce the material contained within.

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No. AL 52163A0001) to reproduce map information; Copyright remains otherwise with the Ordnance Survey.

## **Non-Technical Summary**

An archaeological desk based assessment and site visit was carried out on the site of two proposed wind turbines on land at Penygraig, Ystradmeurig, Ceredigion. The aim of the work was to assess the archaeological potential of the area and the potential impact of the development proposals on the archaeological resource, thereby assisting in determining whether further archaeological work is required.

The HER data revealed 76 recorded sites within a 2km radius of the site, although none were located closer than 150m. Aerial photographs from 1946 onwards and historic maps from 1845 onwards were consulted as part of the desk based study. The study has shown that the 2km study area is rich in archaeological remains with evidence for human activity in the landscape for at least 2500 years.

The proposed development will have no direct physical impacts and a mostly minor impact on the setting of heritage assets within the 2km study area.

# **1** Introduction

#### 1.1 Location and scope of work

- 1.1.1 In August 2013 Archaeology Wales Ltd (AW) was commissioned by Rachel Harper of Dulas Engineering Ltd to carry out an archaeological desk based assessment and site visit on a proposed two wind turbine site at Penygraig, Ystradmeurig, Ceredigion (NGR SN 70822 67688 – Fig 1). The archaeological work follows recommendations from Dyfed Archaeological Trust – Heritage Management.
- 1.1.2 The proposed development will comprise two wind turbines with all associated access and cabling (Fig 2). The turbines will have a blade tip height of 46.1m.
- 1.1.3 The work was carried out by Chris E Smith (MIfA), following guidelines set out by the Institute for Archaeologists, *Standards and Guidance for Desk-Based Assessments* (2008, revised 2011).

#### 1.2 Geology

1.2.1 The underlying solid geology of the area is comprised of undifferentiated Llandovery rocks. This is comprised of interbedded mudstone, siltstone and sandstone (Geological Survey Map, 2001).

#### 1.3 Site Description

1.3.1 The site covers an irregularly shaped area located to the north and south of the B4380, at Ystradmeurig, between Tynygraig and Pontrhyfendigaid.

1.3.2 The assessment area is located on the south facing slope of Craig Ystradmeurig between 169m and 284m above ordnance datum. The majority of the assessment area is currently composed of improved upland pasture.

#### 1.4 Study Area

1.4.1 The area assessed for this report encompasses a 2km radius around the proposed turbine locations. This allows for an understanding to be gained of the impact of the proposed development on the wider archaeological resource and the cultural landscape as a whole.

# 2 Issues and Constraints

- 2.1.1 There are a number of statutory designations related to the cultural heritage that will affect the proposed development. These include
  - Scheduled Ancient Monuments (SAMs)
  - Listed Buildings (LBs)
- 2.1.2 Ancient Monuments and Archaeological Areas Act (1979)
- 2.1.3 Under the Ancient Monuments and Archaeological Areas Act (1979; 2000 revision), the Welsh Assembly Government (WAG) and Cadw are required to compile and maintain a schedule of monuments considered to be of national importance. The statutory consent of Cadw is required before any works are carried out which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering up a Scheduled Ancient Monument (SAM). In addition, impacts of development works upon the setting of a SAM form an important consideration in the granting or refusal of planning consent to conduct development works.
- 2.1.4 There are no SAM sites within the proposed development area. However there are 5 SAMs within the 2km study area.
- 2.1.5 Town and Country Planning Act (1990)
- 2.1.6 Other known sites of archaeological or historic significance are listed on county-based Historic Environment Records, following the 1990 Town and Country Planning Act. There are 50 sites listed on the HER for the study area, excluding the SAMs and LBs. There are no sites recorded within the proposed development area itself.
- 2.1.7 Planning (Listed Building and Conservation Areas) Act (1990)
- 2.1.8 Under Planning Policy WALES, November 2012, Section 6.5, and the Welsh Office Circular 61/96, 'Planning and the Historic Environment: Historic Buildings and Conservation Areas' and the 'Planning (Listed Buildings and Conservation Areas) Act 1990 and the Historic Buildings and Ancient Monuments Act of 1953, listed buildings

are categorised as Grades I, II\* and II in decreasing order of special architectural and historic importance. These buildings are of acknowledged importance to the nation's built heritage. Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires planning decision makers to have special regard to the desirability of preserving listed buildings and their settings.

- 2.1.9 There are 5 Grade II Listed Buildings within the 2km assessment area and 1 Grade II\* Listed Building. There are no listed buildings within the proposed development area.
- 2.1.10 Conservation Areas may be designated under the Planning (Listed Buildings and Conservation Areas) Act 1990. Section 72 of the 1990 Act requires decision-makers on applications for planning consents to pay special attention to the desirability of preserving or enhancing the character or appearance of the area. As a matter of policy, planning decision-makers must take into account the potential effects of development on the setting of Conservation Areas.
- 2.1.11 Welsh Office Circular 60/96 (Planning and the Historic Environment: Archaeology)
- 2.1.12 These guidelines establish the principles and framework within which archaeological matters are a material consideration within the planning process. They identify how sites are preserved and recorded, and the role of local authorities and the Welsh Office working through *Cadw*. It states:

'Archaeological remains should be seen as a finite and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction... They are part of our sense of national identity and are valuable both for their own sake and for their role in education, leisure and tourism'. (Welsh Office Circular 60/96 Paragraph 3).

- 2.1.13 Welsh Office Circular 60/96 places emphasis on the need for early consultation with the appropriate authorities (Paragraph 11) and includes information on the need for formal Environmental Assessments in some circumstances (Paragraph 12).
- 2.1.14 In Wales this guidance replaces Planning Policy Guideline (PPG) 16: Archaeology and Planning (1990).
- 2.1.15 Welsh Office Circular 61/96 (Planning and the Historic Environment: Historic Buildings and Conservation Areas).
- 2.1.16 This document addresses issues associated with development proposals affecting standing buildings, and also recommends consideration of other designations including the setting of listed buildings, World Heritage Sites and Historic Landscapes, Parks and Gardens as a material consideration for planners when scrutinising applications. It lays out the criteria for the listing process.

# **3** Desk Based Assessment Results

#### 3.1 Sources Consulted

- 3.1.1 As part of the desk based assessment, the following repositories were consulted for readily available information:
  - Historic Environment Record (HER) data held by Dyfed Archaeological Trust
  - National Monuments Record (NMR) held by RCAHMW, Aberystwyth
  - The National Library of Wales, Aberystwyth
  - Cadw
  - Portable Antiquities Scheme Online Database
- 3.1.2 All works were undertaken in accordance with the IfA's Standards and Guidance: *for an archaeological desk based assessment* (2008, Revised 2011).

#### 3.2 HER Data

3.2.1 A search of the regional HER returned a total of 76 sites within a 2km radius of the proposed turbine locations. They are listed below by PRN number and are displayed on Fig 3 by period and location in relation to the site.

PRN 10004NAME BWLCHYRHENDRETYPEFarmhousePERIODPost-medievalNGRSN72286930COMMUNITYCONDITIONNot KnownSTATUSSNOPSOURCESOURCESTATUSSourceSourceSNOPSTATUSSourceSNOPSUBSECTSUBSECT<t

PRN 10007NAME UNKNOWNTYPEDeserted rural settlementPERIODNGRSN70887006COMMUNITYCONDITIONDamagedSTATUSSSSIFORMComplex

PRN 10067 NAME HENBLAS
TYPE Mansion PERIOD Post-medieval
NGR SN70326757 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Building

PRN 10931NAME DOLVAWR;DOL-FAWRTYPESettlementPERIODMedievalNGRSN71756722COMMUNITYYstrad FflurCONDITIONSTATUS None recordedFORMDocuments

PRN 11256 NAME HEN BLAS TYPE Findspot PERIOD Iron Age NGRSN702676COMMUNITYYstrad MeurigCONDITIONSTATUS None recordedFORMDocuments

PRN 12451NAME YSTRAD MEURIG PARISH CHURCH;ST JOHN THEBAPTIST'STYPE ChurchPERIODMedievalNGRSN70396766COMMUNITYYstrad MeurigCONDITIONSTATUSNone recordedFORMDocuments

PRN 12851NAME DROSGOLTYPECairnPERIODUnknownNGRSN70566957CONDITIONSTATUS None recordedFORMNone

PRN 13609NAME GWNNWS ISSATYPECommon landPERIODNGRSN708700COMMUNITYVSTATUSCLSSSIFORMTopography

PRN 17432NAME PONT AFON MEURIGTYPEBridgePERIODPost-medievalNGRSN71806751COMMUNITYCONDITIONIntactSTATUSSTATUSNone recordedFORMOther Structure

PRN 19162 NAME PANTYBONTBREN;RHYD-GALED
TYPE Bridge PERIOD Post-medieval
NGR SN69506866 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Other Structure

PRN 19167 NAME LLWYNMALIS;LISBURNE WEST;LLWYN MALEES
TYPE Lead mine, Zinc mine PERIOD Post-medieval
NGR SN69006790 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Earthwork

PRN 19168 NAME UNKNOWN
TYPE Quarry PERIOD Post-medieval
NGR SN6927368011 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Earthwork

PRN 19169 NAMETYPE Factory PERIOD Post-medievalNGR SN69286955 COMMUNITY Ystrad MeurigCONDITION Not Known STATUS None recorded FORM Building

PRN 19171 NAME CAPEL CARADOG TYPE Chapel PERIOD Post-medieval NGR SN69296943 COMMUNITY Ystrad Meurig CONDITION Intact STATUS None recorded FORM Building

PRN 19172 NAME RHYD GALED
TYPE Blacksmiths workshop PERIOD Post-medieval
NGR SN69516869 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Building

PRN 19643NAME PANT-Y-FFYNNONTYPEWellPERIODPost-medievalNGRSN7046269133COMMUNITYCONDITIONSTATUSNone recordedFORMPlace-name

PRN 19644NAME HAFOD-Y-GOFAINTTYPEHafodPERIODPost-medievalNGRSN70086898COMMUNITYVSTATUSNone recordedFORMPlace-name

PRN 19645NAME HAFOD HOUSETYPEHafodPERIOD Post-medievalNGRSN70066895COMMUNITYCONDITIONSTATUS None recordedFORMPlace-name

PRN 19646NAME HAFOD-Y-GOFAINT-FACHTYPEHafodPERIODPost-medievalNGRSN7021168873COMMUNITYVSTATUSNone recordedFORMPlace-name

PRN 19647 NAME UNKNOWN
TYPE Quarry PERIOD Post-medieval
NGR SN70796849 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Earthwork

PRN 19665NAME GWAR FFYNNONTYPEWellPERIODPost-medievalNGRSN7138668683COMMUNITYVSTATUSNone recordedFORMPlace-name

PRN 19669 NAME STRATA FLORIDA STATION
TYPE Railway station PERIOD Post-medieval
NGR SN71106710 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Building

PRN 19672 NAME YSBYTY YSTWYTH
TYPE Sunday school PERIOD Post-medieval
NGR SN72026915 COMMUNITY Ysbyty Ystwyth
CONDITION Not Known STATUS None recorded FORM Building

# PRN 2037 NAME PEN-Y-FFRWYD LLWYD CAMP TYPE Hillfort PERIOD Iron Age NGR SN70926878 COMMUNITY Ystrad Meurig CONDITION Near Intact STATUS scheduled ancient monument CD033 FORM Earthwork

PRN 2038 NAME YSTRAD MEURIG CASTLE
TYPE Castle PERIOD Medieval
NGR SN70256750 COMMUNITY Ystrad Meurig
CONDITION Near Destroyed STATUS scheduled ancient monument
CD032 FORM Building

#### PRN 2039 NAME CWM MEURIG ISAF

TYPE MottePERIODMedievalNGRSN71856777COMMUNITYYstradCONDITIONNearIntactSTATUSScheduledancient monumentCD031FORMEarthwork

#### PRN 2044 NAME GAREG-LWYD

TYPE Defended enclosurePERIOD Iron AgeNGRSN70106971COMMUNITY Ystrad MeurigCONDITIONNear Intact, DamagedSTATUS scheduled ancient monumentCD267FORMEarthwork

PRN 2045 NAME CRAIG YSTRADMEURIG
TYPE Round barrow PERIOD Bronze Age
NGR SN7057768662 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Earthwork

#### PRN 2046 NAME YSTRAD MEURIG

TYPE HospicePERIOD MedievalNGR SN7168COMMUNITY Ystrad MeurigCONDITIONSTATUS None recorded FORM Documents

PRN 24571 NAME BWLCH Y BAEDD
TYPE Cottage PERIOD Post-medieval
NGR SN70437008 COMMUNITY Ysbyty Ystwyth
CONDITION Damaged STATUS None recorded FORM Building

PRN 25933 NAME GLAN-SYCHNANT TYPE Lead mine PERIOD Post-medieval NGR SN7084969228 COMMUNITY Ystrad Meurig CONDITION Not Known STATUS *None recorded* FORM Earthwork

PRN 25934 NAME CLODDIAU;BRONCARADOC;BRONCARADOG TYPE Lead mine PERIOD Post-medieval NGR SN7224369018 COMMUNITY Ysbyty Ystwyth CONDITION Not Known STATUS *None recorded* FORM Earthwork

PRN 25990 NAME TY'N Y COED
TYPE Metal mine PERIOD Post-medieval
NGR SN6977269512 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Earthwork

PRN 30118 NAME RHYDGALED
TYPE Dwelling, Public house PERIOD Post-medieval
NGR SN6951868653 COMMUNITY Ystrad Meurig
CONDITION Intact STATUS *listed building 14558 II* FORM Building

PRN 38039 NAME BWLCH-Y-BAEDD WELL ITYPE Well PERIOD Post-medievalNGR SN7046770116 COMMUNITY Ystrad MeurigCONDITION STATUS None recorded FORM None

PRN 38040 NAME BWLCH-Y-BAEDD WELL II
TYPE Well PERIOD Modern
NGR SN7074170078 COMMUNITY Ystrad Meurig
CONDITION STATUS None recorded FORM None

PRN 40664NAME PEN-Y-GRAIG-UCHAFTYPE FarmPERIODPost MedievalNGRSN70796795COMMUNITYYstrad MeurigCONDITIONVariousSTATUSNone recordedFORMComplex

PRN 40670 NAME TRE-ISAF FACH
TYPE Farm PERIOD Post Medieval
NGR SN70776742 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Documents

PRN 40677 NAME CARMARTHEN-CARDIGAN RAILWAY
TYPE Railway PERIOD Post Medieval
NGR SN68636735 COMMUNITY Ystrad Meurig
CONDITION Damaged STATUS None recorded FORM Earthwork

PRN 45059 NAME DOLBEUDIAU FARM
TYPE Barn PERIOD Post-medieval
NGR SN71126630 COMMUNITY Ystrad Fflur
CONDITION Near Intact STATUS None recorded FORM Building

PRN 5038NAME MYNACHDYTYPEMonastic land, GrangePERIODNGRSN712679COMMUNITYCONDITIONSTATUSNone recordedFORMPlace-name

PRN 51576 NAME LLWYNGOFFRE FELIN FACH
TYPE Leat PERIOD Post-medieval
NGR SN72706878 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Documents

PRN 5558 NAME DROSGOL
TYPE Clearance cairn PERIOD Medieval, Post-medieval
NGR SN7084169196 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Earthwork

PRN 5559 NAME DROSGOL
TYPE Clearance cairn PERIOD Medieval, Post-medieval
NGR SN70646916 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Earthwork

PRN 6141NAME HAFOD Y GOFAINT ISAFTYPEHafodPERIODMGRSN69956940COMMUNITYCONDITIONSTATUSNone recordedFORMPlace-name

PRN 6865 NAME BRYN BACH TYPE Cottage PERIOD Post-medieval NGR SN69716865 COMMUNITY Ystrad Meurig CONDITION Near Destroyed STATUS None recorded FORM Building

PRN 8322 NAME HEN BLAS
TYPE Finds, Cropmark PERIOD Bronze Age, Unknown
NGR SN702675 COMMUNITY Ystrad Meurig
CONDITION Not applicable STATUS None recorded FORM Finds

PRN 9256 NAME RHYD-GOCH TYPE Cottage PERIOD Post-medieval NGR SN68886825 COMMUNITY Ystrad Meurig CONDITION Damaged STATUS *None recorded* FORM Building

PRN 9297 NAME TY-UCHAF
TYPE Cottage PERIOD Post-medieval
NGR SN71016965 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Building

PRN 9298 NAME GLAN-SYCHNANT
TYPE Farmstead PERIOD Post-medieval
NGR SN70986925 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Building

PRN 9299 NAME PENLLYN TYPE Cottage PERIOD Post-medieval NGR SN71186928 COMMUNITY Ystrad Meurig CONDITION Near Intact STATUS *None recorded* FORM Building

PRN 9300 NAME PIGYN
TYPE Cottage PERIOD Post-medieval
NGR SN71206904 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Building

PRN 9301 NAME PANT-Y-CHWARELTYPE Cottage PERIOD Post-medievalNGR SN71356924 COMMUNITY Ysbyty YstwythCONDITION Near Intact STATUS None recorded FORM Building

PRN 9302 NAME TY'N-Y-CLAWDD TYPE Cottage PERIOD Post-medieval NGR SN71556916 COMMUNITY Ysbyty Ystwyth CONDITION Near Intact STATUS *None recorded* FORM Building

PRN 9303 NAME TY'N-Y-LLYN TYPE Cottage PERIOD Post-medieval NGR SN71566910 COMMUNITY Ysbyty Ystwyth CONDITION Near Intact STATUS None recorded FORM Building

PRN 9304 NAME GWAR-FFYNNON TYPE Cottage PERIOD Post-medieval NGR SN71606890 COMMUNITY Ystrad Meurig CONDITION Damaged STATUS *None recorded* FORM Building

PRN 9305 NAME TAN-CNWCH TYPE Cottage PERIOD Post-medieval NGR SN72006878 COMMUNITY Ystrad Meurig CONDITION Damaged STATUS None recorded FORM Building

PRN 9306 NAME HENDREFELIN MINE;ELLA;LISBURNE WEST;HENDRE
TYPE Lead mine PERIOD Post-medieval
NGR SN718698 COMMUNITY Ysbyty Ystwyth
CONDITION Not Known STATUS None recorded FORM Earthwork

PRN 9308 NAME FELIN-FACH TYPE Cottage PERIOD Post-medieval NGR SN72716873 COMMUNITY Ysbyty Ystwyth CONDITION Damaged STATUS *None recorded* FORM Building

PRN 97600 NAME HENDREFELIN MINE;ELLA;LISBURNE WEST;HENDRE
TYPE Mine level PERIOD Post Medieval
NGR SN71876992 COMMUNITY Ysbyty Ystwyth
CONDITION STATUS None recorded FORM Earthwork

PRN 97601 NAME HENDREFELIN MINE; ELLA; LISBURNE WEST; HENDRE
TYPE Mine shaft PERIOD Post Medieval
NGR SN71786981 COMMUNITY Ysbyty Ystwyth
CONDITION STATUS None recorded FORM Earthwork

PRN 97602 NAME HENDREFELIN MINE;ELLA;LISBURNE WEST;HENDRE
TYPE Trench PERIOD Post Medieval
NGR SN71776979 COMMUNITY Ysbyty Ystwyth
CONDITION STATUS FORM Earthwork

PRN 97603NAME HENDREFELIN MINE;ELLA;LISBURNE WEST;HENDRETYPE Boiler housePERIOD Post MedievalNGRSN71716975COMMUNITYYsbyty YstwythCONDITIONSTATUS None recordedFORMBuilding - Ruined

PRN 97604 NAME HENDREFELIN MINE; ELLA; LISBURNE WEST; HENDRE
TYPE Balance pit PERIOD Post Medieval
NGR SN71726976 COMMUNITY Ysbyty Ystwyth
CONDITION STATUS None recorded FORM Earthwork

PRN 97605 NAME HENDREFELIN MINE; ELLA; LISBURNE WEST; HENDRE
TYPE Flat rods PERIOD Post Medieval
NGR SN71696974 COMMUNITY Ysbyty Ystwyth
CONDITION Near Destroyed STATUS None recorded FORM Documents

PRN 97606 NAME HENDREFELIN MINE;ELLA;LISBURNE WEST;HENDRE
TYPE Mine shaft PERIOD Post Medieval
NGR SN71666972 COMMUNITY Ysbyty Ystwyth
CONDITION STATUS None recorded FORM Earthwork

PRN 97607 NAME HENDREFELIN MINE; ELLA; LISBURNE WEST; HENDRE
TYPE Mine shaft PERIOD Post Medieval
NGR SN71626970 COMMUNITY Ysbyty Ystwyth
CONDITION STATUS None recorded FORM Earthwork

PRN 97609 NAME LLWYNMALIS;LISBURNE WEST;LLWYN MALEES
TYPE Mine shaft PERIOD Post Medieval
NGR SN68846786 COMMUNITY Ystrad Meurig
CONDITION STATUS None recorded FORM Earthwork

PRN 97610 NAME LLWYNMALIS;LISBURNE WEST;LLWYN MALEES
TYPE Balance pit PERIOD Post Medieval
NGR SN68856786 COMMUNITY Ystrad Meurig
CONDITION Near Destroyed STATUS None recorded FORM Documents

PRN 97611 NAME LLWYNMALIS;LISBURNE WEST;LLWYN MALEES TYPE Waste tips PERIOD Post Medieval NGRSN68846787COMMUNITYYstrad meurigCONDITIONSTATUS None recordedFORMEarthwork

PRN 97612 NAME LLWYNMALIS;LISBURNE WEST;LLWYN MALEES
TYPE Building PERIOD Post Medieval
NGR SN69046794 COMMUNITY Ystrad Meurig
CONDITION STATUS None recorded FORM Building - Ruined

PRN 97613 NAME LLWYNMALIS;LISBURNE WEST;LLWYN MALEES
TYPE Mine building PERIOD Post Medieval
NGR SN69056790 COMMUNITY Ystrad Meurig
CONDITION STATUS None recorded FORM Building - Ruined

PRN 97614 NAME LLWYNMALIS;LISBURNE WEST;LLWYN MALEES
TYPE Engine shaft PERIOD Post Medieval
NGR SN69046792 COMMUNITY Ystrad Merig
CONDITION STATUS None recorded FORM Documents

PRN 97615 NAME LLWYNMALIS;LISBURNE WEST;LLWYN MALEES
TYPE Mine building PERIOD Post Medieval
NGR SN68986791 COMMUNITY Ystrad Meurig
CONDITION Near Destroyed STATUS None recorded FORM Documents

PRN 97616 NAME LLWYNMALIS;LISBURNE WEST;LLWYN MALEES
TYPE Mine shaft PERIOD Post Medieval
NGR SN68946787 COMMUNITY Ystrad Meurig
CONDITION STATUS None recorded FORM Documents

#### 3.3 HER Data Summary

- 3.3.1 Of the 76 sites contained within the HER dataset, the vast majority relate to structures or features of post-medieval date, primarily collapsed cottages or remnants of extractive industry.
- 3.3.2 Whilst prehistoric sites are contained within the HER data, these are primarily the SAM sites and are dealt with elsewhere within this report.
- 3.3.3 A number of medieval sites are also present within the HER data. Whilst some of these are SAM sites (again, dealt with elsewhere) others remain unscheduled.
- 3.3.4 Two distinct geographic groups of HER sites are contained within the dataset. Both relate to post-medieval mining activities at Hendrefelin and Llwynmalis.
- 3.3.5 Hendrefelin represents a series of trial mines that were excavated on a small and discontinuous fault line. They were linked by at least four shafts. A record from 1870 shows that 20 tons of lead ore were produced in that year (Ralph, nd).

3.3.6 Llwynmalis, or Lisburne West Mine, was known to have been worked before a recorded reopening in 1840, and appears to have been worked to 1853. There was an abortive opening in 1856 followed by further reopenings in 1862-70 and 1880-84. Records show it produced 786 tons of lead ore (Ralph, nd).

#### 3.4 SAM Data

- 3.4.1 A search of Cadw's SAM database returned a total of 5 SAM sites within a 2km radius of the proposed turbine locations. They are described and listed below by SAM number and are displayed on Fig 4 in relation to the site.
- 3.4.2 <u>CD033 Pen-y-Ffrwyd Llwyd Camp.</u> Located approximately 500m to the north of the proposed turbines is a large Iron Age hillfort. Plates 1-3 show oblique aerial photographs of the site. The following is an extract Driver's (2005) account of the hillfort:

"Pen-y-Ffrwyd Llwyd Camp is a dramatically sited hillfort, located on very prominent ridge overlooking a shallow valley and descent to the river Ystwyth on the northwest side from the edge of a cliff, and commanding views out across the northern fringes of Cors Caron to the southeast. Along the west side the hillfort has been built against a very steep cliff edge; on the east side the land slopes away more gradually. The fort is an elongated oval in plan, aligned northeast, measuring c.188m northeast-southwest by 80m east-west. The main gate was sited at the northeast tip and is approached by a well-defined trackway which enters between the terminals of the two lines of rampart and is flanked by a high additional outwork on the northwest side. The eastern terminal of the inner rampart appears to have been enlarged to form a small bastion flanking the gateway. There is a small postern gate 1.3m wide on the southwest side flanked by impressive sections of rock cut ditch. In addition, an oblique trackway cuts through both sets of defences on the east side and probably represents a later entrance into the enclosure; there is the possibility of early medieval/medieval reuse. The enclosure is bivallate but the inner and outer lines of defence are not contiguous and may belong to different phases. The two ramparts are separated by clear ground and, particularly on the southeast side, the suggestion of a terrace. The inner rampart is a much lighter piece of work, forming almost a footing rampart built of material scooped from the interior. There is no outer ditch, and few traces of stone walling; these are piecemeal in nature and observed on the south side. The inner enclosure occupies a very strong position on the hill and incorporates natural outcrops on the south side. The outer enclosure is quite differently built, the bank standing to about 10m by 2m high overall with a strong outer rock cut ditch, particularly on the north side (flanking the gateway) and on the south side. Traces of well-built stone walling can also be seen on its outer face. Up to three house platforms can be traced inside the fort, but aerial photographs taken in winter conditions suggest the positions of many more terraces in the interior" (Driver, 2005).

- 3.4.3 <u>CD214 Craig Ystradmeurig Round Cairn.</u> This Bronze Age funerary monument is set on high ground at the top of Craig Ystradmeurig. It is located approximately 350m to the south west of Pen-y-Ffrwyd Llwyd Camp and 500m to the north east of the proposed turbine locations. The feature is approximately 10m in diameter and is 1.8m high. Plate 4 shows two photographs of the cairn from a Cadw monitoring visit undertaken in 2006, whilst Fig 5 shows a detailed location of CD214 (and CD033) in relation to the proposed turbines.
- 3.4.4 <u>CD032 Ystradmeurig Castle.</u> Approximately 700m to the south west of the proposed turbine locations are the earthworks of an important castle established in about 1110 and then destroyed in 1137. It was disputed, besieged and rebuilt through the later twelfth century and is last recorded in 1208. The castle remains consists of a rather angular enclosure, about 100m north-south by 82m, occupying the southern tip of a spur. This has traces of a rampart and ditch on the north where it faces level ground and is otherwise defined by scarps above steep natural slopes. In the northern part of the enclosure are the foundations of a massive rectangular stone tower, 18-20m across. This was apparently part of a building complex at least 30m across. Within the southern tip of the castle enclosure gentle scarps define an inner oval enclosure, about 35m north-south by 30m (Wiles, 2007). Fig 6 shows a detailed plan of the castle earthworks whilst plate 5 shows an oblique aerial photograph of the site.
- 3.4.5 <u>CD031 Cwm Meurig Motte.</u> Approximately 1km to the south east of the proposed turbine locations are the remains of a medieval motte and bailey fortification. This is a steep-sided, flat-topped circular, apparently ditched mound, about 23m in diameter & 5.0m high, having a 10m diameter summit area, showing the clear scar of an excavation trench on the east; possible indications of a curvilinear enclosure, roughly 40-50m across, on the north: there is no evidence to support the suggestion that this site represents the original castle of Ystrad Meurig, predecessor of the complex enclosure, 1.5km to the west (Wiles, 2004). Fig 7 shows its exact location and plate 6 shows an oblique aerial photograph of the site.
- 3.4.6 <u>CD268 Garreg-Lwyd Defended Enclosure.</u> Located approximately 1.4m to the north west of the proposed turbines location is an oval hillslope enclosure sited on land falling gently to the west. The defences are recorded as comprising a dry-stone wall about 3m thick and 0.5m high. The interior shows no sign of having been ploughed (Driver, 2005).

#### 3.5 LB Data

3.5.1 A total of nine LBs are located within a 2km radius of the proposed turbines location. Of these, eight are grade II listed structures whilst one is grade II\* listed. The LBs are listed below and their location in relation to the proposed turbines is shown on fig 8.

| Number | Name               | Grade |
|--------|--------------------|-------|
| 14558  | Rhydgaled          | II    |
| 82037  | Church of St. John | II    |
| 82949  | Bryn Hyfryd        | II    |

| 82952 | Bryn Hyfryd coach house and stable | II  |
|-------|------------------------------------|-----|
| 82955 | Maesbanadlog                       | II  |
| 82957 | Plas Bron Meurig                   | II  |
| 82959 | Talfryn                            | II  |
| 83669 | Hafodygofaint Uchaf                | II  |
| 9916  | St Johns College, Ystradmeurig     | II* |

#### 3.6 Historic Landscape Characterisation

- 3.6.1 The location of the proposed turbines, and all of the application area, lies within the south eastern edge of the Upland Ceredigion Historic Landscape area, HLW (D) 2.
- 3.6.2 The following is an extract from the Upland Ceredigion landscape description from the Countryside Council for Wales:

"This extensive area of Ceredigion comprises a series of upland plateaux between about 200 and 400m above OD, bounded to the east by the Cambrian Mountains, the central spine of Wales, and dominated by Pumlumon Fawr at 752m above OD in the north. The plateaux are deeply dissected by the valleys of the Rivers Rheidol, Ystwyth and their tributaries, the lower reaches of which are below 50m above OD at the plateaux margins along the west side of the area. The whole area is rich in diverse and often visually dramatic evidence of land use and the exploitation of natural resources, from the prehistoric period to the present, and it also includes several sites with important historic artistic associations. The valleys provide two major cross-mountain, east-west routes, the northernmost from the Rheidol valley via Devil's Bridge to the upper reaches of the Wye valley below Eisteddfa Gurig, and the other route from Devil's Bridge follows the Ystwyth valley virtually to its source and thence to the headwaters of the River Elan. These routes provided the spectacle of mountain scenery, open upland moors and rivers and waterfalls that became almost the stock-in-trade descriptions and views of the 18th century travellers and artists. Two major changes in land use separate the perceived, artistic and tourist landscape of the late 18th and 19th centuries from that of the late 20th century. The most recent, the afforestation of large areas of upland and valley sides, began in the 1920s and is now at its maximum planned extent. The second major industry represented in this area is the silver and lead mine industry whose period of most intense operation spans the late 19th and early 20th centuries. The principal sites with extant remains are Esgair- mwyn ,Cwmystwyth , Frongoch,Ystum Tuen, Llywernog, Pontewryd, Goginan, Great Darren, Cwmsymlog and Bryndyfi. Most surface buildings and processing evidence is 19th century in date, but there are earlier traces from the 17th and 18th centuries era of the Mines Royal and Mines Adventurers. Of even greater significance perhaps is the recent and convincing demonstration through excavation and survey of prehistoric, Bronze Age copper mining from such sites as Copa Hill near Cwmystwyth. Water power is important in the area and the River Rheidol and its tributaries are dammed below

Pumlumon, at Nant-y-moch. Miners' housing survives both in isolated areas and in settlements like Ffair Rhos and Pontrhydfendigaid. The post-medieval growth of these villages was mainly due to the mining and quarrying industry and to the long distance livestock trade organised by the Drovers. Droves converged on Cwmystwyth and Ffair Rhos, before taking the open mountain routes to the east. Fairs at Ffair Rhos and Pontrhydfendigaid were dominated by the livestock trade. Livestock (cattle and sheep) production and the ability to supplement agricultural income by mining work enriched this area of Mid-Wales in the 18th and 19th centuries. The vegetational and land use changes of the 20th century, intended to compensate for the decline in hill farming and collapse of rural extractive industries, are particularly marked in this area not just by afforestation. The fortunes of the leading Ceredigion gentry families were enhanced by appropriation of the estates of former monastic houses, most notably of the Cistercian House of Strata Florida. Re-established at its present site in 1184, the Abbey came under the patronage of the Lord Rhys, prince of Deheubarth, and his descendants, many of whom were buried there. The area encloses the Abbey site and the whole of the large upland grange of Cwmystwyth. Lead smelting at Cwmystwyth reduced the areas of woodland, but the mainstay of the grange's economy was its upland sheep walks. The medieval livestock régime of both cattle and sheep was undoubtedly organised through seasonal grazing of the uplands or transhumance. Settlement studies of hafod and lluest named settlements have demonstrated how seasonally occupied holdings could evolve into permanent small holdings from the later Middle Ages onwards. There are many well-documented examples within this landscape area. Bronze Age monuments are known from the high uplands as well as the plateaux west of the Cambrian Mountains. In addition to antiquarian explorations and finds of pottery and metalwork, groups of cairns have been excavated at Nant-y-moch and a barrow at Troed Rhiw Seiri. There are large areas of wild, remote, almost untouched moorland, for example, south and east of Cwmystwyth, which have not been systematically surveyed and have great archaeological potential. Changing use of the uplands during the first half of the first millennium BC, mainly brought about by climatic deterioration, led to changes in settlement patterns. A proliferation of different kinds of Iron Age defended sites occurs west and south of the area, but Iron Age settlement is attested by such sites as Castell Rhyfel hillfort, Caron-Is-Clawdd, and the strongly defended Castell Bwa-Drain high above Cwm Rheidiol. The western limits of the area partly enclose the Roman route corridor of Sarn Helen, the principal north-south route through Wales, with an auxiliary fort at Trawscoed, strategically sited to safeguard the route across the deep valleys of the Rheidol and the Ystwyth. Also included within the western limits are medieval Welsh settlements, commotal centres like Ystrad Meurig or Llanfihangel-y-Creuddyn, which were seized by the Normans in the 11th and 12th centuries and made the centres of their new lordships".

3.6.3 This Historic Landscape Area is subdivided into individual Character Areas (HLCAs). The proposed development lies within HLCA Blaen Sychnant. The following is an extract from the description and essential characteristics of that area: "This is an area of undulating, sometimes craggy upland, ranging in height between 200m and 300m. There is a collection of abandoned cottages dispersed across the landscape, and at least one inhabited dwelling - a stone built cottage. These are early 19th century squatter cottages. Surrounding the abandoned cottages are relict field systems of small fields and paddocks with larger fields further out. Boundaries once comprised earth and stony banks and dry-stone walls, but wire fences now divide enclosures. Grazing of improved pasture, sometimes running over old boundary banks, dominates the area, but patches of rougher grazing are present. It is essentially a treeless landscape.

Recorded archaeology in this area consists mostly of deserted cottages and associated remains. There is, however, a metal mine on record, and a Medieval motte - Cwm Meurig Isaf - provides an element of time-depth to the landscape.

To the north and southwest, unenclosed and semi-enclosed upland merges with this area. Elsewhere there is better definition between this area and its neighbours, as the land falls away to lower-lying, settled, enclosed pasture"

#### 3.7 Historic Maps

- 3.7.1 As part of the desk based assessment, a study of past land use within the area of the proposed turbines was made by assessing cartographic sources.
- 3.7.2 <u>1845 Ystrad Meurig Parish Tithe Map.</u> The tithe map (Fig 9), drawn up in 1845, shows the proposed turbine locations in relatively clear detail. No features are marked as being within the area though other features, such as the hillfort to the north, are clearly depicted.
- 3.7.3 <u>1890 1<sup>st</sup> Ed 1:10560 OS Map.</u> The 1<sup>st</sup> edition OS map (Fig 10) shows the area of proposed turbines in very clear detail. The area is depicted as rough, unimproved, upland pasture/grazing. A footpath is also marked bisecting the field along a roughly north south axis. Whilst no features of historic or archaeological significance are depicted within the field containing the turbnines, both Pen-y-Ffrwd Llwyd hillfort and Craig Ystrad Meurig cairn to the north and north east are depicted clearly. Also, a small quarry adjacent to the assessment areas northern boundary is shown.
- 3.7.4 <u>1905 2<sup>nd</sup> Ed 1:10560 OS Map.</u> The 2<sup>nd</sup> edition OS map (Fig 11) shows the assessment area in the same level of detail as previously depicted and with no further features of archaeological or historic significance added.

#### 3.8 Historic Map Regression Summary

3.8.1 The tithe and early issue OS maps show that, at least in the 19<sup>th</sup> and early 20<sup>th</sup> centuries, no features of archaeological significance are marked as being present within the area of the proposed turbines.

#### **3.9** Aerial Photographs

3.9.1 The aerial photographs held by the NMR in Aberystwyth were consulted as part of the desk based assessment as well as the Welsh Assembly Collection from Cardiff.

- 3.9.2 The assessment area was generally well covered by aerial photography dating from between 1946 and 1978. Only those photographs retaining sufficient clarity of detail are contained within this assessment.
- 3.9.3 <u>106G/UK/1457 2May46.</u> The 1946 RAF aerial photograph (Plate 7) shows the locations of the proposed turbines in relatively clear detail. No features are shown within the immediate area. The field is shown as being upland pasture though appears to have been improved by this point.
- 3.9.4 <u>1973 Ordnance Survey AP.</u> The 1973 OS aerial photograph (Plate 8) shows the site of the proposed turbines in clear detail. It is apparent that a large amount of disturbance of some sort has taken place, limited almost only to the field containing the proposed turbines.
- 3.9.5 The whole area is shown as being white, with vehicle tracks apparent across the surface of the field. It is unclear what form this obvious disturbance actually took on the ground, whether it relates to topsoil stripping or some sort of agricultural spreading for example.
- 3.9.6 No further features of historic or archaeological significance are depicted.
- 3.9.7 <u>2013 Google Earth Satellite Image.</u> The Google Earth image (Plate 9) shows the site as it currently appears. No obvious features of historic or archaeological interest are noted. Similarly, no residual effect of the disturbance evident on the 1973 aerial photograph is visible.

#### 3.10 Portable Antiquities Scheme

3.10.1 A full search of the Portable Antiquities Scheme (PAS) online database returned no finds from within the assessment area.

## 4 Site Visit

#### 4.1 Aims

- 4.1.1 The site visit was carried out on Friday 9<sup>th</sup> August 2012, with a second visit carried out on Friday 11<sup>th</sup> July 2014. The aims of the visits were to:
  - Assess any historic and/or archaeological sites identified during assessment of the documentary and cartographic sources
  - Assess the condition of archaeological sites within the proposed development area and the potential impact of development on them
  - Assess the potential of the development area to yield new and unrecorded archaeological sites.

- 4.1.2 High resolution (14+ megapixel) digital photographs were taken where appropriate, and a finds sampling strategy was formulated in case surface finds were encountered during the site visit.
- 4.1.3 Following the Institute for Archaeologist's *Standards and Guidance for Desk-Based Assessments* (2011), the main objective of the site visit was to gain information about the archaeological resource within the proposed development area in order to make an assessment of its significance in the local, regional and national context. The determination of significance will enable the following to be formulated:
  - A strategy to ensure the recording, preservation or management of the resource during the proposed development
  - A strategy to mitigate against a threat to the archaeological resource should it be considered of sufficient value
  - A proposal for further archaeological investigation within a programme of research associated with the proposed development

#### 4.2 Site Visit Summary

- 4.2.1 Both site visits undertaken in bright and sunny conditions (Plates 10-34).
- 4.2.2 No features of archaeological or historic significance were noted within the areas of the proposed turbines or associated infrastructure.
- 4.2.3 A small amount of stones were noted located against a natural rock outcrop. This is thought to represent relatively modern clearance rather than be of archaeological significance.

# 5 Impact Assessment

#### 5.1 Criteria for assessing impact

- 5.1.1 The Impact was assessed in terms of both the potential physical effect that the development might have on the archaeological resource and the effect on the setting of archaeological sites, including visibility to and from the site. The assessment was carried out following guidelines set out in *Design Manual for Roads and Bridges* (DMRB 2009, Volume 11, Section 3, part 2 HA 20807).
- 5.1.2 The assessment of potential impacts resulting from the proposed development has taken account of the likely effects during both the construction and operational phases. The significance level attributed to each impact has been assessed based on the magnitude of change due to the development proposals, and the sensitivity of the affected receptor/receiving environment to change, as well as a number of other factors.

| Importance          | Receptor  |  |  |  |
|---------------------|---|--|--|--|
| Highest             | World Heritage Site   |  |  |  |
| High                | Scheduled Ancient Monuments   |  |  |  |
|                     | Grade I and II* Listed Buildings  |  |  |  |
|                     | Sites suitable for scheduling or considered to be of national                             |  |  |  |
|                     | importance. Other sites not listed on the HER but considered to be of national importance |  |  |  |
| Moderate            | Sites listed on the Historic Environment Record which are of a                            |  |  |  |
|                     | reasonably well defined extent, nature and date and significant                           |  |  |  |
|                     | examples in the regional/county context   |  |  |  |
|                     | Grade II listed buildings   |  |  |  |
|                     | Registered Historic Battlefields  |  |  |  |
|                     | Registered Historic Parks and Gardens   |  |  |  |
|                     | Conservation Areas  |  |  |  |
|                     | Other sites not listed on the HER but considered to be of regional importance             |  |  |  |
| Low                 | Sites listed on the Historic Environment Record which are of a less                       |  |  |  |
|                     | well defined extent, nature and date  |  |  |  |
|                     | Other sites not listed on the HER but considered to be of local                           |  |  |  |
|                     | importance  |  |  |  |
| Negligible          | Sites of some local heritage interest   |  |  |  |
|                     | Sites of uncertain importance meriting further study                                      |  |  |  |
|                     | Poorly provenance sites   |  |  |  |
| Unknown             | Sites of uncertain importance meriting further study                                      |  |  |  |
| Table 1. Importance | tance of Receptors  |  |  |  |

Table 1: Importance of Receptors

| Archaeological | Criteria   |  |  |
|----------------|--|--|--|
| Potential      |  |  |  |
| High           | Existing sites that are readily visible as standing structures or<br>earthworks that survive in a good state of preservation<br>Known sites comprising buried archaeological remains |  |  |

|                    | 1   |  |  |  |
|--------------------|---|--|--|--|
|                    | Areas where numerous sites of certain dates or periods are known          |  |  |  |
|                    | within the vicinity, indicating similar sites are likely to be present    |  |  |  |
|                    | within a site area.   |  |  |  |
| Moderate           | Areas where a few sites of certain dates or periods are known             |  |  |  |
| Moutrate           | 1   |  |  |  |
|                    | within the vicinity, indicating similar sites may be present within       |  |  |  |
|                    | a site area   |  |  |  |
|                    |   |  |  |  |
|                    | Areas where numerous sites of certain dates or periods are known          |  |  |  |
|                    | within the vicinity, but where the site area has been subject to          |  |  |  |
|                    | some previous development or disturbance.                                 |  |  |  |
| Low                | Areas where very few sites of certain dates or periods are known          |  |  |  |
| 2011               | within the vicinity, indicating similar sites may possibly be present     |  |  |  |
|                    | within the vienney, indeating similar sites may possibly be present       |  |  |  |
|                    | A many with any many many a site of contain datas an mania da ana lun arm |  |  |  |
|                    | Areas where numerous sites of certain dates or periods are known          |  |  |  |
|                    | within the vicinity, but where the site area has been subject to          |  |  |  |
|                    | extensive previous disturbance through modern development or              |  |  |  |
|                    | industrial processes  |  |  |  |
|                    |   |  |  |  |
|                    | Areas where significant build-up of material has occurred                 |  |  |  |
|                    | modern times associated with levelling, spoil tipping or othe             |  |  |  |
|                    | industrial activities sealing areas where archaeological deposits         |  |  |  |
|                    | may be present  |  |  |  |
| Negligible         | Areas where no known archaeological remains have been                     |  |  |  |
| regingible         | ÷   |  |  |  |
|                    | identified through previous archaeological investigations                 |  |  |  |
|                    |   |  |  |  |
|                    | Areas where previous disturbance through modern development               |  |  |  |
|                    | or industrial activity has completely removed archaeological              |  |  |  |
|                    | remains that were known or may have been present                          |  |  |  |
| Unknown            | Where there is no available archaeological information indicating         |  |  |  |
|                    | the presence or absence of archaeological remains                         |  |  |  |
| Table 2. Archesele |   |  |  |  |

Table 2: Archaeological Potential

5.1.3 The magnitude of impacts through development upon heritage features can range from major to neutral. To establish the magnitude of impact table 3 is used.

| Magnitude of<br>Impact | Description of Impact   |
|------------------------|---|
| Major                  | Removal of or damage to at least 50% of a site or feature   |
|                        | Fundamental alteration to the setting of features for which<br>the concept of setting is applicable |
| Moderate               | Removal of or damage to up to 50% of a site or feature  |

|         | Considerable alteration to the setting of a site or feature for<br>which the concept of setting is applicable |  |
|---------|---|--|
| Minor   | Some disturbance to site or feature   |  |
|         | Discernible alteration to the setting of a site or feature for<br>which the concept of setting is applicable  |  |
| Neutral | No disturbance to site or feature   |  |
|         | No alteration to the setting of a site or feature   |  |

Table 3: Magnitude of Impact

5.1.4 The significance of an impact is devised by cross referencing the importance of the receptor with the magnitude of impact, see table 4. This follows the principles set out in the Design Manual for Roads & Bridges, Volume II, Section 3, Part 2, Cultural Heritage.

| Importance of Receptor |           |           |                |          |               |
|------------------------|-----------|-----------|----------------|----------|---------------|
| Magnitude<br>of Impact | Highest   | High      | Moderate       | Low      | Negligible    |
| Major                  | Major     | Major     | Major/Moderate | Moderate | Minor         |
| Moderate               | Major     | Major     | Moderate       | Moderate | Minor         |
| Minor                  | Moderate/ | Moderate/ | Minor          | Minor    | Minor/Neutral |
|                        | Minor     | Minor     |                |          |               |
| Neutral                | Neutral   | Neutral   | Neutral        | Neutral  | Neutral       |

Table 4: Assessing significance of impact

#### 5.2 Assessment of impact on SAM sites

- 5.2.1 As there are no SAM sites within the area of proposed development there will be NO direct physical impacts.
- 5.2.2 Figure 12 is a map showing the theoretical visibility of the turbine development from SAMs in the surrounding landscape, wire frame images of views both to and from the SAM sites are also provided in Appendix 3. It should be noted that it does not take local aspects such as screening by trees etc into account and is based on topographic mapping. Explanations following a visual assessment from these sites are provided below the following table. The following table shows details of all scheduled ancient monuments within a 2km radius of the turbine locations and their theoretical visibility of the proposed turbines.

| SAM No. | Description                        | Distance from<br>nearest turbine | ZTV Data                                     |
|---------|------------------------------------|----------------------------------|--|
| CD268   | Garreg Llwyd Defended<br>Enclosure | 1.4km                            | No turbine<br>visibility                     |
| CD214   | Craig Ystradmeurig cairn           | 0.5km                            | Both turbines visible                        |
| CD033   | Pen-y-Ffrwd Llwyd<br>Hillfort      | 0.5km                            | Both turbines<br>visible from S&E<br>of fort |
| CD032   | Ystradmeurig Castle                | 0.7km                            | Both turbines visible                        |
| CD031   | Cwm Meurig motte                   | 1km                              | Both turbines visible                        |

Table 5: SAM ZTV data

- 5.2.3 CD268 will not be physically disturbed by the proposed development. The turbines would also not be visible from this location, as demonstrated by the wireframe image (Appendix 3) and as it also lies at some distance from the development site there will be no alteration to the setting of the site.
- 5.2.4 CD214 is located on top of an adjacent ridgeline to the proposed development. The site will not be physically affected by the development. Its location on the top of a prominent ridge marks out the ridge itself as an important part of the setting for this monument, and making the cairn a noticeable feature of the skyline. The cairn has good all round views, although more extensive from the northwest anti-clockwise through to the southsoutheast, with the clearest views of the monument largely from the west and southwest. The proposed turbines will be partly visible from the cairn itself, this is not demonstrated in the wireframe image (Appendix 3) but was confirmed from a site visit (Plates 22 & 23). However, due to the height of the cairn ridge and the topography of the proposed development site the turbines will not be visible from the main views of the cairn from the west and southwest, and despite the cairn being visible on the skyline from the location of the proposed turbines, which lie in private farmland, any view of the cairn from beyond this point in that direction is obscured by natural topography anyway. There is a clear separation in the undulating landscape between the high ground of the cairn and the area of the proposed turbines which also serves to reduce any impact on the setting of the cairn. Although the proposed turbines are likely to affect the view from the cairn, this will be relatively minor given the wide extensive views in other directions. The effect on the setting of the cairn is therefore considered to be Minor, which is further emphasised by the fact the cairn and the proposed development site lie in separate Historic Landscape Character Areas. Therefore the Magnitude of Impact is considered to be Minor.

- 5.2.5 CD033 will not be physically disturbed by the development. It lies a relatively short distance to the north of the proposed development, despite this however local topography serves to largely hide the proposed turbines from view, as demonstrated by the wireframe image (Appendix 3). The ground on which the hillfort is located slopes down to the north with its main views being to the north and east (Plates 26 - 29). Although from the southern tip of the hillfort defences there are clear views to the south, the extending ridgeline in this direction and then sudden drop in height to the proposed development site, serves to hide the turbines from view. Similarly the hillfort itself is not visible from the site of the proposed turbines. The hillfort has utilised the northern end of a prominent ridge with steep natural slopes to the north, west and east. To the south the ridge extends for a further c.200m before steep slopes drop down to the level of the proposed turbines which lies c.500m to the south. This prominent ridge of high ground is clearly an important part of the setting of the hillfort, however the lower slopes of improved pasture which lie to the south and east, and include the area of proposed development are not considered to have the same relevance to the setting of the hillfort. As with CD214 it is felt that there enough of a clear visual and topographical distinction between the ridge upon which the archaeological site is located and the location of the proposed development that the turbines will not reduce the prominence of these higher ridges and therefore the impact on the setting is considered to be Minor. This is also perhaps emphasised by the fact the hillfort and the proposed development site lie in separate Historic Landscape Character Areas.
- 5.2.6 CD032 will not be physically disturbed by the development. Although on lower-lying ground the site does still have extensive views, largely over Cors Caron to the south and southeast (Plate 32). The wireframe image indicates the proposed turbines will be visible from this site (Appendix 3), however, lying as it does on the southern edge of the settlement of Ystrad Meurig, views northwards towards the site are obscured by buildings and tree cover (Plate 31). Similarly, the castle site is not visible from ground level at the location of the proposed turbines due to the elongated ridge on which the proposed turbines will be located (Plate 30). The castle is located on the edge of a settlement, close to a medieval church site and on some of the main road links through the local area with commanding views to the south, all of which it could be considered form elements of the setting for the castle, but none of which will be adversely affected by the proposed development. Therefore the Magnitude of Impact is considered to be Minor.
- 5.2.7 CD031 will not be physically disturbed by the development. It was not possible to access the site during the site visit, which was viewed from a short distance to the south (Plate 34). The wireframe image indicates the proposed turbines will be visible from this site (Appendix 3), however the site is covered in mature trees which would serve to obscure views to and from the site. It was not possible to positively identify this site from the location of the proposed turbines (Plate 33). The lower-lying riverside setting of this potential castle motte site will not adversely be affected by the proposed development. Therefore the Magnitude of Impact is considered to be Minor.
- 5.2.8 Taking into account the importance and potential of the SAM sites and cross referencing this with the likely magnitude of impact as discussed above, the following table shows

| SAM No. | Importance | Potential | Magnitude of<br>Impact | Significance of<br>Impact |
|---------|------------|-----------|------------------------|---------------------------|
| CD268   | High       | High      | Neutral                | Neutral                   |
| CD214   | High       | High      | Minor                  | Moderate/Minor            |
| CD033   | High       | High      | Minor                  | Moderate/Minor            |
| CD032   | High       | High      | Minor                  | Moderate/Minor            |
| CD031   | High       | High      | Minor                  | Moderate/Minor            |

the <u>significance of impact</u> the proposed development is likely to have on the SAM sites within a 2km radius of the site.

 Table 6: Significance of impact on SAM sites

#### 5.3 Assessment of impact on LB sites

5.3.1 As there are no LB sites within the area of proposed development there will be NO direct physical impacts. The following table shows details of all listed buildings within a 2km radius of the proposed turbine locations and their theoretical visibility of the sites (Fig 13).

| LB No. | Description                     | Distance from<br>nearest turbine     | ZTV Data              |
|--------|---------------------------------|--------------------------------------|-----------------------|
| 14588  | Rhydgaled                       | 1.3km                                | Both turbines visible |
| 82037  | Church of St. John              | 0.65km                               | Both turbines visible |
| 82949  | Brynhyfryd                      | 1.9km                                | Both turbines visible |
| 82952  | Brynhyfryd coach house & stable | 1.9km                                | Both turbines visible |
| 82955  | Maesbanadlog                    | 1.1km                                | Both turbines visible |
| 82957  | Plas Bron Meurig                | 0.65km                               | Both turbines visible |
| 82959  | Talfryn   1.8km   No turbing    |                                      | No turbines visible   |
| 83669  | Hafodygofaint Uchaf             | afodygofaint Uchaf 1.7km No turbines |                       |

| 9916 St Johns College | 0.6km | Both<br>visible | turbines |
|-----------------------|-------|-----------------|----------|
|-----------------------|-------|-----------------|----------|

Table 7: ZTV data for LB sites

5.3.1 Taking into account the importance and potential of the LB sites and cross referencing this with the likely magnitude of impact (based on ZTV data), the following table shows the <u>significance of impact</u> the proposed development is likely to have on the LB sites within a 2km radius of the site.

| LB No. | Importance | Potential | Magnitude of<br>Imapct | Significance of<br>Impact |
|--------|------------|-----------|------------------------|---------------------------|
| 14558  | Moderate   | Low       | Minor                  | Minor                     |
| 82037  | Moderate   | Low       | Minor                  | Minor                     |
| 82949  | Moderate   | Low       | Minor                  | Minor                     |
| 82952  | Moderate   | Low       | Minor                  | Minor                     |
| 82955  | Moderate   | Low       | Minor                  | Minor                     |
| 82957  | Moderate   | Low       | Minor                  | Minor                     |
| 82959  | Moderate   | Low       | Minor                  | Minor                     |
| 83669  | Moderate   | Low       | Minor                  | Minor                     |
| 9916   | High       | Moderate  | Minor                  | Moderate/Minor            |

Table 8: Significance of impact on LB sites

5.3.2 As there are no recorded HER sites within the area of the proposed turbines there will be NO direct physical impacts. The following table shows details of all HER sites within a 2km radius of the turbine locations and their theoretical visibility of said turbines (Fig 14).

| PRN No. | Name            | Distance from<br>nearest turbine | ZTV Data     |
|---------|-----------------|----------------------------------|--------------|
| 1004    | Bwlch yr Hendre | 1.75km                           | None visible |
| 1007    | Unknown         | 1.85km                           | None visible |
| 10067   | Henblas         | 1km                              | Both visible |
| 10931   | Dol Fawr        | 1.1km                            | Both visible |

| 11256 | Henblas                   | 1km    | Both visible |
|-------|---------------------------|--------|--------------|
| 12451 | St. John's Church         | 1km    | Both visible |
| 12851 | Drosgol                   | 1.1km  | Both visible |
| 13609 | Gwnnws Issa               | 1.8km  | None visible |
| 17432 | Pont Afon Meurig          | 1.2km  | Both visible |
| 19162 | Pant y Pont Bren          | 1.5km  | Both visible |
| 19167 | Lisburne West             | 1.9km  | Both visible |
| 19168 | Unknown                   | 1.8km  | Both visible |
| 19169 | Unknown                   | 2km    | One visible  |
| 19171 | Capel Caradoc             | 2km    | Both visible |
| 19172 | Rhydgaled                 | 1.5km  | Both visible |
| 19643 | Pant-y-Ffynnon            | 1km    | None visible |
| 19644 | Hafod-y-Gofaint           | 1km    | None visible |
| 19645 | Hafod House               | 1km    | None visible |
| 19646 | Hafod y Gofaint<br>Fach   | 0.9km  | None visible |
| 19647 | Unknown                   | 0.15km | Both visible |
| 19665 | Gwar ffynnon              | 0.7km  | Both visible |
| 19669 | Strata Florida<br>Station | 1.1km  | Both visible |
| 19672 | Ysbyty Ystwyth            | 1.5km  | Both visible |
| 2037  | Pen-y-Ffrwyd              | 0.4km  | Both visible |
| 2038  | Ystradmeurig Castle       | 1km    | Both visible |
| 2039  | Cwm Meurig motte          | 1km    | Both visible |
| 2044  | Garreg Llwyd              | 1.6km  | None visible |
| 2045  | Craig Ystradmeurig        | 0.4km  | Both visible |
| 2046  | Ystradmeurig              | 0.2km  | Both visible |

| 24571 | Bwlch y Baedd     | 1.9km | None visible |
|-------|-------------------|-------|--------------|
| 25933 | Glan sychant      | 1km   | None visible |
| 25934 | Cloddiau          | 1.7km | None visible |
| 25990 | Tynycoed          | 1.7km | One visible  |
| 30118 | Rhydgaled         | 1.5km | Both visible |
| 38039 | Well I            | 1.9km | Both visible |
| 38040 | Well II           | 1.9km | None visible |
| 40664 | Pen y Graig Uchaf | 1.5km | None visible |
| 40670 | Tre Isaf Fach     | 1km   | Both visible |
| 45059 | Dolbeudiau Fm     | 2km   | Both visible |
| 5038  | Mynachdy          | 0.4km | Both visible |
| 51576 | Llwyngoffre       | 2km   | None visible |
| 5558  | Drosgol           | 1km   | None visible |
| 5559  | Drosgol           | 0.9km | One visible  |
| 6865  | Bryn Bach         | 1.4km | Both visible |
| 8322  | Henblas           | 1.1km | Both visible |
| 9256  | Rhyd Goch         | 2km   | Both visible |
| 9297  | Ty Uchaf          | 1km   | None visible |
| 9298  | Glan Sychant      | 1km   | None visible |
| 9299  | Penllyn           | 1.1km | None visible |
| 9300  | Pigyn             | 0.8km | None visible |
| 9301  | Pant y Chwarel    | 1km   | None visible |
| 9302  | Ty'n y Clawdd     | 1km   | Both visible |
| 9303  | Ty'n y llyn       | 1km   | Both visible |
| 9304  | Gwar Ffynnon      | 1km   | Both visible |
| 9305  | Tan Cnwch         | 1.2km | None visible |

| 9306  | Hendrefelin | 1.9km | None visible |
|-------|-------------|-------|--------------|
| 9308  | Felin Fach  | 2km   | None visible |
| 97600 | Hendrefelin | 2km   | None visible |
| 97601 | Hendrefelin | 1.8km | Both visible |
| 97602 | Hendrefelin | 1.8km | Both visible |
| 97603 | Hendrefelin | 1.8km | Both visible |
| 97604 | Hendrefelin | 1.8km | Both visible |
| 97605 | Hendrefelin | 1.8km | Both visible |
| 97606 | Hendrefelin | 1.8km | Both visible |
| 97607 | Hendrefelin | 1.8km | Both visible |
| 97609 | Llwynmalis  | 1.9km | Both visible |
| 97610 | Llwynmalis  | 1.9km | Both visible |
| 97611 | Llwynmalis  | 1.9km | Both visible |
| 97612 | Llwynmalis  | 1.9km | Both visible |
| 97613 | Llwynmalis  | 1.9km | Both visible |
| 97614 | Llwynmalis  | 1.9km | Both visible |
| 97615 | Llwynmalis  | 1.9km | Both visible |
| 97616 | Llwynmalis  | 1.9km | Both visible |

Table 9: ZTV data for HER sites

5.3.3 Taking into account the importance and potential of the HER sites and cross referencing this with the likely magnitude of impact (based on the ZTV data), the following table shows the <u>significance of impact</u> the proposed development is likely to have on the HER sites within a 2km radius of the site.

| PRN No. | Importance | Potential | Magnitude of<br>Impact | Significance of<br>Impact |
|---------|------------|-----------|------------------------|---------------------------|
| 1004    | Low        | Low       | Minor                  | Minor                     |
| 1007    | Low        | Low       | Minor                  | Minor                     |
| 10067   | Low        | Low       | Minor                  | Minor                     |

| 10931 |            |            |         |                |
|-------|------------|------------|---------|----------------|
|       | Low        | Low        | Minor   | Minor          |
| 11256 | Negligible | Negligible | Minor   | Minor/Neutral  |
| 12451 | High       | Moderate   | Minor   | Moderate/Minor |
| 12851 | Low        | Low        | Minor   | Minor          |
| 13609 | Low        | Low        | Minor   | Minor          |
| 17432 | Low        | Low        | Minor   | Minor          |
| 19162 | Low        | Low        | Minor   | Minor          |
| 19167 | Low        | Low        | Minor   | Minor          |
| 19168 | Low        | Low        | Minor   | Minor          |
| 19169 | Low        | Low        | Minor   | Minor          |
| 19171 | Low        | Low        | Minor   | Minor          |
| 19172 | Low        | Low        | Minor   | Minor          |
| 19643 | Low        | Low        | Minor   | Minor          |
| 19644 | Low        | Low        | Minor   | Minor          |
| 19645 | Low        | Low        | Minor   | Minor          |
| 19646 | Low        | Low        | Minor   | Minor          |
| 19647 | Low        | Low        | Minor   | Minor          |
| 19665 | Low        | Low        | Minor   | Minor          |
| 19669 | Low        | Low        | Minor   | Minor          |
| 19672 | Low        | Low        | Minor   | Minor          |
| 2037  | High       | High       | Minor   | Moderate/Minor |
| 2038  | High       | High       | Minor   | Moderate/Minor |
| 2039  | High       | High       | Minor   | Moderate/Minor |
| 2044  | High       | High       | Neutral | Neutral        |
| 2045  | High       | High       | Minor   | Moderate/Minor |
| 2046  |            | Low        |         |                |
|       | Low        | LOW        | Minor   | Minor          |

| 24571 | Low | Low | Neutral | Neutral |
|-------|-----|-----|---------|---------|
| 25933 | Low | Low | Neutral | Neutral |
| 25934 | Low | Low | Neutral | Neutral |
| 25990 | Low | Low | Minor   | Minor   |
| 30118 | Low | Low | Minor   | Minor   |
| 38039 | Low | Low | Minor   | Minor   |
| 38040 | Low | Low | Neutral | Neutral |
| 40664 | Low | Low | Neutral | Neutral |
| 40670 | Low | Low | Minor   | Minor   |
| 45059 | Low | Low | Minor   | Minor   |
| 5038  | Low | Low | Minor   | Minor   |
| 51576 | Low | Low | Neutral | Neutral |
| 5558  | Low | Low | Neutral | Neutral |
| 5559  |     |     |         |         |
| 6865  | Low | Low | Minor   | Minor   |
| 8322  | Low | Low | Minor   | Minor   |
| 9256  | Low | Low | Minor   | Minor   |
| 9297  | Low | Low | Minor   | Minor   |
| 9298  | Low | Low | Neutral | Neutral |
| 9299  | Low | Low | Neutral | Neutral |
|       | Low | Low | Neutral | Neutral |
| 9300  | Low | Low | Neutral | Neutral |
| 9301  | Low | Low | Neutral | Neutral |
| 9302  | Low | Low | Minor   | Minor   |
| 9303  | Low | Low | Minor   | Minor   |
| 9304  | Low | Low | Minor   | Minor   |
| 9305  | Low | Low | Neutral | Neutral |

|       | 1   |     |         |         |
|-------|-----|-----|---------|---------|
| 9306  | Low | Low | Neutral | Neutral |
| 9308  | Low | Low | Neutral | Neutral |
| 97600 | Low | Low | Neutral | Neutral |
| 97601 | Low | Low | Minor   | Minor   |
| 97602 | Low | Low | Minor   | Minor   |
| 97603 | Low | Low | Minor   | Minor   |
| 97604 | Low | Low | Minor   | Minor   |
| 97605 | Low | Low | Minor   | Minor   |
| 97606 | Low | Low | Minor   | Minor   |
| 97607 | Low | Low | Minor   | Minor   |
| 97609 | Low | Low | Minor   | Minor   |
| 97610 |     |     | Minor   | Minor   |
| 97611 | Low | Low |         |         |
| 97612 | Low | Low | Minor   | Minor   |
| 97613 | Low | Low | Minor   | Minor   |
| 97614 | Low | Low | Minor   | Minor   |
| 97615 | Low | Low | Minor   | Minor   |
| 97616 | Low | Low | Minor   | Minor   |
| 27010 | Low | Low | Minor   | Minor   |

Table 10: Significance of Impact on HER sites

## 5.4 Assessment of impact on Historic Landscape Characterisation areas

5.4.1 As previously mentioned the proposed turbine sites are located adjacent to the south western edge of the Upland Ceredigion HLC area, approximately 1km inside its boundary and within HLCA Blaen Sychnant. The description of the characteristic elements of this HLCA are included in paragraph 3.6.3. In summary this undulating upland area is one of grazed improved pasture enclosed in wire fences with some relict earth and stone bank boundaries visible. The archaeology largely comprises post-medieval deserted cottages, with the occasional mining remains and a medieval castle motte. The area merges into the semi-enclosed uplands to the north and west, with a more distinct separation with the lower-lying, settled enclosed pasture to the east and south.

5.4.2 The landuse and enclosure pattern of this HLCA will remain unchanged by the proposed development. Similarly the archaeological sites mentioned in the description will not be affected by development on this site. Clearly modern wind turbines are not a current element of this HLCA, however a possible radio mast or similar structure lies a relatively short distance to the north-east, possibly associated with the extensive quarrying activity at Craig y Bwlch, a wind farm is visible in the distance to the west and overhead powerlines are also visible throughout the area, all of which serve to add a modern element to the visual landscape in this area. Given the relatively small size of the proposed development (two turbines only), the resulting significance of impact is deemed to be only minor.

## 6 Discussions and Conclusions

## 6.1 Overall Interpretation

- 6.1.1 The desk based assessment has determined that the proposed development site is located within an archaeologically rich landscape with human activity in evidence from the Bronze Age onwards.
- 6.1.2 The hillfort at Pen y Ffrwd Llwyd, located immediately to the north of the proposed turbine locations, shows continuation of activity from the Bronze Age to the Iron Age. A small number of other Iron Age sites was also located in the vicinity. The hillfort is likely to have acted as a focal point for Iron Age activity in this part of the landscape.
- 6.1.3 Whilst the two turbines will be visible from parts of the hillfort, notably areas of the southern and eastern sides, other parts will have no view at all.
- 6.1.4 It should be noted that a change of location to the southern turbine, to avoid an area of semi natural vegetation, has been proposed. The move relocates the turbine a total of 25m to the south east (NGR 270786 268214).
- 6.1.5 This proposed move, very small in scale, has been reflected in all of the illustrations contained within this report. It is concluded that the proposed movement of the southerly turbine by 25m to the south east will result in no change to the archaeological impacts laid out above.

## 6.2 Conclusions

- 6.2.1 An assessment of the significance of impact that the development is likely to have on SAM sites, LBs and HER sites within a 2km radius of the site was undertaken during August 2013, with further assessment undertaken in July 2014. The vast majority of sites investigated will register only a minor impact whilst 18 sites will receive no impact at all.
- 6.2.2 The four SAM sites and one grade II\* LB are judged likely to register only a moderate/minor impact. This is mainly because of the relatively small size of the development (only two turbines) and the local topography reducing the visual impact on

the SAM sites. It is not big enough to cause either 50% of the site to be removed or cause considerable alteration to setting. Thus the magnitude of impact can only be deemed minor at most, thus resulting in the moderate/minor significance of impact on these, the most important, receptors.

- 6.2.3 It should also be noted that, as the proposed development has no direct physical impacts, the scheme is completely reversible, i.e. all impacts on archaeological assets in the surrounding landscape will be reversed upon the eventual removal and decommissioning of the turbine and its associated infrastructure.
- 6.2.4 Whilst the desk based assessment and the site walkover did not identify any new sites of archaeological or historic interest within the area of proposed development, the amount of documented archaeology in the surrounding landscape, combined with evidence for over 2500 years of human activity, suggests that the likelihood of previously unrecorded archaeological remains surviving in the area of proposed development is high.

# 7 Mitigation Proposals

- 7.1.1 A staged programme of mitigation is proposed to further investigate the potential archaeological resource within the development area and to ensure that previously unrecorded archaeological features are suitably investigated and recorded if they are revealed during construction works.
- 7.1.2 Stage 1 Pre-construction. A programme of pre-construction evaluation is proposed, designed to determine the existence, nature, extent and date of the archaeological resource. The scope of the evaluation and the methodology to be employed will be determined in discussion with Dyfed Archaeological Trust Heritage Management. However, it is suggested that, as a minimum, a single evaluation trench be excavated across the footprint of the proposed turbine and the associated hard standing.
- 7.1.3 No further features of historic or archaeological interest were noted. Should features of archaeological significance be identified during the evaluation, a programme of excavation will be implemented. The scope of the excavations will be decided in conjunction with Dyfed Archaeological Trust Heritage Management.
- 7.1.4 Stage 2 During construction. A programme of archaeological watching briefs should be implemented to ensure that no previously unrecorded sites of archaeological significance are revealed. The scope of the watching brief will be determined in discussion with Dyfed Archaeological Trust – Heritage Management, and will be informed by the results of the stage 1 works.

# 8 Acknowledgements

8.1.1 Thanks are due to Rachel Harper and Michael Phillips of Dulas Engineering Ltd, to Zoe Bevans-Rice of DAT-HM and to all the staff at the NLW and RCAHMW (Aberystwyth).

# 9 Bibliography & Sources

Ancient Monuments and Archaeological Areas Act, 1979, Rev-2000

British Geological Survey, 2001, 4th Edition. Solid Geology Map, UK South Sheet

Driver, T. 2005, *The Hillforts of North Ceredigion: Architecture, Landscape Setting and Cultural Contexts*, PhD thesis, The University of Wales, Lampeter, unpublished.

Highways Agency 2009. *Design Manual for Roads and Bridges*, http://www.dft.gov.uk/ha/standards/dmrb/index.htm

Institute for Field Archaeologists 2008 – Rev 2011, Standards and Guidance for Desk Based Assessments

Planning (Listed Building and Conservation Areas) Act, 1990

Ralph, J. nd. cited on www.mindat.org - accessed 22nd August 2013

Town and Country Planning Act, 1990

Welsh Office Circular 60/96, Planning and the Historic Environment: Archaeology

Welsh Office Circular 61/96, *Planning and the Historic Environment: Historic Buildings and Conservation Areas* 

Wiles, J. 2004 cited on www.coflein.gov.uk - accessed 22nd August 2013

Wiles, J. 2007 cited on www.coflein.gov.uk - accessed 22<sup>nd</sup> August 2013

http://www.ccgc.gov.uk/landscape--wildlife/protecting-our-landscape/historiclandscapes/upland-ceredigion.aspx – accessed 22<sup>nd</sup> August 2013

Data sources

- HER for 2km radius from turbine sites (Dyed Archaeological Trust)
- SAM & LB data for 2km radius from turbine site (Cadw)

**Cartographic Sources** 

- 1845 Tithe Map of Ystradmeurig Parish (NLGW)
- 1890 1<sup>st</sup> Ed OS (NLGW)
- 1905 2<sup>nd</sup> Ed OS (NLGW)

Aerial Photographs

- 106G/UK/1457 2May46 (RCAHMW)
- 1973 OS AP (RCAHMW)
- 2013 Google Earth Satellite image



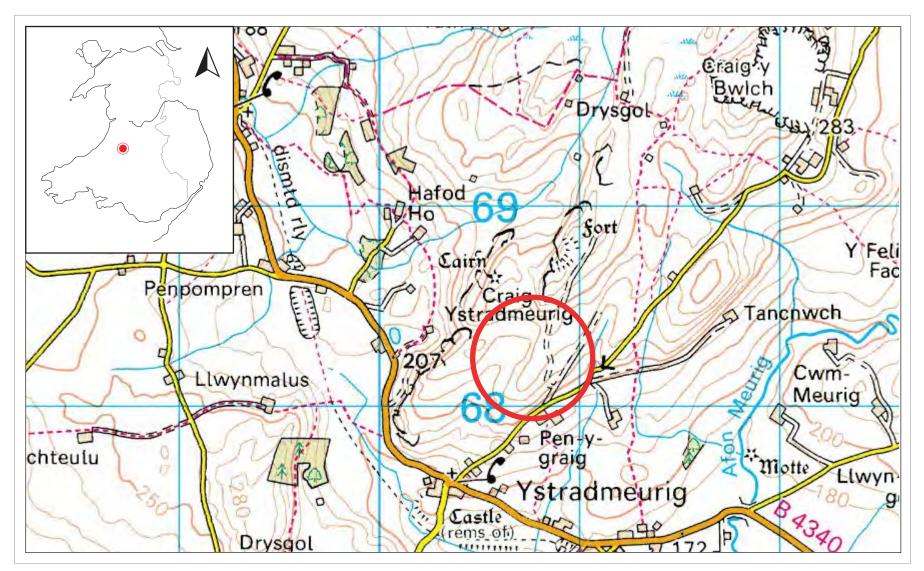
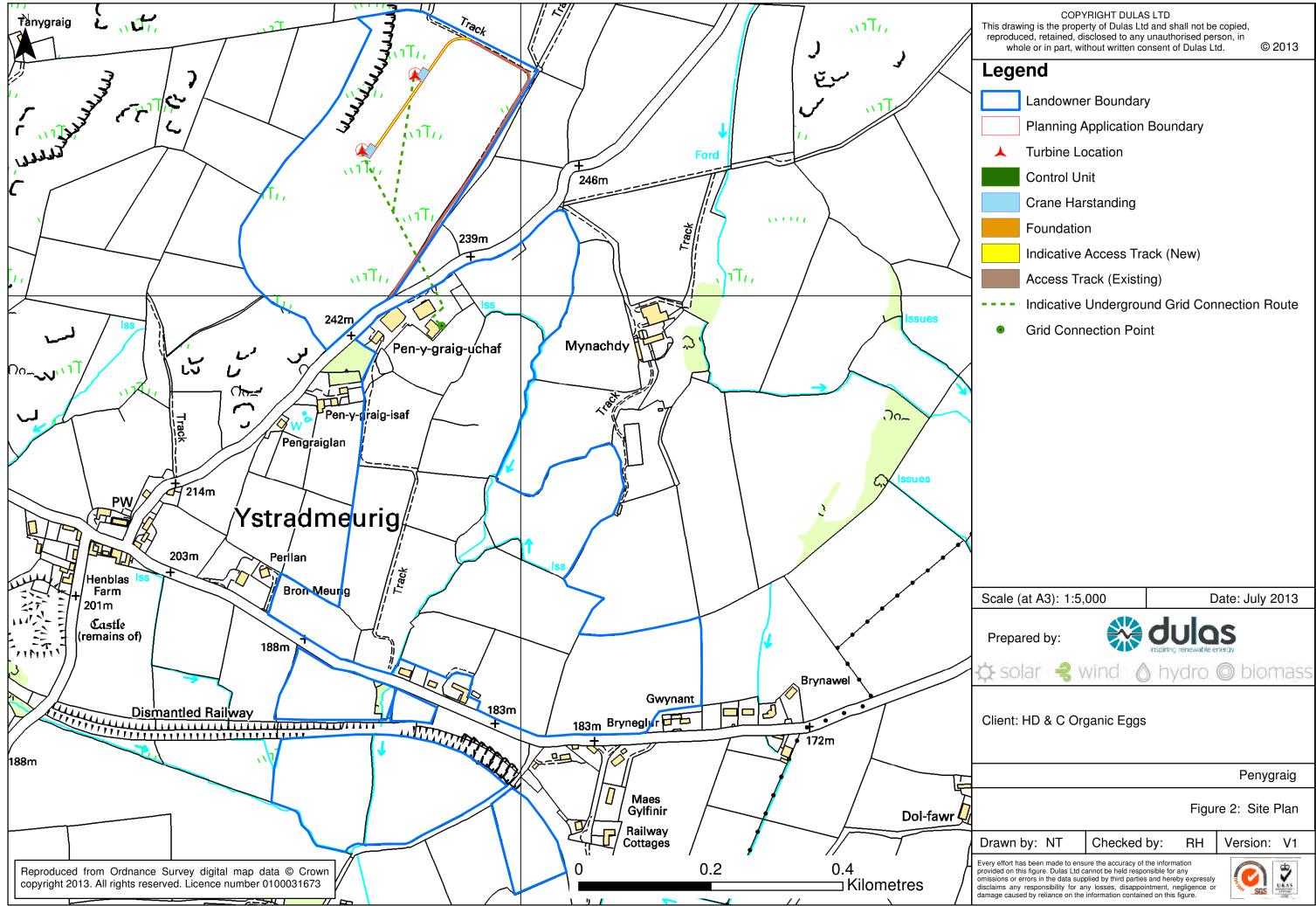


Fig 1: Map showing location of assessment area



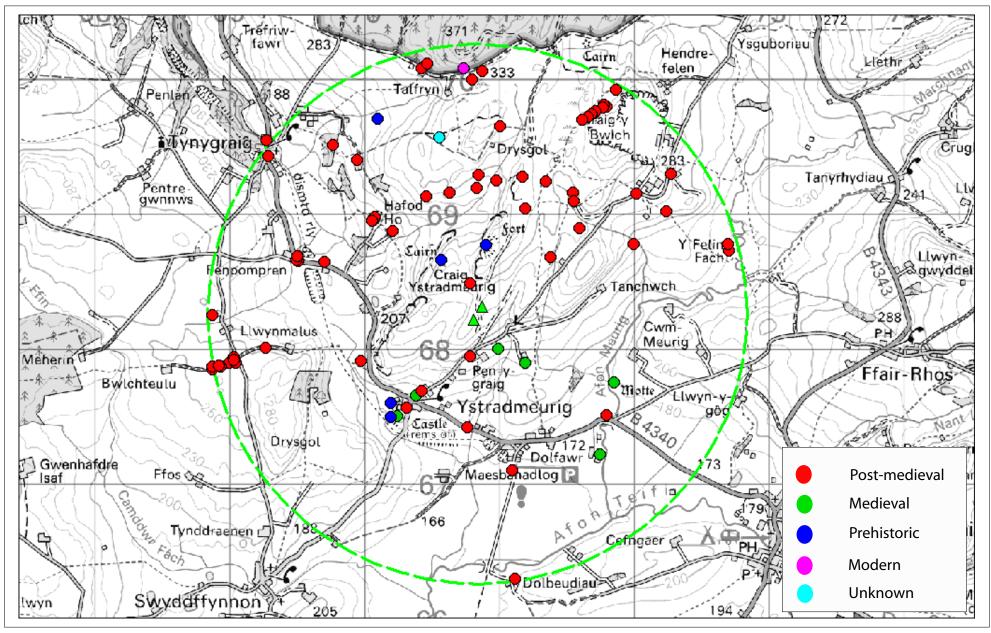


Fig 3: Map showing locations of all HER data points within a 2km radius of proposed turbines (Triangles)

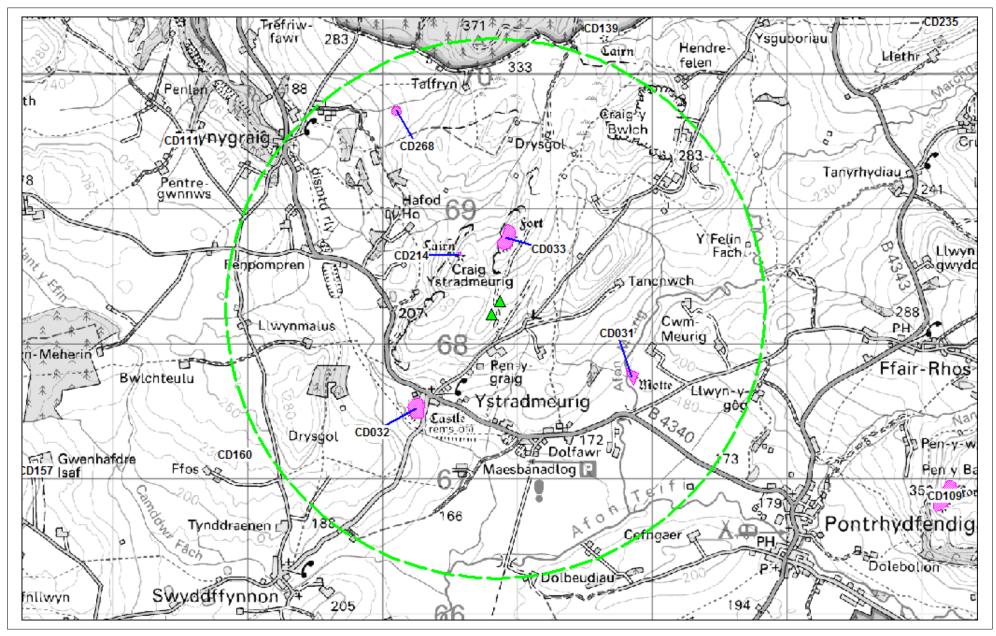


Fig 4: Map showing locations of all SAM sites within 2km radius of proposed turbines (triangles)

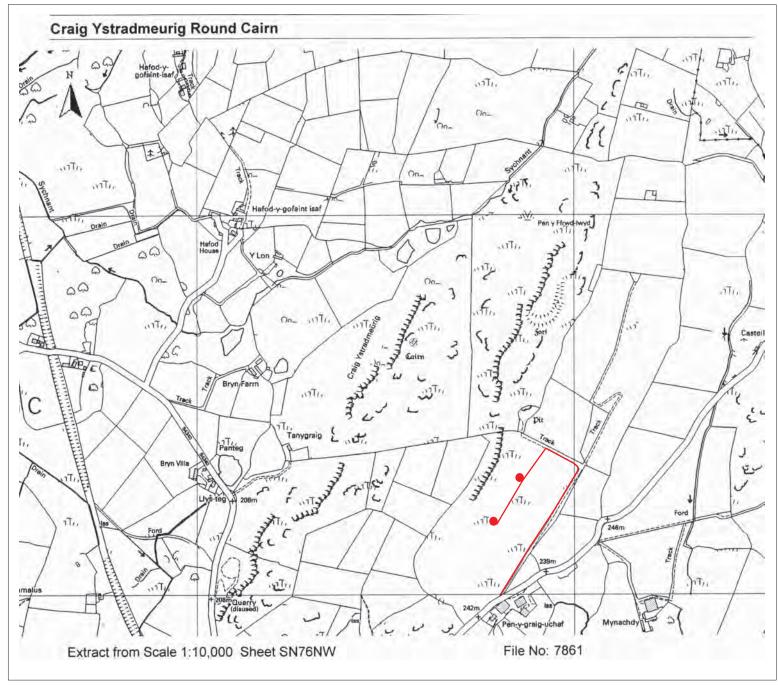


Fig 5: Location map showing CD214 in relation to proposed turbines

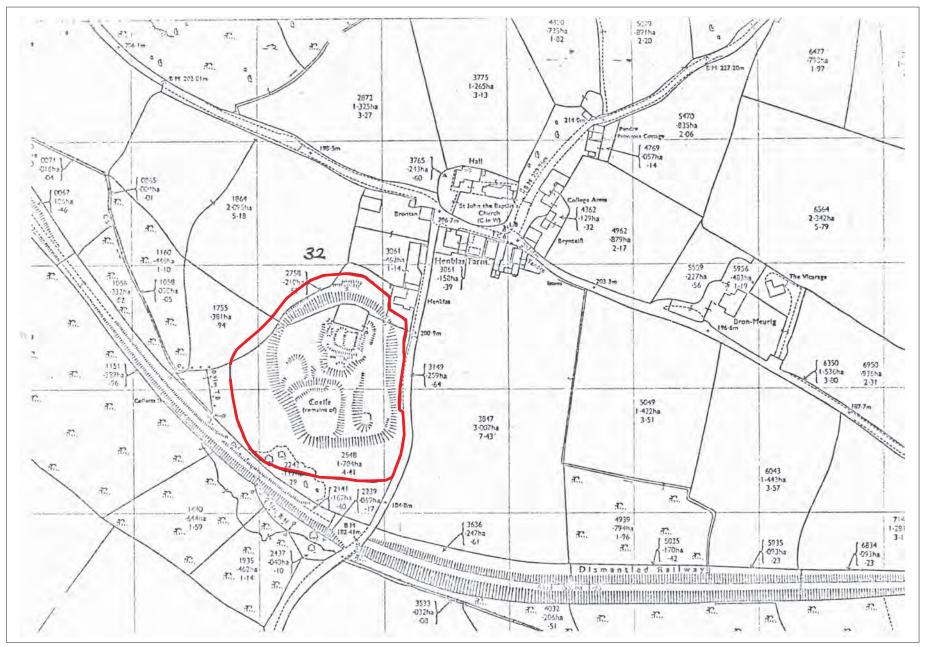


Fig 6: Detail of Ystrad Meurig castle scheduled area

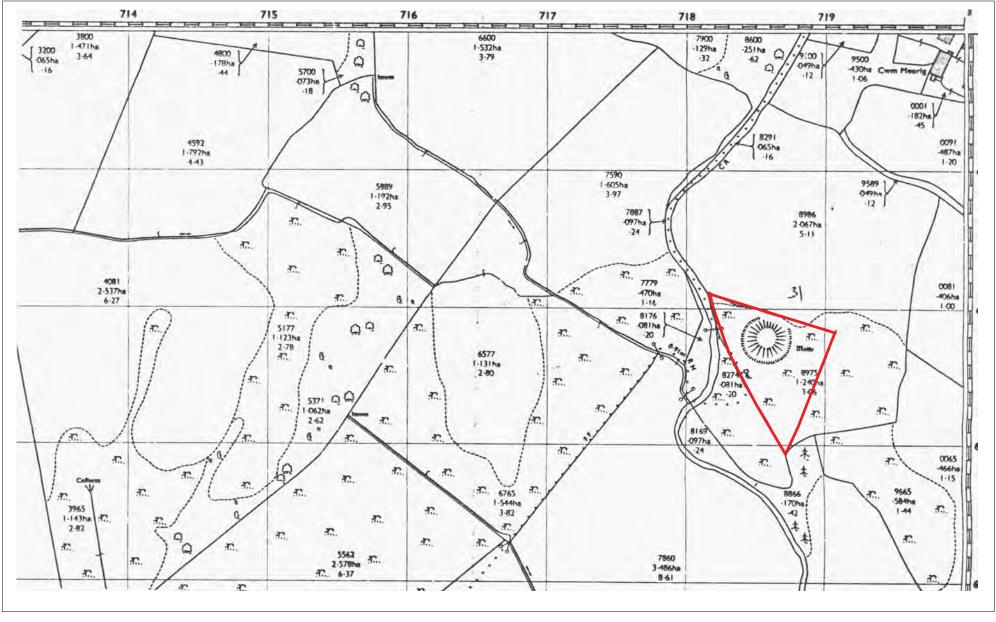


Fig 7: Detail of Cwm Meurig motte and bailey scheduled area

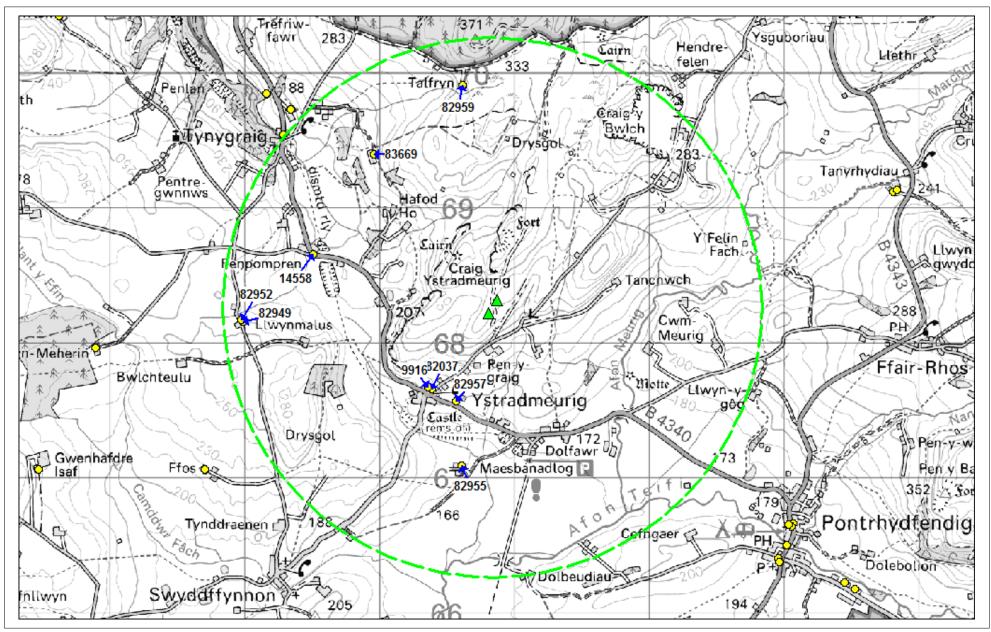


Fig 8: Map showing locations of all listed buildings within a 2km radius of proposed turbines (triangles)



Fig 9: 1845 Ystrad Meurig parish tithe map with turbine locations overlaid

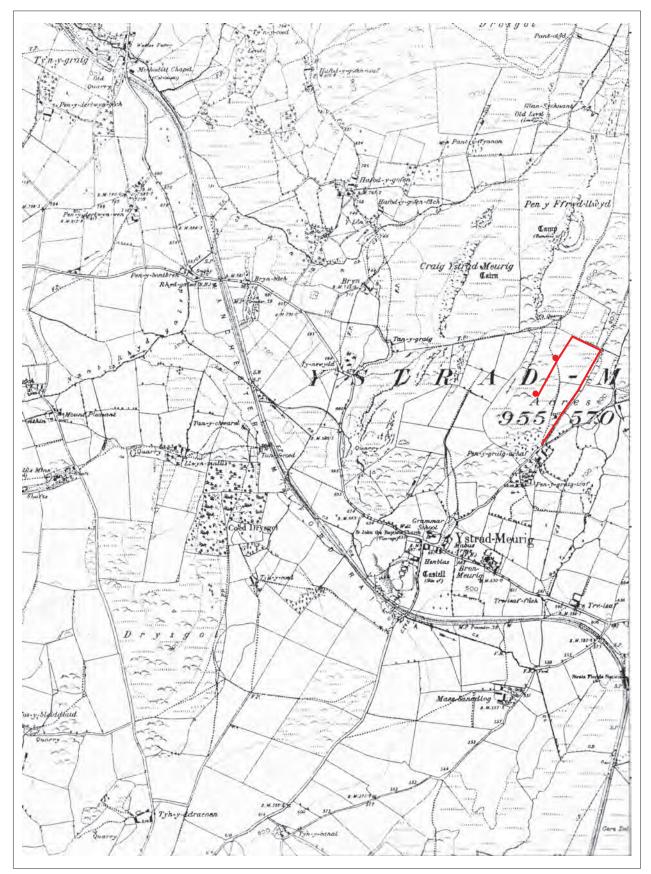


Fig 10: 1890 1st Edition OS map with turbine locations overlaid

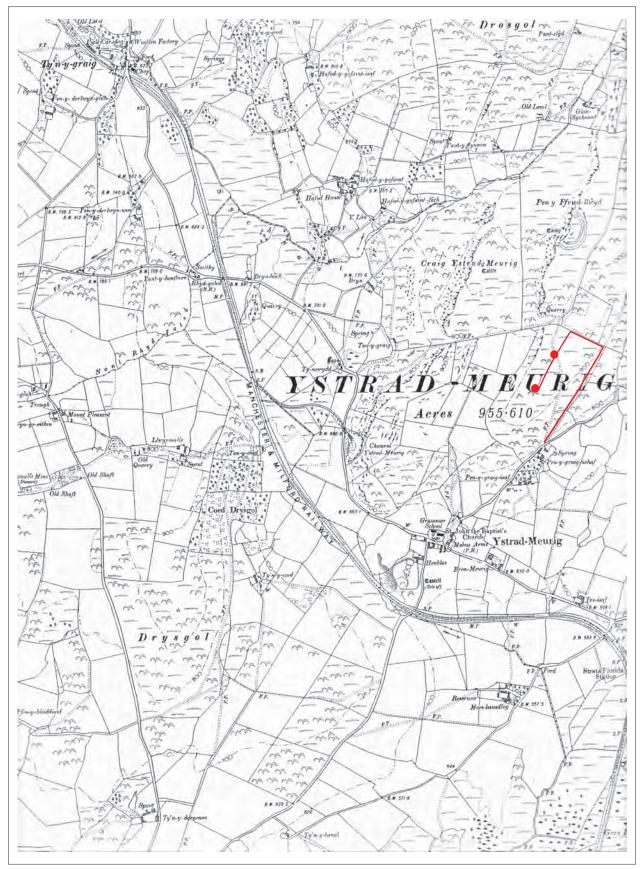


Fig 11: 1905 2nd Edition OS map with turbine locations overlaid

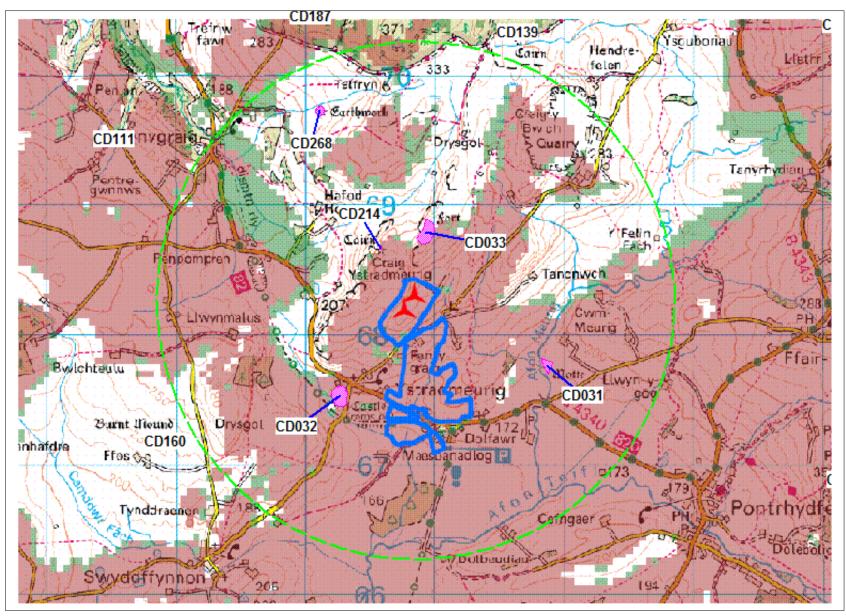


Fig 12: SAM sites overlaid on ZTV map (Red = both turbines visible, Green = one turbine visible)

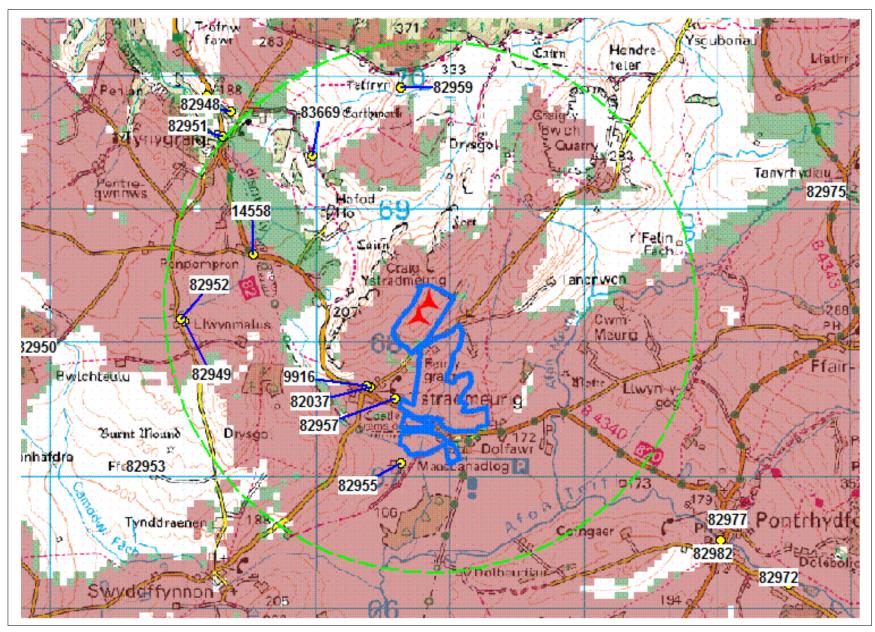


Fig 13: LB locations overlaid on ZTV map (Red = both turbines visible, Green = one turbine visible)

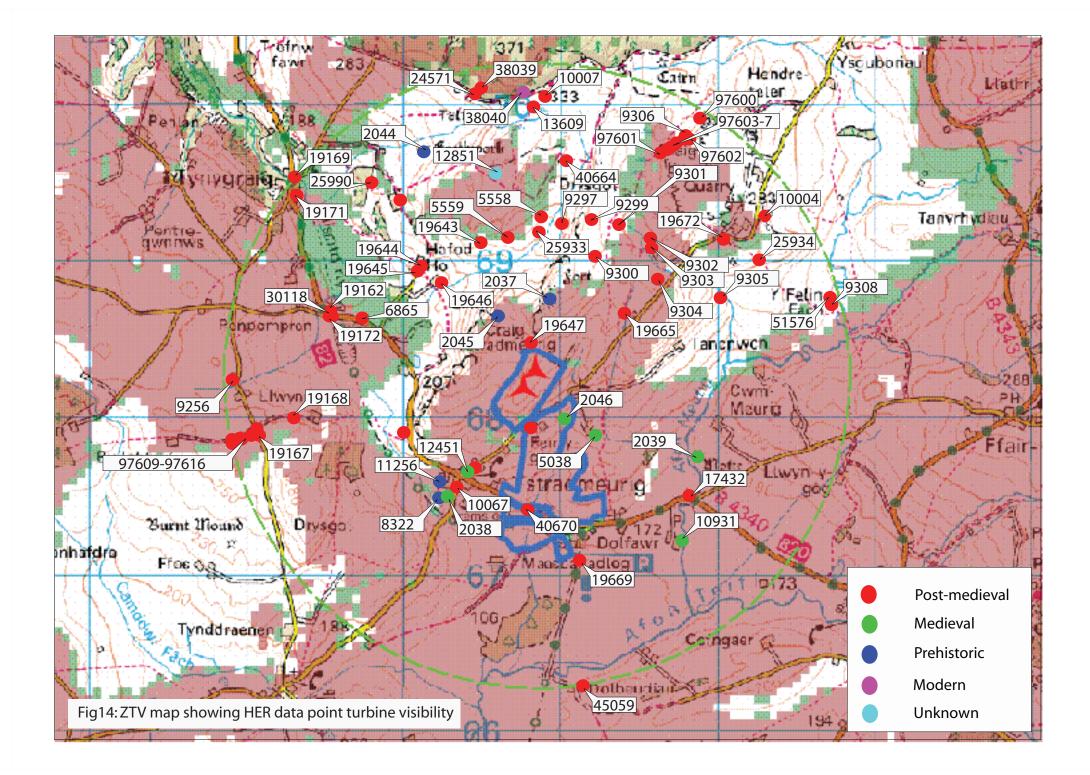






Plate 1: Oblique view of CD033 Pen-y-Ffrwd Llwyd hillfort, looking south



Plate 2: Oblique view of hillfort CD033 Pen-y-Ffrwd Llwyd, Looking north



Plate 3: Oblique view of hillfort CD033 Pen-y-Ffrwd Llwyd with adjacent later deserted rural settlement

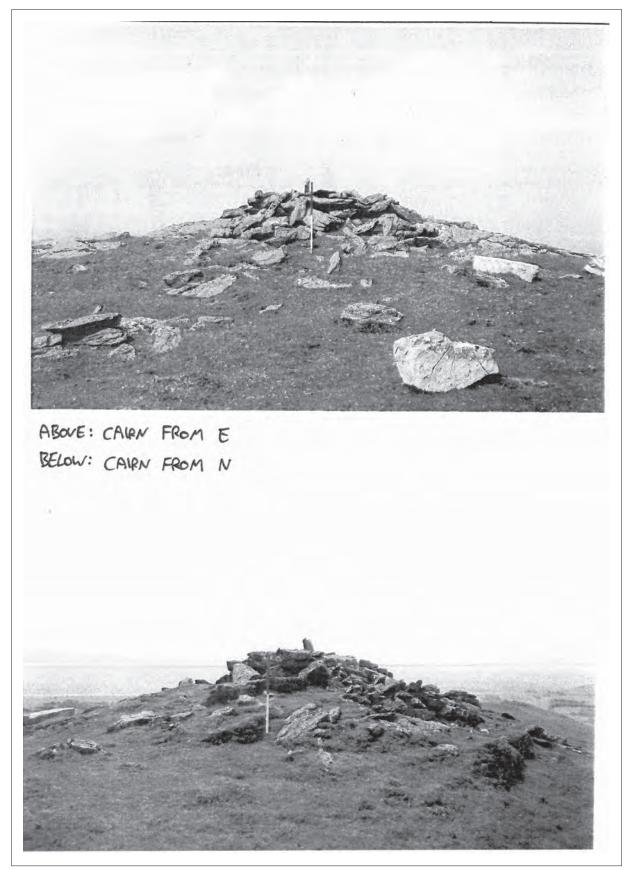


Plate 4: 2006 photographs of Craig Ystradmeurig round cairn CD214 from Cadw visit



Plate 5: Oblique view of Ystrad Meurig castle CD032



Plate 6: Oblique view of Cwm Meurig motte and bailey CD031



Plate 7: 1946 RAF aerial photograph with turbine locations overlaid



Plate 8: 1973 OS aerial photoghraph showing turbines overlaid



Plate 9: 2013 Google Earth satellite image showing field of proposed development



Plate 10: The site viewed from the north west



Plate 11:The site viewed from the north Scales 2x2m



Plate 12: Looking north from between the two turbines Scales 2x2m



Plate 13: Looking west from between the two turbines Scales 2x2m



Plate 14: Looking south from between the two turbines Scales 2x2m



Plate 15: Looking east from between the two turbines Scales 2x2m



Plate 16: View south from the south of the site Scales 2x2m



Plate 17: Looking south east along the proposed cable trench route Scales 2x2m



Plate 18: Looking east along the trackway forming the proposed site access Scales 2x2m



Plate 19: Lookinjg south along the northern end of the trackway forming the proposed site access Scales 2x2m



Plate 20: Looking south along the southern end of the trackway Scales 2x2m



Plate 21:View of trackway entrance Scales 2x2m



Plate 22: Looking northwest from the site towards Scheduled Ancient Monument CD214 Craig Ystradmeurig Cairn (arrow).

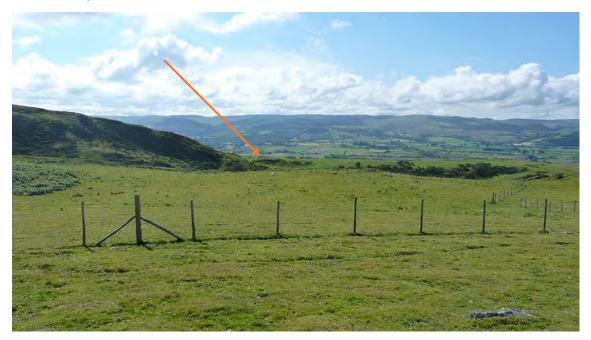


Plate 23: Looking southeast from CD214 towards the proposed turbine locations (arrow).





Looking south from CD214



Looking west from CD214

Plate 24: Views from CD214 Craig Ystradmeurig Cairn

Looking southwest from CD214



Looking northwest from CD214



Looking north from CD214

Plate 25: Views from CD214 Craig Ystradmeurig Cairn

Looking northeast from CD214



Plate 26: Looking north from the site towards Scheduled Ancient Monument CD033 Pen-y-Ffrwd Llwyd Hillfort (not visible).



Plate 27: Looking south from the highest point at the southern edge of CD033 towards the proposed turbine locations (obscured by ridgeline of rougher grazing extending up centre right of the photo).





Looking west from CD033

Looking northwest from CD033



Looking north from CD033

Plate 28: Views from CD033 Pen-y-Ffrwd Llwyd Hillfort



Looking northeast from CD033. Craig y Bwlch quarry is visible in the centre of the photo.





Looking east from CD033

Plate 29: Views from CD033 Pen-y-Ffrwd Llwyd Hillfort

Looking southeast from CD033



Plate 30: Looking south from the site in the direction of Scheduled Ancient Monument CD032 Ystradmeurig Castle (not visible beyond the fall of the ridge).



Plate 31: Looking northeast from CD032 towards the proposed turbine locations, showing the intermittent view of the ridgeline obscured by mature trees.





Looking east from CD032

Looking south-southeast from CD032



Looking southwest from CD032



Looking northwest from CD032

Plate 32: Views from CD032 Ystradmeurig Castle



Plate 33: Looking southeast from the site in the direction of Scheduled Ancient Monument CD031 Cwm Meurig motte (approximate position arrowed).



Plate 34: View north towards CD031 (approximate position arrowed), showing mature tree cover.

### Archaeology Wales APPENDIX III: Wire Frame Images

#### Penygraig 5 fW(Yc`c[]WU`K]fYZiUa Yg

Printed/Page 09/07/2014 10:31 / 1

Licensed user: **Dulas Ltd** Unit 1, Dyfi Eco Park Machynlleth GB-SY20 8AX Powys +44 1654 705000 Calculated: 09/07/2014 10:25/2.9.269

Eam

O

#### VISUAL - Main result

| WTG s   | siting |           |                |              |                   |            |        |       |      |     |       |
|---------|--------|-----------|----------------|--------------|-------------------|------------|--------|-------|------|-----|-------|
|         | WTG    | type      |                |              |                   |            | Distan | ce to | came | era |       |
|         | Valid  | Manufact. | Type-generator | Power, rated | Rotor<br>diameter | Hub height | A      | В     | С    | D   | Е     |
|         |        |           |                | [kW]         | [m]               | [m]        | [m]    | [m]   | [m]  | [m] | [m]   |
| 1 New   | No     | Endurance | E3120-55       | 55           | 19.0              | 36.0       | 1,170  | 868   | 581  | 495 | 1,655 |
| 2 Exist | No     | Endurance | E3120-55       | 55           | 19.0              | 36.0       | 1,174  | 998   | 451  | 420 | 1,569 |

British TM-OSG Eye point Target point Photo dir.



Iduit

East North Z Clouds :Clear sky (08) Landscape picture file: 1000 x 5 271,865 267,762 180.7 Visibility Avernal 270,817 268,270 186.8 Min Avernal Lens: 35 mm Film: 39x19 mm 294\* Wind dir. :0\*

Eye point Target point Photo dir.

WindPRO is developed by EMD International A/S, Niels Jernesvej 10, DK-9220 Aalborg Ø, Tel. +45 96 35 44 44, Fax +45 96 35 44 46, e-mail: windpro@emd.dk

| Project:            | Aiiiiii Manufact. Type-           | -generator Pow | ver rated Botor | diameter. Hub b | eight Distance | Recommended observation distance: 3  |
|---------------------|-----------------------------------|----------------|-----------------|-----------------|----------------|--|
| Penygraig Y ā^⊹ǽ{ ^ | minianuradi. Type-                | [kW]           |                 | [m]             | [m]            | Photo exposed: 09/07/2014 09:50:38   |
|                     | 1 New (red) Endurance E3120-55    | 55             | 19.0            | 36.0            | 1,170          | Lens: 35 mm Film: 39x19 mm Pixels: 1000x500<br>Eye point: British TM-OSGB36/Airy (GB/IE) East: 2 |
|                     | 2 Exist (blue) Endurance E3120-55 | 55             | 19.0            | 36.0            | 1,174          | Wind direction: 0° Direction of photo: 294°<br>Camera: CD031 Cwm-Meurig-Isaf Mound and Baile     |

WindPRO is developed by EMD International A/S, Niels Jernesvej 10, DK-9220 Aalborg Ø, Tel. +45 96 35 44 44, Fax +45 96 35 44 46, e-mail: windpro@emd.dk

| WindPRO version 2.9.269 | Nov 2013 |
|-------------------------|----------|
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |
|                         |          |

#### e: 35 cm

st: 271,865 North: 267,762

Bailey Castle

<sup>Created by:</sup> Dulas Ltd Unit 1, Dyfi Eco Park Machynlleth GB-SY20 8AX Powys +44 1654 705000

| Man | Dowor roted | Rotor diamotor | Hub height D | istance             | Becomm | ended observation distan | ce: 35 |
|-----|-------------|----------------|--------------|---------------------|--------|--------------------------|--------|
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              | $\uparrow \uparrow$ |        |                          |        |
|     |             |                |              | 1                   |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |
|     |             |                |              |                     |        |                          |        |

WindPRO version 2.9.269 Nov 2013

**35 cm** Created by: Dulas Ltd Unit 1, Dyfi Eco Park Machynlleth : 270,268 North: 267,517 GB-SY20 8AX Powys +44 1654 705000

| <sup>Project:</sup><br>Penygraig Y <b>ā</b> ^ <i>¦æ</i> { ^ | Manufact.                | Type-generator | Power, rated | Rotor diameter | Hub height | Distance | Recommended observation distance: 3<br>Photo exposed: 09/07/2014 09:52:53  |
|---|--------------------------|----------------|--------------|----------------|------------|----------|--|
|   | 1 New (red) Endurance    | E3120-55       | 55           | 19.0           | 36.0       | 581      | Lens: 35 mm Film: 39x19 mm Pixels: 1000x500  |
|   | 2 Exist (blue) Endurance | E3120-55       | 55           | 19.0           | 36.0       | 451      | Eye point: British TM-OSGB36/Airy (GB/IE) Ea<br>Wind direction: 0° Direction of photo: 192°<br>Camera: CD033 Pen y Ffrwd-Llwydd Camp |

WindPRO is developed by EMD International A/S, Niels Jernesvej 10, DK-9220 Aalborg Ø, Tel. +45 96 35 44 44, Fax +45 96 35 44 46, e-mail: windpro@emd.dk

WindPRO version 2.9.269 Nov 2013

#### : 35 cm

**: 35 cm** : 270,931 North: 268,777 Created by: Dulas Ltd Unit 1, Dyfi Eco Park Machynlleth GB-SY20 8AX Powys +44 1654 705000

|   | 1 New (red) Endurance<br>2 Exist (blue) Endurance | E3120-55 | 55<br>55 | 19.0<br>19.0 | 36.0<br>36.0 | 495<br>420 | Lens: 35 mm Filr<br>Eye point: British | 09/07/2014 09:54:54<br>n: 39x19 mm Pixels: 1000x500<br>TM-OSGB36/Airy (GB/IE) East: 2<br>° Direction of photo: 148 °<br>Craig Ustradmeurig Round Cairn |
|---|---|----------|----------|--------------|--------------|------------|--|--|
| <sub>roject:</sub><br>Penygraig Wireframe |   |          | [kW]     | [m]          | [m]          | [m]        | Recommend<br>Photo exposed: (          | ed observation distance: 3   |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |
|   |   |          |          |              |              |            |  |  |

WindPRO version 2.9.269 Nov 2013

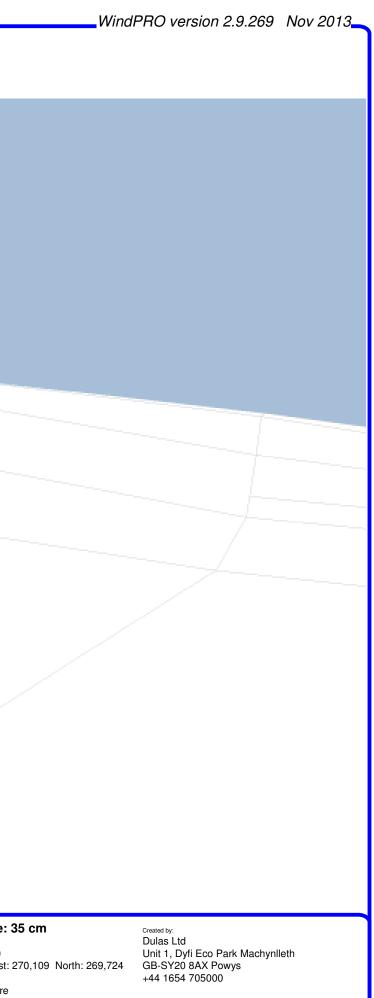
#### : 35 cm

: 270,576 North: 268,662

Created by: Dulas Ltd Unit 1, Dyfi Eco Park Machynlleth GB-SY20 8AX Powys +44 1654 705000

| Project:<br>Penygraig Wireframe | 1 New (red) | Manufact. Type-generator<br>Endurance E3120-55<br>Endurance E3120-55 | r Power, rated<br>[kW]<br>55<br>55 | Rotor diamete<br>[m]<br>19.0<br>19.0 | er Hub height<br>[m]<br>36.0<br>36.0 | Distance<br>[m]<br>1,655<br>1,569 | Recommended observation distance: 3<br>Photo exposed: 09/07/2014 09:57:16<br>Lens: 35 mm Film: 39x19 mm Pixels: 1000x500<br>Eye point: British TM-OSGB36/Airy (GB/IE) East: 2<br>Wind direction: 0° Direction of photo: 153°<br>Camera: CD268 Careg-lwyd Defended Enclosure |
|---------------------------------|-------------|--|------------------------------------|--------------------------------------|--------------------------------------|-----------------------------------|---|
|                                 |             |  |                                    |                                      |                                      |                                   |   |
|                                 |             |  |                                    |                                      |                                      |                                   |   |
|                                 |             |  |                                    |                                      |                                      |                                   |   |
|                                 |             |  |                                    |                                      |                                      |                                   |   |
|                                 |             |  |                                    |                                      |                                      |                                   |   |
|                                 |             |  |                                    |                                      |                                      |                                   |   |
|                                 |             |  |                                    |                                      |                                      |                                   |   |
|                                 |             |  |                                    |                                      |                                      |                                   |   |
|                                 |             |  |                                    |                                      |                                      |                                   |   |
|                                 |             |  |                                    |                                      |                                      |                                   |   |
|                                 |             |  |                                    |                                      |                                      |                                   |   |

WindPRO is developed by EMD International A/S, Niels Jernesvej 10, DK-9220 Aalborg Ø, Tel. +45 96 35 44 44, Fax +45 96 35 44 46, e-mail: windpro@emd.dk







Archaeology Wales Ltd Rhos Helyg, Cwm Belan, Llanidloes; Powys SY18 6QF T: 01686 440371 E: info@arch-wales.co.uk www.arch-wales.co.uk

**Specification** 

#### For Archaeological Desk Based Assessment and Site Visit:

### Penygraig, Ystradmeurig, Ceredigion

Prepared for: Rachel Harper Dulas Ltd

Project No: 2160

July 2013

Archaeology Wales Limited Rhos Helyg, Cwm Belan, Llanidloes, Powys, SY18 6QF Tel: +44 (0) 1686 440371 Email: admin@arch-wales.co.uk



#### NON TECHNICAL SUMMARY

This Specification details the proposal for an archaeological Desk Based Assessment and Site Visit associated with the proposed construction of two 45.2m wind turbines, with associated access and infrastructure, on land at Penygraig, Ystradmeurig, Ceredigion. It has been prepared by Archaeology Wales Ltd for Rachel Harper of Dulas Ltd.

#### 1. Introduction

The proposed development comprises plans to construct two wind turbines, with associated access and infrastructure, at Penygraig, Ystradmeurig, Ceredigion (Henceforth – the site), NGR: SN 70822 67688. Information on the development has been supplied by Dulas Ltd. The local planning authority is Ceredigion County Council (Henceforth – CCC). This stage of works is being undertaken pre-planning application.

This specification has been prepared by Chris E Smith (MIfA), Project Manager, on behalf of Archaeology Wales Ltd (Henceforth - AW) at the request of Rachel Harper of Dulas Ltd. It provides information on the methodology that will be employed by AW during a Desk Based Assessment and Site Visit.

The purpose of the proposed Desk Based Assessment and Site Visit is to provide CCC with information in respect of the proposed development, the requirements for which are set out in Planning Policy WALES, November 2012, Section 6.5, and Welsh Office Circular 60/96.

All work will conform to the Standard and Guidance for Archaeological Desk Based Assessment (IfA 2011) and be undertaken by suitably qualified staff to the highest professional standards.

The development proposals at Pen-y-graig, Ystrad Meurig, include the erection of two wind turbines with associated access track and infrastructure (cable trenching). Fig 1 shows the proposed site layout.

#### 2 Site description

The site covers an irregularly shaped area to both the north and south of the B4380, at Ystradmeurig, between Tynygraig and Pontrhyfendigaid.

The assessment area is located on the south facing slope of Craig Ystradmeurig between 169m and 284m above ordnance datum. The majority of the assessment area is currently composed of improved upland pasture.

A total of six Scheduled Ancient Monuments (SAMs) exist within a 2.5km radius of the centre of the site. These include: CD032 Ystradmeurig Castle, CD031 Cwm Meurig Isaf motte and bailey, CD033 Pen-y-Ffrwd Llwyd Camp, CD214 Craig Ystradmeurig round cairn, CD160 Ffos burnt mound and CD268 Gareg-lwyd defended enclosure.

A total of 18 listed buildings are also located within 2.5km of the centre of the site.

All of the site is located within the Upland Ceredigion Landscape of Outstanding Historic Interest (HLW D2).

#### 3 Site specific objectives

The primary objective of the archaeological work will be to assess the impact of the development proposals on the historic environment by means of a detailed desk top study and site visit. This will help inform future decision making, design solutions and potential mitigation strategies. The aim will be to make full and effective use of existing information in establishing the archaeological significance of the site, to elucidate the presence or absence of archaeological material, its character, distribution, extent, condition and relative significance.

The work will include a comprehensive assessment of regional context within which the archaeological evidence rests and will aim to highlight any relevant research issues within national and regional research frameworks.

The work will result in a report that will provide information of sufficient detail to allow informed planning decisions to be made which can safeguard the archaeological resource. Preservation *in situ* will be advocated where at all possible, but where engineering or other factors result in loss of archaeological deposits, preservation by record will be recommended.

#### 4 The proposed archaeological work

The proposed archaeological work relates to the whole of the site, i.e. all of the application area.

The aim of the work will be to establish and make available information about the archaeological resource existing on the site. The work will include the following elements:

- A detailed desk top study (Stage 1)
- A site visit (Stage 2)
- The production of an illustrated report and the deposition of the site archive (Stage 3)

The assessment will consider the following:

a) the nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area.

b) the significance of any remains in their context both regionally and nationally

c) the history of the site

d) the potential impact of any proposed development on the setting of known sites of archaeological importance

e) the potential for further work, with recommendations where appropriate for a suitable investigative and/or mitigation methodology.

#### 5 Method statement for a detailed desk top study (Stage 1)

The desk based assessment will consider the following:

- 1. collation and assessment of all relevant information held in the regional HER within a 2km radius of the centre of the site
- 2. assessment of all available excavation reports and archives (including unpublished and unprocessed material) affecting the site and its setting
- 3. assessment of a ZTV map showing visibility of turbines from known heritage assets
- 4. assessment of all extant aerial photographic (AP) evidence and, where relevant, a re-plotting of archaeological and topographic information by a suitably qualified specialist at an appropriate scale. The main source of archaeological aerial photographic records is held at the Royal Commission on Ancient and Historical Monuments in Wales (RCAHMW), Aberystwyth
- 5. assessment of online records held by the Portable Antiquities Scheme relating to finds from the assessment area
- 6. assessment of archive records held at the County Archives, and as appropriate, site files held by RCAHMW
- 7. assessment of the environmental potential of the archaeological deposits through existing data or by inference
- 8. assessment of the faunal potential of the archaeological deposits through existing data or by inference
- 9. assessment of the artefactual potential of the archaeological deposits through
- 10. existing data or by inference
- 11. assessment of available geotechnical information for the area including the results of test pits and boreholes
- 12. assessment of the present topography and land use of the area through maps and site inspection

The history of the site will also be studied. This will involve the following:

- 1. A review of the published resources (in particular the documents outlined in Section 2 above).
- 2. An analysis of relevant maps and plans. Cartographic evidence is held at the County Record Offices, including tithe maps, enclosure act plans, estate maps and all editions of the Ordnance Survey. Place and fieldname evidence from these sources must be considered.
- 3. An analysis of the historical documents (e.g. county histories, local and national journals and antiquarian sources) held in museums, libraries or other archives, in particular local history and archives library.
- 4. A review of the aerial photographic evidence.

An assessment of the potential for further investigative work will be included within the report. This will give recommendations where appropriate for a methodology for further non-intrusive survey and / or intrusive evaluation to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development and/or an appropriate mitigation strategy. The assessment will formulate a methodology for further archaeological investigation and/or mitigation within a programme of research. This will consider the use of the following techniques:

- 1. Archaeological historic building recording / survey.
- 2. The use of geophysical survey.

- 3. A programme of trenching and/or test pits to investigate the deposit model in more detail.
- 4. A programme of strip, map and sample in areas of identified potential.
- 5. Design modification to preserve remains in situ.
- 6. Archaeological excavation of identified remains.
- 7. Archaeological watching brief on construction works.

The detail of potential further work will be agreed with both the client and DAT prior to being undertaken.

#### 6 Method statement for a Site Visit (Stage 2)

A walkover survey will be undertaken of the proposed development area. This will consider the nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area.

Drawings will comprise measured and sketch plans and elevations at appropriate scales as appropriate.

Photographs will be taken in high-resolution digital photography with the camera set to take TIFF format images with a resolution greater than eight megapixels.

The locations of previously unrecorded features will be logged using GPS. A distribution plan showing the locations of known and previously unknown features in relation to the proposed track will be produced.

Written records will be made as appropriate.

### 7 Method statement for the production of an illustrated report and the deposition of the site archive (Stage 3)

The results will be presented in a report and will be detailed and laid out in such a way that data and supporting text are readily cross-referenced. The HER Officer will be contacted to ensure that any sites or monuments not previously recorded in the HER are given a Primary Record Number (PRN) and that data structure is compatible with the HER. The historical development of the site will be presented in phased maps and plans comprising clearly, the outline of the site.

Within the report an attempt will be made to indicate areas of greater or lesser archaeological significance and the sites will be ranked in level of overall archaeological importance (locally, regionally and nationally).

All relevant aerial photographs, re-plots and historic maps will be included and be fully referenced. Any site photographs included in the report will be appropriately captioned and clearly located on a suitably scaled site plan.

The report will specifically include the following:

- 1. a copy of the approved specification
- 2. a location plan
- 3. all identified sites plotted on an appropriately scaled plan of the proposal site
- 4. a gazetteer of all located sites with full dimensional and descriptive detail including grid reference and period

Copies of the report will be sent to Zoe Bevans Rice (DAT), Rachel Harper (Dulas Ltd) and for inclusion in the regional HER. Digital copies will be provided in pdf format if required.

A summary report of the work will be submitted for publication to a relevant local or national journal (eg Archaeology in Wales) no later than one year after the completion of the work.

#### The site archive

A project archive will be prepared in accordance with the National Monuments Record (Wales) / the guidelines of the Institute for Archaeologists agreed structure and be deposited within an appropriate local museum on completion of site analysis and report production. It will also conform to the guidelines set out in 'Management of Archaeological Projects Two, Appendix 3' (English Heritage 1991).

Arrangements will be made with the local museum before work starts. Wherever the archive is deposited, this information will be relayed to the HER.

Although there may be a period during which client confidentiality will need to be maintained, the report and the archive will be deposited not later than six months after completion of the work.

Other significant digital data generated by the survey (ie AP plots, EDM surveys, CAD drawings, GIS maps, etc) will be presented as part of the report on a CD/DVD. The format of this presented data will be agreed with the curator in advance of its preparation.

#### 9 Resources and timetable

#### **Standards**

The work will be undertaken by AW staff using current best practice.

All work will be undertaken to the standards and guidelines of the IfA.

#### <u>Staff</u>

The project will be undertaken by suitably qualified AW staff. Overall management of the project will be undertaken by Mark Houliston (a CV is available upon request).

#### **Equipment**

The project will use existing AW equipment.

#### Timetable of archaeological works

No start date or timetable of works has yet been agreed.

This WSI will be resubmitted if the start of the assessment is deferred by more than 6 months.

#### Insurance

AW is an affiliated member of the CBA, and holds Insurance through the CBA insurance service.

#### Health and safety

All members of staff will adhere to the requirements of the Health & Safety at Work Act,

If AW has sole possession of the site, then AW will produce a detailed Risk Assessment for approval by the client before any work is undertaken. If another organisation has responsibility for site safety, then AW employees with be briefed on the contents of all existing Risk Assessments, and all other health and safety requirements that may be in place.

Chris E Smith BA (Hons) MA MIfA



### PRN 10004 NAME BWLCHYRHENDRE TYPE Farmhouse PERIOD Post-medieval NGR SN72286930 COMMUNITY Ysbyty Ystwyth CONDITION Not Known STATUS None recorded FORM Building

#### SUMMARY

Farmhouse of architectural interest, described by RCAHMW in 1975. Condition unknown. RPS October 2001

#### PRN 10007 NAME UNKNOWN

TYPEDeserted rural settlementPERIODPost-medievalNGRSN70887006COMMUNITYYstrad MeurigCONDITIONDamagedSTATUSSSSIFORMCONDITIONComplexComplexComplex

#### SUMMARY

Possible platform and paddock described in 1988. May be a deserted settlement site. RPS October 2001

PRN 10067 NAME HENBLAS
TYPE Mansion PERIOD Post-medieval
NGR SN70326757 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Building

#### SUMMARY

Name suggests this to be an old mansion or "plas" located adjacent to the parish church at Ystrad Meurig. Recorded as being in less than perfect condition by RCAHMW in 1981. Present condition unknown. RPS October 2001.

PRN 10931 NAME DOLVAWR; DOL-FAWR
TYPE Settlement PERIOD Medieval
NGR SN71756722 COMMUNITY Ystrad Fflur
CONDITION STATUS None recorded FORM Documents

#### SUMMARY

A medieval settlement shown on William Rees's map of South Wales and the Borders in the 14th century, published in 1932.

PRN 11256 NAME HEN BLASTYPE Findspot PERIOD Iron AgeNGR SN702676 COMMUNITY Ystrad Meurig

**CONDITION STATUS** *None recorded* **FORM** Documents

#### SUMMARY

A stone spindle whorl of reputed Iron Age date was reported from here in 1923.

PRN 12451 NAME YSTRAD MEURIG PARISH CHURCH; ST JOHN THE BAPTIST'S
TYPE Church PERIOD Medieval
NGR SN70396766 COMMUNITY Ystrad Meurig
CONDITION STATUS None recorded FORM Documents

PRN 12851NAME DROSGOLTYPECairnPERIODNGRSN70566957COMMUNITYCONDITIONSTATUSNoneRecordedFORMNone

#### SUMMARY

Two cairns. The northernmost is c.5.50m x 5.00m x 0.30m high and the other is c.6.00m x 5.50m x 0.40m high. Leighton DK 1977

PRN 13609NAME GWNNWS ISSATYPECommon landPERIODNGRSN708700COMMUNITYYstradMeurigCONDITIONSTATUSCL , SSSIFORMTopography

PRN 17432 NAME PONT AFON MEURIG
TYPE Bridge PERIOD Post-medieval
NGR SN71806751 COMMUNITY Ystrad Fflur
CONDITION Intact STATUS None recorded FORM Other Structure

#### SUMMARY

A road bridge which carries the B4340 over the Afon Meurig.

PRN 19162 NAME PANTYBONTBREN; RHYD-GALED
TYPE Bridge PERIOD Post-medieval
NGR SN69506866 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Other
Structure

#### SUMMARY

A minor road bridge over Nant Rhyd Galed.

PRN 19167 NAME LLWYNMALIS; LISBURNE WEST; LLWYN MALEES
TYPE Lead mine, Zinc mine PERIOD Post-medieval
NGR SN69006790 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Earthwork

#### SUMMARY

Small 19th century metal mine. Recorded lead ore output-1500 tons; Zinc ore output-100 tons

PRN 19168 NAME UNKNOWN
TYPE Quarry PERIOD Post-medieval
NGR SN6927368011 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Earthwork

#### SUMMARY

Quarry shown on the 1963 Ordnance Survey map.

#### **PRN** 19169 **NAME**

TYPE FactoryPERIODPost-medievalNGRSN69286955COMMUNITYYstrad MeurigCONDITIONNot KnownSTATUSNone recordedFORMBuilding

#### SUMMARY

A factory is shown on the 1963 Ordnance Survey map in Ty'n y Graig village. Presumably this was a woollen factory.

PRN 19171NAME CAPEL CARADOGTYPEChapelPERIODPost-medievalNGRSN69296943CONDITIONIntactSTATUSSTATUSNone recordedFORMBuilding

#### SUMMARY

Calvinistic Methodist chapel built in 1869 and still in use in 1998.

PRN 19172 NAME RHYD GALED
TYPE Blacksmiths workshop PERIOD Post-medieval
NGR SN69516869 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Building

#### SUMMARY

A smithy shown on the 1963 Ordnance Survey map. Present use and condition unknown.

PRN 19643NAME PANT-Y-FFYNNONTYPEWellPERIODPost-medievalNGRSN7046269133COMMUNITYYstrad MeurigCONDITIONSTATUSNone recordedFORMPlace-name

#### SUMMARY

A "ffynnon" place-name indicative of a well being located nearby.

PRN 19644NAME HAFOD-Y-GOFAINTTYPEHafodPERIODPost-medievalNGRSN70086898COMMUNITYYstrad MeurigCONDITIONSTATUSSTATUSNone recordedFORMPlace-name

**SUMMARY** "Hafod" place-name of unknown significance. RPS October 2001

PRN 19645 NAME HAFOD HOUSE
TYPE Hafod PERIOD Post-medieval
NGR SN70066895 COMMUNITY Ystrad Meurig
CONDITION STATUS None recorded FORM Place-name

#### SUMMARY

"Hafod" place-name of unknown significance. RPS October 2001

PRN 19646NAME HAFOD-Y-GOFAINT-FACHTYPEHafodPERIODPost-medievalNGRSN7021168873COMMUNITYCONDITIONSTATUSNone recordedFORMPlace-name

#### SUMMARY

"Hafod" place-name of unknown significance. RPS October 2001

PRN 19647 NAME UNKNOWN
TYPE Quarry PERIOD Post-medieval
NGR SN70796849 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Earthwork

#### SUMMARY

Quarry shown on the1964 Ordnance Survey map.

PRN 19648 NAME ST JOHN THE BAPTISTS CHURCH
TYPE Church PERIOD Post-medieval
NGR SN7039367658 COMMUNITY Ystrad Meurig
CONDITION Intact STATUS listed building 82037 // FORM Building

#### SUMMARY

Ystrad Meurig parish church. The present building dates to 1898, but it stands on the site of the medieval parish church. Listed as a well-designed late Gothic church with good interior on a historical site and for historic interest as memeorial to Edward Richards. Group value with adjacent school. CADW 2003

PRN 19665NAME GWAR FFYNNONTYPEWellPERIODPost-medievalNGRSN7138668683COMMUNITYCONDITIONSTATUSNone recordedFORMPlace-name

#### SUMMARY

A "ffynnon" place-name indicative of well being located nearby.

PRN 19669 NAME STRATA FLORIDA STATION
TYPE Railway station PERIOD Post-medieval
NGR SN71106710 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Building

#### SUMMARY

Former railway station on the closed line between Carmarthen and Aberystwyth.

## PRN 19672 NAME YSBYTY YSTWYTH TYPE Sunday school PERIOD Post-medieval NGR SN72026915 COMMUNITY Ysbyty Ystwyth CONDITION Not Known STATUS None recorded FORM Building

#### SUMMARY

A former Sunday School building shown on the 1964 Ordnance Survey map. Present condition and use unknown.

PRN 2037 NAME PEN-Y-FFRWYD LLWYD CAMP
TYPE Hillfort PERIOD Iron Age
NGR SN70926878 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS scheduled ancient monument
CD033 FORM Earthwork

PRN 2038 NAME YSTRAD MEURIG CASTLE
TYPE Castle PERIOD Medieval
NGR SN70256750 COMMUNITY Ystrad Meurig
CONDITION Near Destroyed STATUS scheduled ancient monument
CD032 FORM Building

#### SUMMARY

This is the later of the two castles at Ystrad Meurig, probably built to replace the early 12th century motte on the valley floor. This was a stronger castle with a stone keep. It was attacked by Maelgwn ap Rhys on Christmas Eve, 1193, when he employed siege engines in his assault. The castle was destroyed by Maelgwn in 1208, when it was threatened by Llywelyn Fawr of Gwynedd.

PRN 2039 NAME CWM MEURIG ISAF
TYPE Motte PERIOD Medieval
NGR SN71856777 COMMUNITY Ystrad Fflur
CONDITION Near Intact STATUS scheduled ancient monument
CD031 FORM Earthwork

#### SUMMARY

Small medieval motte, surrounded by a ditch. This is probably the original castle at Ystrad Meurig, built in the early 12th century by the Normans and destroyed c.1137. A stronger castle was built after this close to the

present village of Ystrad Meurig.

PRN 2044 NAME GAREG-LWYD
TYPE Defended enclosure PERIOD Iron Age
NGR SN70106971 COMMUNITY Ystrad Meurig
CONDITION Near Intact, Damaged STATUS scheduled ancient monument CD267 FORM Earthwork

#### SUMMARY

This small defended enclosure lies on a west-facing slope at 260m above sea level. An almost circular area, c. 35m diameter, is surrounded by a stony bank up to 1.4m high and spread in places to 9m wide. Agricultural encroachment has lowered the defences on the west side. The bank is covered with scrub and brambles, and the interior overgrown. No clear entrance can be identified. K Murphy and R Ramsey 22 December 2005

PRN 2045 NAME CRAIG YSTRADMEURIG
TYPE Round barrow PERIOD Bronze Age
NGR SN7057768662 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Earthwork

#### SUMMARY

A burial cairn, 10m in diameter and up to 1.8m high, sitting on top of a natural rock outcrop. NC 2005.

PRN 2046NAME YSTRAD MEURIGTYPEHospicePERIODNGRSN7168COMMUNITYCONDITIONSTATUSNone recordedFORMDocuments

#### SUMMARY

In 1160AD the Order of the Knights Hospitallers of St John of Jerusalem, based at Slebech, Pembrokeshire, were granted the church and some land at Ystrad Meurig, by Roger, Earl of Clare. It is thought that this became the site of the hospice of Ysbyty Ieuan. PRN 24571 NAME BWLCH Y BAEDD
TYPE Cottage PERIOD Post-medieval
NGR SN70437008 COMMUNITY Ysbyty Ystwyth
CONDITION Damaged STATUS None recorded FORM Building

#### SUMMARY

Ruined cottage recorded by the Ceredigion Archaeological Survey in 1988. RPS October 2001

PRN 25933 NAME GLAN-SYCHNANT
TYPE Lead mine PERIOD Post-medieval
NGR SN7084969228 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Earthwork

**SUMMARY** Minor 19th century metal mine working.

PRN 25934 NAME CLODDIAU; BRONCARADOC; BRONCARADOG
TYPE Lead mine PERIOD Post-medieval
NGR SN7224369018 COMMUNITY Ysbyty Ystwyth
CONDITION Not Known STATUS None recorded FORM Earthwork

**SUMMARY** Minor metal mine. Recorded lead ore output is trivial.

PRN 25990 NAME TY'N Y COED
TYPE Metal mine PERIOD Post-medieval
NGR SN6977269512 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Earthwork

**SUMMARY** Minor 19th century metal mine working.

PRN 30118 NAME RHYDGALED
TYPE Dwelling, Public house PERIOD Post-medieval
NGR SN6951868653 COMMUNITY Ystrad Meurig
CONDITION Intact STATUS listed building 14558 II FORM Building

#### SUMMARY

Marked as a beerhouse on the 1st and 2nd Edition Ordnance Survey

maps. Early to mid 19th century cottage. JH Jan 1995

PRN 38039 NAME BWLCH-Y-BAEDD WELL I
TYPE Well PERIOD Post-medieval
NGR SN7046770116 COMMUNITY Ystrad Meurig
CONDITION STATUS None recorded FORM None

#### SUMMARY

Well, as noted on Ordnance Survey 6 inch 2nd Edition 1900 map, Card 16NW.Unknown CAP 1999

PRN 38040 NAME BWLCH-Y-BAEDD WELL IITYPE Well PERIOD ModernNGR SN7074170078 COMMUNITY Ystrad MeurigCONDITION STATUS None recorded FORM None

#### SUMMARY

Well, as noted on Ordnance Survey 6 inch 2nd Edition 1900 map, Card 16NW.Unknown CAP 1999

PRN 40664NAME PEN-Y-GRAIG-UCHAFTYPEFarmPERIODPost MedievalNGRSN70796795COMMUNITYYstrad MeurigCONDITIONVariousSTATUSNone recordedFORM

SUMMARY

PRN 40670 NAME TRE-ISAF FACH
TYPE Farm PERIOD Post Medieval
NGR SN70776742 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None
recorded FORM Documents

#### SUMMARY

PRN 40677 NAME CARMARTHEN-CARDIGAN RAILWAYTYPE Railway PERIOD Post MedievalNGR SN68636735 COMMUNITY Ystrad Meurig

**CONDITION** Damaged **STATUS** *None recorded* **FORM** Earthwork

#### SUMMARY

PRN 45059 NAME DOLBEUDIAU FARM
TYPE Barn PERIOD Post-medieval
NGR SN71126630 COMMUNITY Ystrad Fflur
CONDITION Near Intact STATUS None recorded FORM Building

#### SUMMARY

U-shaped courtyard of farm buildings, north and south ranges shown on Tithe. LRW 2002

PRN 5038NAME MYNACHDYTYPEMonastic land, GrangePERIODMedievalNGRSN712679COMMUNITYYstrad MeurigCONDITIONSTATUSNone recordedFORMPlace-name

#### SUMMARY

#### DESCRIPTION

An area of monastic land including the place-name 'Mynachty' at NGR SN 7120 6792, representing part of the extensive Mefenydd Grange, which belonged to the Cistercian Strata Florida Abbey (Williams 1990, 57, 108). NDL 2004 Mynachdy is a modern dwelling, but its name suggests a medieval ecclesiastical origin. It may be the site of the medieval hospice of Ysbyty Ieuan (PRN 2046). RPS 2003

PRN 51576 NAME LLWYNGOFFRE FELIN FACH
TYPE Leat PERIOD Post-medieval
NGR SN72706878 COMMUNITY Ystrad Meurig
CONDITION Not Known STATUS None recorded FORM Documents

#### SUMMARY

A leat serving Llwyngoffre Mill (later known as Felin fach). It first appears on the Old Series map (1834). Present condition unknown but the line can still be traced through the field boundaries shown on recent maps.

## PRN 5558 NAME DROSGOL TYPE Clearance cairn PERIOD Medieval, Post-medieval NGR SN7084169196 COMMUNITY Ystrad Meurig CONDITION Near Intact STATUS None recorded FORM Earthwork

#### SUMMARY

A crescent shaped bank over 2m high made of stones. The bank is built on debris from an old level and has a stone wall that crosses it. A similar bank lies just to the west, PRN 5559. They are thought to be agricultural clearance cairns. JH 2002 based on OS 1978

PRN 5559 NAME DROSGOL
TYPE Clearance cairn PERIOD Medieval, Post-medieval
NGR SN70646916 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Earthwork

#### SUMMARY

A crescent shaped bank over 2m high made from stones. A similar bank lies to the east, PRN 5558. They are thought to be agricultural clearance cairns. JH 2002 based on OS 1978

PRN 6141NAME HAFOD Y GOFAINT ISAFTYPEHafodPERIODMedieval, Post-medievalNGRSN69956940COMMUNITYYstrad MeurigCONDITIONSTATUS None recordedFORMPlace-name

#### SUMMARY

Record of a "hafod" place-name of unknown significance. This name is interesting as it translates as "Lower Smiths' Hafod" RPS September 2001

PRN 6865NAME BRYN BACHTYPECottagePERIODNGRSN69716865COMMUNITYYstrad MeurigCONDITIONNear DestroyedSTATUSNonerecordedFORMBuilding

#### SUMMARY

Ruined cottage recorded by the RCAHM in 1976. RPS September 2001

#### DESCRIPTION

C18th-C19th

PRN 8322 NAME HEN BLAS
TYPE Finds, Cropmark PERIOD Bronze Age, Unknown
NGR SN702675 COMMUNITY Ystrad Meurig
CONDITION Not applicable STATUS None recorded FORM Finds

#### SUMMARY

The findspot of a bronze dagger mentioned by Samuel Meyrick in 1808. The location of the dagger is not known.

PRN 9256 NAME RHYD-GOCH
TYPE Cottage PERIOD Post-medieval
NGR SN68886825 COMMUNITY Ystrad Meurig
CONDITION Damaged STATUS None recorded FORM Building

#### SUMMARY

Ruined drystone cottage recorded in 1979. Shown as abandoned on 1964 1:10560 Ordnance Survey map. RPS October 2001.

PRN 9297 NAME TY-UCHAF
TYPE Cottage PERIOD Post-medieval
NGR SN71016965 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Building

#### SUMMARY

Ruined drystone cottage or minor farmstead recorded in 1979. Shown as occupied on 1964 1:10560 Ordnance Survey map. RPS October 2001.

PRN 9298 NAME GLAN-SYCHNANT
TYPE Farmstead PERIOD Post-medieval
NGR SN70986925 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Building

#### SUMMARY

Abandoned, small farmstead complex recorded in 1979. Shown as occupied on 1964 1:10560 Ordnance Survey map. RPS October 2001.

PRN 9299 NAME PENLLYN
TYPE Cottage PERIOD Post-medieval
NGR SN71186928 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Building

#### SUMMARY

Ruined drystone cottage recorded in 1979. Shown as occupied on 1964 1:10560 Ordnance Survey map (RPS October 2001)

PRN 9300 NAME PIGYN
TYPE Cottage PERIOD Post-medieval
NGR SN71206904 COMMUNITY Ystrad Meurig
CONDITION Near Intact STATUS None recorded FORM Building

#### **SUMMARY** Ruined drystone cottage recorded in 1979. RPS October 2001.

PRN 9301 NAME PANT-Y-CHWAREL
TYPE Cottage PERIOD Post-medieval
NGR SN71356924 COMMUNITY Ysbyty Ystwyth
CONDITION Near Intact STATUS None recorded FORM Building

PRN 9302 NAME TY'N-Y-CLAWDD
TYPE Cottage PERIOD Post-medieval
NGR SN71556916 COMMUNITY Ysbyty Ystwyth
CONDITION Near Intact STATUS None recorded FORM Building

PRN 9303 NAME TY'N-Y-LLYN
TYPE Cottage PERIOD Post-medieval
NGR SN71566910 COMMUNITY Ysbyty Ystwyth
CONDITION Near Intact STATUS None recorded FORM Building

PRN 9304 NAME GWAR-FFYNNON
TYPE Cottage PERIOD Post-medieval
NGR SN71606890 COMMUNITY Ystrad Meurig
CONDITION Damaged STATUS None recorded FORM Building

PRN 9305 NAME TAN-CNWCH
TYPE Cottage PERIOD Post-medieval
NGR SN72006878 COMMUNITY Ystrad Meurig
CONDITION Damaged STATUS None recorded FORM Building

PRN 9306 NAME HENDREFELIN MINE; ELLA; LISBURNE WEST; HENDRE
TYPE Lead mine PERIOD Post-medieval
NGR SN718698 COMMUNITY Ysbyty Ystwyth
CONDITION Not Known STATUS None recorded FORM Earthwork

PRN 9308 NAME FELIN-FACH
TYPE Cottage PERIOD Post-medieval
NGR SN72716873 COMMUNITY Ysbyty Ystwyth
CONDITION Damaged STATUS None recorded FORM Building

PRN 97600 NAME HENDREFELIN MINE; ELLA; LISBURNE
WEST; HENDRE
TYPE Mine level PERIOD Post Medieval
NGR SN71876992 COMMUNITY Ysbyty Ystwyth
CONDITION STATUS None recorded FORM Earthwork

PRN 97601NAME HENDREFELIN MINE; ELLA; LISBURNEWEST; HENDRETYPEMine shaftPERIODPostMGRSN71786981COMMUNITYYsbytyYstwythCONDITIONSTATUSNonerecordedFORMEarthwork

PRN 97602 NAME HENDREFELIN MINE; ELLA; LISBURNEWEST; HENDRETYPE Trench PERIOD Post Medieval

#### NGR SN71776979 COMMUNITY Ysbyty Ystwyth CONDITION STATUS FORM Earthwork

PRN 97603 NAME HENDREFELIN MINE; ELLA; LISBURNE
WEST; HENDRE
TYPE Boiler house PERIOD Post Medieval
NGR SN71716975 COMMUNITY Ysbyty Ystwyth
CONDITION STATUS None recorded FORM Building - Ruined

PRN 97604NAME HENDREFELIN MINE; ELLA; LISBURNEWEST; HENDRETYPEBalance pitPERIODPost MedievalNGRSN71726976COMMUNITYYsbyty YstwythCONDITIONSTATUSNone recordedFORMEarthwork

PRN 97605 NAME HENDREFELIN MINE; ELLA; LISBURNE
WEST; HENDRE
TYPE Flat rods PERIOD Post Medieval
NGR SN71696974 COMMUNITY Ysbyty Ystwyth
CONDITION Near Destroyed STATUS None
recorded FORM Documents

#### SUMMARY

Line of flat rods linking Boiler House (PRN 97603) to shaft (PRN 97606), recorded within the Hendrefelin lead mine (PRN 9306) on the 1888 1st edition Ordnance Survey map. "No trace of flat rod route" (Protheroe-Jones, 1993, Mine no.179, Site no.10) found during survey of the mine. See PRN 9306 for further references.

PRN 97606 NAME HENDREFELIN MINE; ELLA; LISBURNE
WEST; HENDRE
TYPE Mine shaft PERIOD Post Medieval
NGR SN71666972 COMMUNITY Ysbyty Ystwyth
CONDITION STATUS None recorded FORM Earthwork

PRN 97607NAME HENDREFELIN MINE; ELLA; LISBURNEWEST; HENDRETYPE Mine shaftPERIODNGRSN71626970COMMUNITYYsbyty YstwythCONDITIONSTATUSNone recordedFORMEarthwork

PRN 97609 NAME LLWYNMALIS; LISBURNE WEST; LLWYN MALEES
TYPE Mine shaft PERIOD Post Medieval
NGR SN68846786 COMMUNITY Ystrad Meurig
CONDITION STATUS None recorded FORM Earthwork

#### SUMMARY

Shaft recorded within Llwyn-Malws lead mine (PRN 19167) on the 1888 1st edition Ordnance Survey map. "Run-in shaft" (Protheroe-Jones, 1993, Mine no.186, Site no.5). See PRN 19167 for further references.

PRN 97610 NAME LLWYNMALIS; LISBURNE WEST; LLWYN MALEES
TYPE Balance pit PERIOD Post Medieval
NGR SN68856786 COMMUNITY Ystrad Meurig
CONDITION Near Destroyed STATUS None
recorded FORM Documents

#### SUMMARY

Structure associated with mine shaft (PRN 97609) recorded within Llwynmalws lead mine (PRN 19167) on the 1888 1st edition Ordnance Survey map. "No trace of angle bob pit" (Protheroe-Jones, 1993, Mine no.186, Site no.6). See PRN 19167 for further references.

PRN 97611 NAME LLWYNMALIS; LISBURNE WEST; LLWYN MALEES
TYPE Waste tips PERIOD Post Medieval
NGR SN68846787 COMMUNITY Ystrad meurig
CONDITION STATUS None recorded FORM Earthwork

#### SUMMARY

Earthwork associated with shaft (PRN 97609) recorded within Llwyn-Malws lead mine (PRN 19167) on the 1888 1st edition Ordnance Survey map. "Vegetated disturbed tips" (Protheroe-Jones, 1993, Mine no.186, Site no.7) recorded during Metal Mines Survey. Se PRN 19167 for further references. PRN 97612NAME LLWYNMALIS; LISBURNE WEST; LLWYN MALEESTYPEBuildingPERIODPost MedievalNGRSN69046794COMMUNITYYstrad MeurigCONDITIONSTATUS None recordedFORMBuilding - Ruined

#### SUMMARY

Building, of unknown function, recorded within the Llwyn-Malws lead mine (PRN 19167) on the 1888 1st edition Ordnance Survey map. "Vestigal ruin of building" (Protheroe-Jones, 1993, Mine no.186, Site no.9) recorded during survey. See PRN 19167 for further references.

PRN 97613 NAME LLWYNMALIS; LISBURNE WEST; LLWYN MALEES
TYPE Mine building PERIOD Post Medieval
NGR SN69056790 COMMUNITY Ystrad Meurig
CONDITION STATUS None recorded FORM Building - Ruined

PRN 97614 NAME LLWYNMALIS; LISBURNE WEST; LLWYN MALEES
TYPE Engine shaft PERIOD Post Medieval
NGR SN69046792 COMMUNITY Ystrad Merig
CONDITION STATUS None recorded FORM Documents

#### SUMMARY

Shaft recorded within Llwyn-Malws lead mine (PRN 19167) on the 1888 1st edition Ordnance Survey map. "No trace of Engine Shaft" (Protheroe-Jones, 1993, Mine no.186, Site no.10) found during survey. See PRN 19167 for further references.

PRN 97615 NAME LLWYNMALIS; LISBURNE WEST; LLWYN MALEES
TYPE Mine building PERIOD Post Medieval
NGR SN68986791 COMMUNITY Ystrad Meurig
CONDITION Near Destroyed STATUS None
recorded FORM Documents

#### SUMMARY

Complex of buildings, of unknown function, recorded within Llwyn-Malws lead mine (PRN 19167) on the 1888 1st edition Ordnance Survey map. "Whole mine area razed and much of tips removed" (Protheroe-Jones, 1993, Mine no.186, Site no.11) See PRN 19167 for further references. PRN 97616 NAME LLWYNMALIS; LISBURNE WEST; LLWYN MALEES
TYPE Mine shaft PERIOD Post Medieval
NGR SN68946787 COMMUNITY Ystrad Meurig
CONDITION STATUS None recorded FORM Documents

#### SUMMARY

Mine structure recorded within Llwyn-Malws lead mine on the 1888 1st edition Ordnance Survey map. "No trace of shaft" (Protheroe-Jones, 1993, Mine no.186, Site no.12) found during survey. See PRN 19167 for further references.

PRN 97858NAME BRYNHOPE; LISBURNE NEW(?); CARONTYPEShaftPERIODPost MedievalNGRSN72526592COMMUNITYYstrad FflurCONDITIONSTATUS None recordedFORMDocuments

# Archaeology Wales

**APPENDIX VI:** Archive Cover Sheet

#### **ARCHIVE COVER SHEET**

#### Penygraig, Ystradmeurig, Ceredigion

| Site Name:                      | Ystradmeurig       |
|---------------------------------|--------------------|
| Site Code:                      | YMC/13/DBA         |
| PRN:                            | -                  |
| NPRN:                           | -                  |
| SAM:                            | -                  |
| Other Ref No:                   | -                  |
| NGR:                            | NGR SN 70822 67688 |
| Site Type:                      | Green Field        |
| Project Type:                   | DBA                |
| Project Manager:                | Chris E Smith      |
| Project Dates:                  | August 2013        |
| Categories Present:             | BA - Modern        |
| Location of Original Archive:   | AW                 |
| Location of duplicate Archives: | -                  |
| Number of Finds Boxes:          | -                  |
| Location of Finds:              | -                  |
| Museum Reference:               | -                  |
| Copyright:                      | AW                 |
| Restrictions to access:         | None               |

### Archaeology Wales

Archaeology Wales Limited, Rhos Helyg, Cwm Belan, Llanidloes, Powys, SY18 6QF Tel: +44 (0) 1686 440371 Email: admin@arch-wales.co.uk