

CAMDDWR WIND ENERGY PROJECT, NR. TREGARON, CEREDIGION

**RESULTS OF THE DESK-BASED AND FIELDWORK ARCHAEOLOGICAL
ASSESSMENT, WITH RECOMMENDATIONS REGARDING THE IMPACT OF
THE PROPOSED DEVELOPMENT ON THE HISTORIC LANDSCAPE**



Report No. 2001/54

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CAMDDWR WIND ENERGY PROJECT

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SUMMARY

The first phase of the Camddwr Wind Energy Project was initially conducted in August 2000 and involved a comprehensive desk-based assessment of the archaeological resource within the then proposed turbine area. The report here is a continuation of this earlier project, but first deals with a second phase of desk-top assessment resulting from a change in the proposed area. This is combined with the assessment made during the fieldwork phase of the currently defined project area, which was conducted in July and August 2001. It is recommended that the locations of certain groups of turbines and their associated tracks be radically re-thought, particularly within the unforested areas. This report also includes the results of a five-stage assessment of the significance of the impact of the proposed development on the historic landscape. This follows the guidelines laid out in a Technical Annex accompanying the Advice Note referring to The Register of Landscapes of Historic Interest in Wales and the Planning Process. The proposed wind energy project is shown to have a potentially severe impact on the historic elements of both the unforested and forested areas.

INTRODUCTION

This report details the results of an archaeological assessment undertaken by Cambria Archaeology Field Operations on behalf of Albro Planning & Environmental in response to the proposed Camddwr Wind Energy Project near Tregaron, Ceredigion. The bulk of the desk-based element of this project was undertaken in August 2000, when the project was called the Cwm Berwyn & Tywi Forest Wind Energy Project (Bestley 2000). The results of this earlier assessment were presented within a report submitted to Albro Planning & Environmental in September 2000. Since the production of this original report, the proposed area for the wind turbines and their exact locations have been altered to include a much larger section of the Tywi forest to the north and east of the original area, with the turbines proposed for the Cwm Berwyn and Cefn Isaf forestry plantations and the Llethr Llwyd open uplands having been dropped from the proposal entirely. However, much of the original unforested upland areas included within the Cwm Berwyn & Tywi Forest project remain included within the Camddwr project remit.

The archaeological assessment for the Camddwr Wind Energy Project was undertaken in two stages. Phase I was a desk-based research of the archaeological resource, whilst in Phase II a fieldwork assessment of known archaeological sites within the project area was made: the results of both phases are combined and presented within this report. Although the bulk of the desk-based element was presented last year in the original Cwm Berwyn Phase I report, it is intended here to present the desk-based element in full again, and for two main reasons. First, the landscape area proposed for the Camddwr Wind Energy Project has changed significantly to include a much larger section of the Tywi forest; and, secondly, the turbines which are still proposed for the open upland landscapes belonging to Nant Llwyd, Maes Glas and Ty'n y Cornel continue to impact on the archaeological resource of the area. Moreover, it was also felt that it would be difficult to understand the results of the Phase II fieldwork in isolation from the Phase I report. All the known archaeological sites included within this report as researched from a variety of written, cartographic and photographic sources, and visited during the fieldwork element of this assessment, have been graded into different categories which more clearly define their considered archaeological importance.

On the basis of these assessments, this report also contains the recommendations for the avoidance of certain features and the application of 'no-go' areas around certain classes of archaeological sites. As a result, it is suggested that the locations of a number of the proposed turbines are either altered or withdrawn. Within the Appendices are a number of maps and also a CD-Rom of digital images taken during fieldwork, with descriptions accompanying each individual photograph. The gazetteer of known archaeological sites within the project area is presented within Appendix II. Appendix IV of this report presents the results an assessment of the Camddwr development following planning guidelines issued with reference to landscapes which are considered to be of national historic importance in Wales. These guidelines suggested a methodology for the assessment of the significance of potential impact of development on historic landscape areas (ASIDOHL) produced with reference to the non-statutory *Register of Landscapes of Historic Interest in Wales* (Cadw 1998). This *Register* was compiled as a joint

initiative between Cadw: Welsh Historic Monuments, The Countryside Council for Wales (CCW) and the International Council on Monuments and Sites (ICOMOS), in collaboration with the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW), the four Welsh Archaeological Trusts and the Welsh unitary authorities. Parts of the land included within the Camddwr Wind Energy Project lie close to the Upland Ceredigion Area, which is one of only thirty-six landscapes for the whole of Wales listed as 'outstanding' within the *Register of Landscapes of Outstanding Historic Interest in Wales* (Cadw 1998). An historic landscape characterisation project carried out within Upland Ceredigion (Murphy 1999) identified over 100 individual historic landscape character areas which combine to create this landscape of 'outstanding' historic interest. Two of these character areas (Area 3 and Area 13) extend from the Registered Landscape into the area of the proposed wind energy project.

Development Proposals

It is proposed to erect 165 wind turbines within a large area of Upland Ceredigion, partly within the Tywi Forest in both Ceredigion and Powys on either side of the Afon Tywi, and partly on open upland areas of Esgair Cerrig, Esgair Hir, Bryn Du, Gamallt, Cynau, Bryn y Gorlan, Blaen Nant-y-rhiw and Pen y Gurnos (see Map 1a in Appendix III). Within the forested areas the turbines and their associated roads are proposed to run along existing forest rides and tracks, whilst open landscape locations have been chosen which maximize wind flow, with the turbines appearing to follow pronounced ridges and local highpoints within the undulating upland plateau.

Project Objectives

Within a project such as this, where a major impact will be made on the landscape both physically and visually, it is important to assess not only the immediate physical threat to the archaeological remains but also to consider the visual/conceptual difference that will be made to the historic landscape as a whole by the proposed development.

Cambria Archaeology was asked by Albro Planning & Environmental to achieve three main goals: first, to provide information on the nature, location and considered importance of individual sites within the proposed development area by means of a gazetteer and plan; secondly, to recommend "no-go" areas around certain archaeological features based on their categorization of importance and status; and, finally, to consider the setting of the sites and the visual impact issue presented by the development of the area as a wind farm.

It is relatively straightforward from cartographic, photographic and documentary sources to quantify the potential, direct, physical impact of the turbines and access routes on known archaeological sites and features, with this physical impact better considered, and evaluated in more detail, during fieldwork. However, the wider, visual impact of the turbines on the historic landscape is generally more difficult to assess and requires more

nebulous criteria in the context of archaeological sites. Guidance on this issue was sought by following the advice note produced in relation to *The Register of Landscapes of Historic Interest in Wales and the Planning Process* (Draft 5, May 2001). This *Register* and subsequent Historic Landscape Characterisation (HLC) programme was borne out of the need to find ways of accommodating change in the modern era within a framework which both appreciated and remained sympathetic to the historic character of the landscapes in question. By using these guidelines in tandem with the desk-based and fieldwork elements of this archaeological assessment it has hopefully been possible to meet the objectives of the project and to make some informed contribution to the issue of visual impact in relation to the Camddwr Wind Energy Project.

METHODOLOGY

The specific methodologies applied to both the Phase I and Phase II elements of this project are outlined below. A MapInfo workspace was created using the Ordnance Survey 1:10,000 raster data onto which various layers of information were added. A polygon outlining the project area was digitised onto the workspace and is shown in pink on the accompanying maps. Data from the Sites and Monuments Records from Ceredigion and Powys and other sources were also layered onto the map, with individual archaeological sites and features represented by different coloured stars. The locations of the turbines were programmed in from the ten-digit grid references provided and appear as 5 symbols with their corresponding numbers on the maps included at the back of this report. Digitised data supplied by CCW (Countryside Council for Wales) and held by Cambria Archaeology illustrate those parts of the project area designated as SSSI (Sites of Special Scientific Interest) and SPA (Special Protected Areas). Much of Upland Ceredigion, and the landscape proposed for this wind energy project, are classified as an ESA (Environmentally Sensitive Area).

A note on environmental considerations

Although this report is concerned primarily with the archaeological resource, it is also important to contextualise this information within the current understanding of this landscape as being within an Environmentally Sensitive Area. Two maps in Appendix III show the extent of the proposed project area which is classified as SSSI and SPA.

Some places in Wales are considered so important to the nation's natural heritage that they have been notified as Sites of Special Scientific Interest (SSSI). Notification of a site as SSSI under the *Wildlife and Countryside Act 1981* forms the statutory bedrock for protecting land to conserve its natural features. Within the unforested upland area proposed for development there are a number of archaeological sites, particularly those of prehistoric date, which fall within the SSSI area, and which, as sites, satisfy the criteria for having a high palaeoenvironmental potential. Within the current programme of research and management focussing on Prehistoric Burial and Ritual Sites in Wales and on Deserted Rural Settlements, as funded by Cadw, these sites are being considered for sample testing and research within the sub-discipline of environmental archaeology. It is

expected that this research will be able to tell us even more about the development of this landscape in environmental terms from the Bronze Age to the present day, which is largely due to it having remained undisturbed for the last 4000 years.

Phase I Desk-based assessment

Various sources were consulted in order to bring together a full and comprehensive report on the archaeology contained within the project area. First, the Sites and Monuments Record (SMR) database held at the offices of Cambria Archaeology was thoroughly searched for all sites known/recorded and held in its computerized and written archive. Secondly, information held and archived by other organizations, such as the Royal Commission for Ancient and Historic Monuments in Wales and Cadw: Welsh Historic Monuments, was also searched to eliminate duplication in the gazetteer, to retrieve new sites from the National Monuments Record (NMR), and also to determine which sites have Scheduled Ancient Monument (SAM) status and are thus under the protection of the State (the National Assembly of Wales through Cadw under the *Ancient Monuments and Archaeological Areas Act 1979*). Various maps (6" first and second edition Ordnance Survey maps, OS sketch maps and estate and Tithe maps) were consulted from the resources held within the Heritage Management section of Cambria Archaeology and also those at the National Library of Wales, Aberystwyth, whilst various aerial photographs were also studied.

Phase II Fieldwork assessment

The fieldwork element was carried out over two weeks in July and August 2001, and involved a walk-over and rapid survey of the project area. This looked at the specific locations of each of the individual turbines according to their respective ten-figure grid references as provided by Albro Planning and Environmental and at the archaeological sites identified during the desk-based Phase I assessment. The remit of the walk-over survey, however, did not allow for a detailed, metre-by-metre study of this historic landscape, which meant that prospection for new sites was not routinely undertaken.

This fieldwork was conducted in order to properly assess on the ground both the archaeological and visual impact of each potential turbine. It also considered the way in which these turbines would be linked together by their tracks, and the potential effects that these tracks would themselves have on the landscape and the archaeological resource by the inevitable earth-moving nature of their construction. However, no map detailing the proposed pathways of the tracks accompanied the revised Camddwr project area, and although some of the track locations could be surmised from the Cwm Berwyn & Tywi Forest maps from last year, given the alteration of parts of the current project area it was difficult to be entirely accurate in our assessment for some of the proposed trackway areas.

The unforested landscape is currently used for the rough grazing of sheep and supports hardy all-year-round vegetation, which barely dies back even during the winter months. Much of the grasses stood approximately one metre tall, and the terrain was uneven, boggy and hard-going underfoot. Such dense vegetational cover made it almost impossible to see and detect any subtle changes on the ground, which could have been indicative of previously unrecorded features to add to the archaeological resource, and although a handful of new sites were indeed discovered and have been added to the SMR (sites 43212-43216), these sites were located in cleared areas or on low-lying land. Within the forestry the density of the trees and the maturity of most of the plantations made it impossible to assess those archaeological features known to lie deep within the heart of the forest, but those sites located on the edge of the forest or along the rides/tracks were visited and recorded. Previous fieldwork assessments within the forestry plantations (e.g. the Forest Enterprise Welsh Historic Assets programme) suggests that despite the destructive nature of some forestry operations, which could be expected to have impacted heavily on the survival of the archaeological resource, there is still a great deal of archaeology that survives within the forest and which remains yet to be discovered. The Mynydd y Ffynnon project, for example, began with 42 known archaeological sites but discovered during the course of the project an additional 140 new sites (Hall & Sambrook 1998). Given the extremely large area of forestry that needed to be covered within the remit of the Camddwr project it was not possible to prospect for new archaeological sites within the forest plantations on this occasion, and more emphasis was placed on assessing the open areas of landscape.

Categorisation of Archaeological Sites and Features

All sites and features within this report have been allocated a category that defines their considered archaeological importance, and follows the definitions developed and applied as standard by all four Welsh Archaeological Trusts.

These categories are:

- | | |
|------------|--|
| Category A | sites of national importance |
| Category B | sites of regional or county importance |
| Category C | sites of district or local importance |
| Category D | minor or damaged sites |
| Category E | sites requiring further investigation |

Category A Sites and Monuments of National Importance

This includes SAMs, Grade I and II* (and some Grade II) Listed Buildings and sites of similar quality, i.e. those that would meet the requirements for scheduling or listing at the top two grades. There is a presumption in favour of preservation of all such sites and their settings should they come under threat. Such sites might include those that survive principally as buried remains.

Category B Sites and Monuments of Regional Importance

This includes sites that would fulfil the criteria for listing at Grade II (if a building), but not for scheduling (if a relict archaeological site). Nevertheless, such sites are of particular importance within a regional context and, if threatened, should ideally be preserved *in situ*, although complete excavation and/or recording may be an acceptable alternative. Most sites of archaeological and/or historical interest will fall within this category.

Category C Sites and Features of Local Importance

This category includes components of the historic environment (such as walls, gateposts, tracks etc.) that help define local distinctiveness and character. They may not be of sufficient importance to justify a recommendation for preservation if threatened, but they nevertheless have an interest and importance in their local context.

Category D Minor and Damaged Sites/Features

This category includes sites/features which are of minor importance or so badly damaged that too little remains to justify their inclusion in a higher category. Rapid recording, either in advance of, or during destruction, is usually sufficient for this category of site.

Category E Sites/Features Needing Further Investigation

Sites/features whose character, importance or location is undetermined are placed in this category. They include buried sites and known underground features identified from archival evidence and retrospective map analysis, sites with no defined physical presence such as find spots, sites noted but not accurately located in antiquarian references, sites known only from place-name evidence and other sites reported at the specified location, but cannot be verified by archaeological fieldwork. They will require further work before they can be allocated to Categories A-D.

The majority of the archaeological sites and features within the project area fall within categories A and B. As noted above, all sites with SAM (Scheduled Ancient Monument) status or recorded as Grade I and II* (and some Grade II) Listed Buildings are necessarily Category A sites, and other sites which fall into this category include all currently non-scheduled prehistoric monuments, which for the purpose of the planning process should be treated as if they were SAMs. Category B sites include the better-preserved examples of medieval and post-medieval deserted rural settlements, farmsteads, enclosures and long huts. Only a handful of sites within the project area fall within Category C, and would include features such as boundary mounds and bridges, with an equally small number graded as Category E sites.

SUMMARY OF ASSESSMENT RESULTS

Site location and Topography

The landscape area proposed for the Camddwr wind energy project fall close to the Upland Ceredigion Landscape of Outstanding Historic Interest in Wales (Cadw 1998). The area proposed for development covers some 50 square kilometres, and lies between Tregaron and Abergwesyn on both sides of the Tywi and Camddwr rivers and to the north of the Afon Doethie. The bulk of the area falls within Ceredigion, although the forested area to the east of the Afon Tywi falls within the county of Powys. The area is characterized by a series of upland plateaux lying above 300m OD, with pronounced local ridges and knolls adding contrast to the landscape. The natural bedrock outcrops closely to the surface in parts of the area and there are occasional crags and scarp slopes, with a number of high and steep-sided valleys following the courses of the numerous streams which flow through these uplands. Much of the landscape is characterized by treeless undulating moorland with blanket bog on the higher levels and peaty hollows. Widespread forestry plantations are also now a feature of this landscape in certain areas.

The summer months are generally not the best time of year to attempt fieldwork in the uplands, precisely because of the vegetational growth. It was impossible to detect any new archaeological sites both on the forested and unforested landscapes in the heart of the project area, and in some instances it even proved difficult to find sites already recorded within the SMR. A GPS was used where possible to locate the known archaeological sites and proposed turbine locations, with these sites and the views available from them recorded, where appropriate, and photographed. The digital photos taken as part of the fieldwork are listed and described later in Appendix I, and form a running commentary to accompany the CD-Rom located at the back of this document.

Landscape History and Development

From the research carried out as part of the Phase I desk-based assessment, palaeoenvironmental evidence suggests that some limited clearance of the forests that once covered the Welsh uplands took place during the Mesolithic and Neolithic periods, although the major periods of forest clearance appear to have begun in the Bronze Age. The cairns and standing stones that are located within or adjacent to the study area probably date to this period of land-use change during the Early Bronze Age (approximately 2100 BC-1500 BC). The majority of these funerary and ritual monuments are located in prominent, highly visible locations on ridge- or hill-tops. It seems highly likely that the builders of the monuments either meant these sites to be visible from a wide area or that they intended the views from the monuments themselves to be very extensive. It has been suggested that they may have acted as territorial markers or boundaries or perhaps served as political memorials of some kind, i.e. they were more than just funerary monuments: they also carried a message for the living. More recently, there have been attempts to understand the complex relationships between different

monuments and the way in which monuments interact with the surrounding landscape with much of this research based on intervisibility studies focusing on the 'views in' and the 'views out' from individual sites. The proposed wind turbines will, to a large extent, compromise the integrity of these complex visual relationships.

The most recent significant environmental/landscape impact on the area has occurred within the last 50 years with the spread of large areas of coniferous forest plantations and the construction of the Llyn Brianne reservoir, with both developments serving to fragment and disperse what remained of the few isolated communities left within these uplands. Over the last 100 years or so a number of farmsteads and dwellings have also gradually been abandoned as population numbers dwindled and economic migrancy became more popular, resulting in these lands becoming part of a smaller number of larger holdings. This economic migrancy has now begun to work both ways: rather than there being only a steady stream of people leaving the area to live elsewhere, the trend is now towards people returning to the country for a better standard of living, away from industrial land- and cityscapes, and back to an open and unspoiled countryside. The attraction of tourists into the area has steadily increased over the years, and various facilities to continue this trend have been developed and maintained (e.g. the two Youth Hostels at Ty'n y Cornel and Dolgoch, the road signs signposting the Tywi scenic tour through the heart of the project area along the mountain road from Tregaron to Abergwesyn, the established footpaths and bridleways along the Doethie valley and through parts of the Tywi forest, and various other projects such as the Red Kite Centre in Tregaron). This landscape is popular with walkers, cyclists, ornithologists and holidaymakers.

The palaeoenvironmental, documentary, cartographic and archaeological evidences all indicate that the predominant land-use in the study area since the Bronze Age has been open moorland with pockets of low intensity agriculture, which carries on in much the same vein today despite parts of the area being converted to coniferous forest. This is in sharp contrast with lower-lying land elsewhere in Ceredigion, which has experienced enormous changes in all forms of land-use over the same period. The use of this area as a loci for the building and use of ritual and funerary monuments has equally continued from prehistory to the present: from the Bronze Age cairns to the Soar y Mynydd chapel, this landscape has been imbued with spiritual significance for at least 4000 years, with particular parts having acted as focal points for ritual and religious activities. Apart from the forestry, the introduction of the wind energy project will essentially be the first major change of land-use since the Bronze Age and could potentially have a profound and long-lasting effect on the historic pattern of land-use within this particular area.

The Archaeological Resource

Within the proposed project area and on its peripheries there are a large number of archaeological sites, features and buildings, dating from the Bronze Age to the present day, and which evidence the long and continued use and significance of this landscape for the last 4000 years.

Sites within the study area

Within the study area itself, and prior to fieldwork, there were 121 recorded archaeological sites and features. Of these, 72 sites were listed within the SMR for Ceredigion held at the offices of Cambria Archaeology in Llandeilo, 31 sites were listed within the SMR for Powys held by Clwyd-Powys Archaeological Trust (CPAT) in Welshpool, and 16 other sites were recorded on the National Monuments Record (NMR) maintained by the RCAHMW in Aberystwyth. One new site was found from map evidence and added to the SMR for Ceredigion (43215), with another site, Site A, found within the Ordnance Survey archive held by the RCAHMW within the Clwyd-Powys area, and submitted to the SMR for Powys.

Table 1 below shows how the numbers of sites break down within their dated period. Of the 121 sites extracted during the desk-based assessment, just over half (67) date from the medieval and post-medieval periods and represent the remains of settlements and agricultural activity. Archaeological features of this period include deserted rural settlements, farmsteads, house platforms, enclosures, dwellings, long huts, boundary mounds as well as a lead mine and a chapel. Also well represented, at just over a third of all sites within the project region, are those monuments and features belonging to the prehistoric period, and specifically the Neolithic and Bronze Ages. The most common prehistoric monument form recorded were round barrows (20 known and possible sites), with also five standing stones and two possible stone circles amongst the total of 36. Some, but not all, of these prehistoric sites are distributed within clusters across the unforested uplands in the south of the project area and all of these must be considered as Category A sites (sites of national importance).

Of the remainder, 8 sites were of unknown date with the majority considered likely to belong to the medieval or post-medieval period on the basis of their recording as folds, long huts and boulders. Sites of modern date included a quarry, a sheep pen and seven triangulation points. No known sites dating from the Iron Age or Roman periods were found within the specific project area, although an Iron Age hillfort (Castell Rhyfel) is recorded a short distance away to the NW of the unforested areas proposed for turbines.

Table 1 Breakdown of sites within the project area by period

TOTAL	Period of construction and use							
	Neolithic	Neo/Bronze	Bronze Age	Medieval	Med/Post Med	Post Med	Modern	Unknown
121	1	2	33	12	16	39	10	8

Roman and Early Medieval/Early Christian sites and monuments are known elsewhere in the region, and specifically within the parishes of Llanddewi Brefi and Tregaron, but no sites were recorded within the Camddwr project area itself.

Five new sites were discovered during the course of the Phase I and Phase II assessments: a post-medieval settlement opposite the Soar y Mynydd chapel and adjacent to Nant y Brithdir (43212); a modern abandoned airstrip constructed and used c.25 years ago

during forestry operations (43213); a fine standing stone pair, dating from the Bronze age (43214), located just above the banks of the Camddwr, 500m south-east of Soar y Mynydd; a modern trig point located on top of Esgair Hir (43215); and, lastly, an area of ridge and furrow (43216) associated with a medieval or later deserted rural settlement adjacent to Nant y Gelli (91357).

Forested areas

Since conducting the original desk-top assessment in August 2000 new areas have been added to the project. All these new areas are located within Forestry Commission lands to the north and east of the original Cwm Berwyn and Tywi Forest area proposed last year. Within Ceredigion there are c.25 new turbines proposed within the Tywi Fechan area of the Tywi forest, with c.43 turbines proposed for the area of Tywi forest on the east side of the River Towy, largely within the county of Powys. The archaeological sites and features within these new areas are predominantly of medieval and post-medieval date, and all of these features relate to settlement and agriculture within this landscape prior to the planting of the forest. A selection of possible prehistoric round barrow sites have also been previously recorded within the area but are now engulfed by the dense coniferous plantations, and their authenticity and condition were impossible to assess. From the preliminary turbine positions provided and plotted onto the maps by far the great majority of the turbines or tracks did not appear to directly impact on any of the sites and features within this new area. However, there were some exceptions.

One exception is turbine 86, which is located rather close to sites 36697 (a trig point), 36696 (a likely post-medieval sheep fold), 2052 (a house platform dating from the medieval/post-medieval period) and 9336 (another post-medieval fold). Site 36697 is a Category C site, although the others can be considered to fall within Category B (sites of regional and district or local importance).

Turbine string 81-87 also infringes on two further sites, 36691 (a modern quarry) and new discovery 43213, an old airstrip constructed and used c. 25 years ago during forestry operations, which runs between turbines 81 and 82, extending down to the edge of the forest overlooking Esgair Ambor. The track running between turbines 81 and 87 would directly impact on both the runway and the quarry (both Category C sites).

Three possible direct physical impacts were noted for a set of modern triangulation points within Tywi Forest: 36682 could be compromised by turbine 69, 36654 could be destroyed by the track linking together turbines 22 and 23, with 36713 appearing to lie in the middle of the proposed trackway linking turbines 75 and 76. All three sites have been assigned a Category C grading.

Within the Powys side of the Tywi Forest it would appear that turbines 30-38 could possibly impact on a whole series of boundary mounds recorded around the perimeter edge of the forest as it borders Esgair Garthen (CPAT sites 13857-13870). These sites too have a Category C grading. Located just outside the project area at the same edge of

the Tywi Forest plantation on Carreg Wen Fawr, just beyond the boundary fence, is a possible Bronze Age standing stone pair (CPAT site A), whose setting would be compromised by the construction process of turbines 36 and 37 and their linking track. There is also a visual impact issue for the unforested landscape to the north-east of the project area, which stretches over to the Claerwen Reservoir.

Non-forested areas

On the open upland landscape proposed for development, which belong to three separate landowners (Maes Glas, Nant Llwyd and Blaendoethie/Ty'n y Cornel) who graze sheep in the area, the locations of a number of turbines and their associated tracks would impact greatly on various archaeological sites and the historic landscape as a whole. These turbines cluster within four distinct groups and relate exactly to the equally distinct clusters of Neolithic/Bronze Age monuments, which are also sited, for the most part, on the highest parts of the upland plateaux. All these monuments are of Category A rating.

Group 1 Turbines 115, 116 and 123 plus tracks, and turbines 109 and 114

These turbines and their associated tracks compromise the setting of the Bryn Gorlan group of prehistoric monuments (9001-9005), and site 5554. The Bryn Gorlan group, all sites of which are Scheduled Ancient Monuments, comprises a stone circle, a standing stone and three small cairns, and is protected by a lozenge-shaped scheduled area surrounding sites 9001-9004, with outlying site 9005 also scheduled under the same authority (ref: 7/3449/CD136 (CER)). The tracks linking turbines 115, 123 and 116 provide the most definite physical threat, although all three turbines appear to be sited far too close to these monuments and encroach on the scheduled area. The track linking turbine 123 to turbine 125 in particular would appear to potentially directly impact standing stone 9002. It should also be noted that turbines 110, 111 and 122 will also visually impact on these prehistoric sites.

During fieldwork it was noted that some of the Bryn Gorlan scheduled ancient monuments have already been compromised by vehicle tracks leading to an anemometer, presumed to be associated with this project, which has itself been placed within the scheduled area designed to protect these sites. Monuments of national importance, such as the Bryn Gorlan group, are included on a 'schedule', maintained by Cadw and held within the protection of the State as outlined in the *Ancient Monuments & Archaeological Areas Act 1979*. Permission for any works to take place within a scheduled area or on a scheduled ancient monument requires the consent of the National Assembly of Wales, through Cadw, by law.

Group 2 Turbines 142 and 144 plus tracks, and turbine string 137-148

Two of the monuments affected by this group of turbines (8528 and 9117) have been recently recommended for scheduling as part of the Cadw-funded Prehistoric Burial and Ritual Sites project and are Category A sites. Prehistoric cairn 9118, as far as could be

seen, will be directly impacted by the track running between turbines 142 and 144, whilst cairn 8528 and stone 9117 are threatened, and certainly visually compromised, by the suggested location of turbines 141 to 147. The setting of all three Bronze Age sites would be severely compromised, both physically and visually, with cairn 9118 possibly destroyed, if these turbines are not substantively relocated. Furthermore, on the map originally supplied with the Cwm Berwyn and Tywi Forest project, the turbine tracks and access routes also show a possible roadway starting from within a few metres of the Soar y Mynydd chapel (7844), which is a Grade II Listed Building and also a Category A site. Soar y Mynydd chapel is a site of Historic Importance and is also of great symbolic importance to the Calvinist Methodist cause, which was first established in this isolated rural area in the 18th century. People travel from all over the world to specifically visit this chapel and every Sunday the chapel is full of worshippers for both its afternoon and evening services.

As will be reiterated in the recommendations later within this report, it is strongly advised that the turbines proposed for both this area and for Bryn y Gorlan are, at the very least relocated, and, more preferably, abandoned altogether. The construction of the turbines, as well as the subsequent visual and aural disturbance, will have a devastating physical and visual sensory impact on not only these monuments but also on the historic landscapes in which these monuments have existed for the last 4000 years.

Group 3 Turbines 146, 149, 150

Whilst these turbines do not directly impact physically on the three Bronze Age cairns in this area, nonetheless they do present a certain level of threat, particularly during the construction process. There is also a visibility issue, which impacts on the setting of these monuments and compromises their integrity. During fieldwork it was noted that Carn Saith-wraig (5555), a fine platform cairn, has some damage on its south-eastern side with some of the cairn material having been robbed at some point in the past, as well as more recent damage apparent by encroaching vehicle tracks caused by quad bikes. Also recently the monument has been compromised by the lighting of a fire on top of part of the cairn, and by the dumping of a pile of old fence-posts on top of the site. An old caravan and modern sheepfold are situated within close proximity to the cairn. Two other round barrows are associated with this site (9009 and 8527) and have also been damaged at some point in the past, and their cairn material robbed. All three sites lie within the area bounded by turbines 146, 149 and 150 and will be at the very least visually impacted by the construction of the turbines. All three sites have been recommended for scheduling and are pending a decision. They have also been classified within this report as Category A sites, i.e. of national importance.

Group 4 Turbines 158-162, and the track between 160 and 161

The proposed locations of turbines 160 and 161, and more specifically the track running between these two turbines, would appear to present a potential physical threat to the Pen y Gurnos Bronze Age round barrow (91303), which also has a modern triangulation point built on top of the site. Turbines 158-162 will also have a clear visual impact on the Pen-y-Gurnos Bronze Age round barrow, classed here as a monument of national importance

and also recommended for scheduling. When visited this site was found to be located on a prominent knoll within the undulating landscape of this area, and its setting and views would be highly compromised by the building and use of the proposed turbines.

Elsewhere on the open landscape there are a further three sites which will be compromised by the current positions of some of the turbines and their tracks. Esgair Cerrig boundary stone II (91359) appears to lie in the middle of the track linking together turbines 105 and 106, with another boundary stone, Esgair Cerrig III (91360) lying close to turbine 126 and possibly compromised by the track linking this turbine to turbine 130. A newly recorded trig pillar, 43215, could also possibly be destroyed by the track linking together turbines 118 and 119. All three sites currently have a Category C grading, but they lie within a virtually undisturbed Bronze Age landscape which may have been part of a processional ritual routeway linking the Bryn Gorlan group of monuments, which lie to the south-west, with a concentration of other prehistoric monuments clustered around the Nant-y-Maen settlement and Cefn Cerrig to the north-east. Indeed, the vertical strata of the natural rock outcrops on top of Esgair Cerrig and Esgair Hir give the appearance of there being a number of possible standing stones across this landscape. This area, and these stones especially, may well have been imbued with symbolic significance in the Bronze Age as 'natural' places of ancestral activity, and could quite feasibly have become the focus of prehistoric rituals involving the deliberate deposition of objects such as axes and pots (see Bradley 2000). Such objects would be buried around the bases of these stones or in other places within this landscape and are therefore not detectable during a walk-over survey. Such evidence would only be revealed through a programme of trial-trenching (excavating a series of pits or trenches dug at key locations identified as potential findspots using professional judgement).

It is also worth noting that turbines 90-94, 99-100, 126, 129-30, 133-134 and 137-165 all fall within the unforested part of the proposed project area which is designated SSSI, whilst turbines 31-44 on the edge of the Tywi Forest in the north-north-eastern fringes of the project area lie at the edge of another tract of upland with SSSI classification. These turbines, in their current positions, are therefore impacting on an Environmentally Sensitive Area.

Sites immediately outside the study area

There are a few distinct clusters of sites, which although just outside the project area, will nonetheless be clearly affected by the proposed wind energy project. The largest group of these clusters around the Nant-y-Maen complex at SN7557, SN7657 and SN7658. Nant-y-Maen itself (29848) is currently inhabited and the viewshed from this farmstead down the Camddwr valley will undoubtedly be severely compromised by the turbines on the upper parts of the open landscape. A large number of archaeological sites and features also cluster on both sides of the Tregaron-Abergwesyn road as it passes through the area, and consist mainly of DRS and associated post-medieval sites, although a

number of prehistoric monuments (cairns and standing stones) are scattered amongst the more prevalent enclosures, long huts, peat cutting areas and trackways.

A second cluster of sites is concentrated on Caron-uwch-clawdd, an area of open land within the Tywi forest on the north-western fringes of the project area around SN7662 and SN7663. A scheduled Bronze Age barrow cemetery (Blaen-Glasffrwd) consisting of at least five round barrows (2053, 2054, and 5577-79) is located here, as is a scheduled standing stone (9015) and another possible round barrow (9013), both of which are associated with the Blaen-Glasffrwd group of monuments. There are also a number of recorded medieval settlements clustered within this area as well.

Smaller clusters of sites lie on the uplands to the north of the Tywi forest, on Blaen Mwyro, and within the edge of the forest at SN785625 close to Nant and Llyn Gorast. On the uplands the sites are predominantly medieval and post-medieval long huts, shelters, enclosures and platforms, but at the edge of the forest there is a possible linear round barrow cemetery (36707-36711), the latter known only from documentary sources.

Within the project area but some distance away from the proposed turbines there are a cluster of sites close to the banks of the Afon Tywi at Esgair Gerwyn (9614-9617) which form a scheduled Neolithic/Bronze Age cairn cemetery (8881)(ref: CD135(CER)), whilst on the opposite side of the river at Nant-ystalwyn there is a post-medieval farmstead settlement. Nant-ystalwyn was also the findspot location of a Neolithic flint scatter (CPAT site 3049), which may be indicative of a prehistoric settlement possibly associated with the ritual cairn complex.

DISCUSSION

The results of the desktop analysis and fieldwork as presented in this report indicate a series of clusters of Bronze Age funerary and ritual monuments present within the open upland areas which would be heavily compromised by the current proposed sitings of the turbines and their tracks. Other archaeological features, particularly those relating to deserted rural settlement studies, are also shown to be potentially affected by the proposed turbine strings elsewhere in the project area. Whilst the majority of these sites were not likely to be directly physically damaged by the turbines themselves, it was considered that the construction processes associated with such a wind energy project could provide a potential threat to the archaeology which needs to be properly assessed on the ground. But more than just the physical impact it is imperative to consider too the visual impact on what is for the most part an unspoiled prehistoric, historic and contemporary landscape, which has formed a significant part of west Wales' social, political and economic development for over 4000 years.

When considering the importance of the archaeological resource within the project area, it is not simply a case of looking at individual sites in isolation from each other, but rather it necessitates a more general landscape perspective. The area in question in many ways remains as much the same now as it did in the Bronze Age, with the numerous funerary

and ritual monuments dating from this period acting as testimony to the importance of this landscape to peoples in prehistory. It is also important to consider all of these prehistoric ritual sites holistically and in relation to one another: the clusters of cairns and stones were not built and used in isolation, but formed part of a whole network of ritual sites which extended across the landscape in all directions and beyond the scope of the project area. The ritual sites within the proposed project area were part of a much larger processional routeway through the landscape, and many of the tracks and roads across the uplands, which are still visible today, pass by a number of these sites. These trackways were still used within living memory by the last drovers of the area, and almost certainly had their origins in the Bronze Age. Such holistic approaches to the archaeological resource are also relevant to more recent settlement studies: this area was farmed and used within equivalent networks and frameworks of reference, with the Soar y Mynydd chapel perhaps the greatest example of a continuing focal point today for the dispersed communities of the uplands, and for peoples from further afield.

What is significant about this area is not simply the recorded archaeological resource, which is visible in the form of known sites and features, but the potential of this area for large amounts of archaeological material currently buried and preserved, yet out of view. It is well documented, for example, that ritual activity at prehistoric sites involved not simply the structured deposition of artefacts and material within the confines of the monuments themselves, but equally within large areas around and between the monuments. The palaeoenvironmental evidence for the area suggests that this was a managed landscape from the early Bronze Age onwards, supporting small pockets of low-intensity agriculture in much the same way as it does to the present day. Evidence yet to be discovered of Bronze Age settlements can be anticipated for parts of the area, with the ritual monuments having acted not only as places in which to bury the dead, but equally as political/territorial markers and thus the foci for a variety of different social and economic activities. The even spread of prehistoric sites throughout the landscape in this area would seem to indicate the likelihood of a reasonably sized, settled population within these uplands which accompanied the monuments, and indeed the landscape has continued to sustain pastoral activity for the last 4000 years. Similar observations of as yet undiscovered archaeology are also true for the medieval and post-medieval periods. For example, during the recent Deserted Rural Settlement (DRS) project rapid walkover field surveys undertaken in the last five years in neighbouring valleys have brought to light a vast number of previously unknown farmsteads and *lluestau*, small enclosed settlements often occupied by shepherds who stayed on the lands throughout the year with their flocks.

It is therefore likely that there are, as yet, many more prehistoric and historic sites to be discovered within this landscape. Dense vegetational cover at the time of the fieldwork part of this project (August 2001) rendered the discovery of new sites almost impossible, although some new sites were indeed discovered and added to the SMR (43212-43216). Indeed, the anticipated sub-surface features evidencing settlement or ritual acts of structured deposition from the Bronze Age to the present would not be visible even when the vegetation was less dense and would only be potentially recoverable by targeted small-scale excavations.

An important issue, which must be taken into account during the planning stages for the Camddwr Wind Energy Project, are thus those areas of landscape *between* the different groups of monuments, which are arguably as archaeologically sensitive as the actual sites themselves. Should the wind energy project go ahead, watching briefs and salvage recording will be necessary during the construction process, particularly in the case of the turbines proposed for the unforested parts of the project area.

RECOMMENDATIONS FOR MITIGATION

The following mitigations are suggested:

1) **The relocation of turbines or the abandoning of some areas of the project**

The turbines and tracks proposed for the Bryn y Gorlan, Blaen Nant-y-rhiw and Pen y Gurnos plateaux need to be re-thought and possibly either re-located or withdrawn from the project proposal altogether, given their exceptionally close relationship to the Bronze Age funerary and ritual monuments of the area which are classed as Category A sites, and therefore sites of national importance. Indeed, some of these sites are already protected by the State as Scheduled Ancient Monuments (9001-9005), with others in the area now recommended for scheduling (and pending a decision) as part of the Cadw-funded Prehistoric Burial and Ritual Sites project. Given the richness of the archaeological resource and the importance of the historic landscape in this area (see assessment in Appendix IV of this report), there is a case for arguing that the entire open landscape should, by preference, be abandoned altogether. The turbines suggested for the forestry are less problematic as they appear to cause less physical and visual disturbance to the known archaeological resource. However, there is still an issue of as yet undiscovered archaeology within the forested area, which would require prospection (see point 2).

The following turbines should be relocated or abandoned:

Group 1 Turbines 115, 116 and 123 plus tracks, and turbines 109 and 114

In this area it is recommended that these turbines are withdrawn from the project on the basis of their immediate impact on the setting of the Bryn Gorlan group of scheduled monuments, and threatened physical impact on standing stone 9002 in particular. It should also be noted that turbines 110, 111 and 122 will also visually impact on these prehistoric sites and their locations should also be reconsidered.

Group 2 Turbines 142 and 144 plus tracks, and turbine string 137-148

In this area it is recommended that turbines 142 and 144 and their linking track are removed from the project because of their physical impact on cairn 9118 in particular, but also because of their visual and potential impact on prehistoric sites 8528 and 9117. Turbine 143 also poses a potential physical threat to cairn 8528 and should ideally also be removed. Within turbine string 137-148, at the very least turbines 141 and 145 will have

a severe visual impact on the settings of these Bronze Age sites and their locations should be reconsidered.

Group 3 Turbines 146, 149 and 150

In this area it is recommended that these three turbines are removed from the project on the basis of their visual impact on the three Bronze Age monuments which lie in the middle of the triangular area they delimit.

Group 4 Turbines 158-162, and the track between 160 and 161

All five of these turbines have a severe visual impact on the setting of the Pen y Gurnos round barrow and are therefore recommended to be removed from the project. Compounding this, the track that will run between turbines 160 and 161 poses a potential physical threat to the site.

Other turbines

Turbine 86 and the track linking it to turbine 87 poses a physical threat to four archaeological sites within its immediate area and should be relocated.

Turbines 31-44 visually impact the open unforested landscape to the north-east of the project area (over towards the Claerwen reservoir), and potentially impact the boundary mounds along the edge of the forestry plantation, which may warrant their reconsideration.

Recommendations: A physical “no-go” area of at least a 250m radius should be established around all Category A sites within the project area, and preferably at least a 100m radius exclusion zone around all other known archaeological sites. At the very least, the turbines which encroach upon the four main groups of Bronze Age monuments, as detailed above, should be removed from the project. These ‘no-go’ areas are suggested on the basis that, for Category A sites, there should be mechanisms in place which aim to preserve these sites and their settings (see p.6), and that any sub-surface features connected to the monuments are considered likely to occur at least within the proposed exclusion zone. Any ‘no-go’ area less than those suggested above would be deemed to impact very severely on both the known and yet undiscovered archaeological features, in particular with relation to the setting of these sites and the visual impact that the proposed turbines would have on these monuments.

2) Exploration of unknown archaeology beneath the turbines and their tracks

On the basis of the distribution of known archaeological sites and features within the project area, and also the undisturbed nature from the Bronze Age to the present of the unforested landscape areas in particular, it is highly probable that there are a number of other archaeological sites yet to be discovered within both the unforested and forested areas of the project. Given the extremely large area proposed for development it was not possible within the fieldwork phase of the project to prospect for new sites, and indeed many features may be below the surface and thus not detectable during a walk-over

survey. Such potential sites should be evaluated in selected areas affected by the final locations of the turbines and their tracks.

Recommendations: Pre-construction evaluations will be needed. For the unforested areas a series of strategically placed trial-trenches should be excavated which will be selected once the final locations of the turbines and their tracks are known. Within the forestry an archaeological watching brief to identify potential new sites affected by the final locations of the turbines and their tracks should be undertaken when trees are being felled prior to the construction of the turbines. Archaeological watching briefs should also be undertaken during the construction process throughout the entire project area, which includes any necessary salvage recording.

3) Historic landscape character considerations

If the proposed development goes ahead in its current, or even in an amended, form, the consequences for the historic character of the project area as a whole are considerable. Not only is there a visual impact issue on the current enjoyment and amenity value of the historic landscape and its wider setting, but there is also the irreparable change to the landscape itself and thus to its innate archaeological and historic character. This is especially so for the open moorland areas which have remained largely unchanged in land-use and activity for the last 4000 years.

Recommendations: Given the significance of this historic landscape and the assessments made regarding the potential impact of this project on its archaeological resource and character (as presented earlier in this report and re-iterated in Appendix IV), it is difficult to see how amending the locations of some of the turbines will lessen the overall impact the development will make on the area. Although certain archaeological sites may no longer be physically threatened by the relocation of selected turbines, these turbines will nonetheless have a severe visual impact on the monuments and their landscape setting. Both the forested and open areas of this project are within historic landscape character areas, and their historic character will be severely compromised by the project. Of the two areas, the open moorland will be the most drastically affected and is, on balance, the more significant of the two historic landscape character areas.

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APPENDIX 1

Digital photos

Digital photographs of sites and views were taken throughout the course of the fieldwork where possible and appropriate, and these pictures form a kind of phenomenological journey through the landscape, which highlight not only the nature of this landscape but how its views would be altered by the construction of turbines. The photos can only allude to the landscape as it survives today, and they require an imaginative leap as to how the landscape would be transformed by the building processes involved in the erection of the turbines and the laying of the tracks between them.

001. Clear-felled brash.

Photo taken along a forest ride in Tywi Forest which runs towards cairn 805 at SN8141656870. This and the next image show the devastation left by the clear felling and regeneration/replanting of these areas: any archaeology in the area is likely to have been destroyed, or is at the very least impossible to see because of the brash.

002. Clear-felled forest.

Photo of clear-felled area showing the ground disturbance caused by the hi-Mac equipment used in forestry operations. However, in those areas of the forest which have not been felled or re-planted it is likely that a great deal more archaeology lies undisturbed and as yet undiscovered. Forestry plantations can actually serve to protect the archaeological resource in some instances.

003. Cairn 805.

Photo of Castell Llygoden Bronze Age platform cairn looking N, taken from forest ride. Although this cairn will not be directly affected by the construction of turbines 60-64 in their current proposed locations, it is worth bearing in mind that if the forest were clear-felled and only the turbines remained, there would be a visibility impact issue.

004. Turbines 62-64.

Photo looking NE along the ride on which turbines 62-64 are proposed to be located.

005. Turbine 64.

View out from the forest ride close to the proposed location of turbine 64 looking SSW

006. View towards turbines 21-16.

View taken from SN8143960633 looking over to site 13686 (Esgair Saeson medieval common land) and towards turbines 21-16 which would run left to right within the forest at the edge of the open landscape, and would have a direct visual impact on the area.

007. View from site 13854.

Photo taken of view from site 13854 looking NW and over towards the forest where turbines 22-27 are proposed to be located.

008. View over towards Esgair Saeson common land.

Photo taken at SN8057261150 looking SW over to Esgair Saeson common land. The tree line just visible at the top of the plateau denotes the location of proposed turbine string 21-17 (running from left to right) which will overlook this medieval and post-medieval area of land. In the left hand side of the picture there are the visible remains of old field boundaries, sheepwalks, tracks and a possible sheepfold, all connected to the historic use of this landscape for animal husbandry from the medieval period to the present.

009. Moel-prysgau and view.

Photo of Moel-prysgau DRS (deserted rural settlement) and its view, looking S. The farmstead is clearly visible, as are associated enclosures and earthworks. The farm is located adjacent to a stream and looks out over the Esgair Saeson common land (site 13686), with turbines 21-19 being just visible running along the top of the plateau from left to right if built in their current proposed locations.

010. Moel-prysgau.

Photo taken from the road above Moel-prysgau farmstead (site 36653) looking E and over towards the part of the Tywi forest where turbines 45-50 will be located. Nant Loyw, which runs alongside the farm and runs into the Afon Tywi just above Moel-prysgau, is visible in the picture meandering through the landscape.

011. View out over Blaen Mwyro.

View taken from SN7991161410 looking NNW over the open landscape of Blaen Mwyro and Crug Gynon towards sites 35651-59, 8555 and 9335. These sites, already visually compromised by the forest itself will be further impacted with the arrival of turbines, especially if the turbines remain once the forest is clear-felled.

012. View towards turbine 12, 80 and 87.

View taken from same location as photo 11 looking W/WNW towards the edge of the Tywi forest and the locations of turbines 12, 80 and 87.

013. View down forest break towards turbines 11 and 12.

Photo taken looking N down the length of a forest break at SN7875261030 over towards the proposed location of turbines 11 and 12.

014. Tywi Forest: Panorama 1.

First of four photos creating a panorama, taken at SN7794361389. This photo looks S/SSE into the forest where turbines 14-16 would be located.

015. Tywi Forest: Panorama 2.

Photo 2 of panorama. This shot looks W/WSW to where turbines 6-9 will be located.

016. Tywi Forest: Panorama 3.

Photo 3 of panorama. This picture looks N to where turbines 9 and 10 are proposed.

017. Tywi Forest: Panorama 4.

Last photo in the panorama. This photo looks NE down the valley where turbines 11 and 12 are to be located.

018. Tywi Fechan valley. View looking NE down the valley of the Tywi Fechan taken at SN7758260402. The photo looks across to turbines 11 and 12.

019. Esgair Hirnant.

View looking ESE/SE towards Esgair Hirnant, taken at SN7768960327. Photo looks over towards the location of turbine string 78-73.

020. Cefn y Cwnc.

Photo taken from SN7797260253 looking SW/SSW towards the unforested saddle of Cefn y Cwnc and Pen y Maen. On the high unforested ground on the left of the photo there are two Bronze Age cairns (sites 9019 and 29829), whilst all through the saddle and beyond lie clustered a large number of archaeological sites, which will be severely impacted on visually by the proposed turbines, particularly those suggested for the open ground between the Tywi Forest and Cwm Berwyn plantations.

021. View towards turbines 69-72.

Photo taken looking S/SSE over part of the unforested saddle and towards the location of turbines 69-72, with possibly turbines 88 and 89 visible on the horizon.

022. Esgair Gerwyn: Panorama 1.

A four-photo panorama looking from SE to NE, taken at SN8013357597. This series of four photos looks over the valley of the Afon Tywi towards the waterfall and high ground on which turbines 51-64 are to be located.

023. Esgair Gerwyn: Panorama 2.

Second photo of the panorama swinging from SE to NE across the Afon Tywi and looking up to Esgair Cloddiad.

024. Esgair Gerwyn: Panorama 3.

Third photo of four in a panorama view over the Tywi valley and looking to the high ground of Nant-y-Stalwyn and Esgair Cloddiad.

025. Esgair Gerwyn: Panorama 4.

Final photo in the panorama which looks NE over Carreg y Fran and up to the location of turbines 54 and 55 and Drum Nantyrhelyg.

026. Carreg y Fran.

Photo taken at SN8195258453 looking W/WNW over the unforested Carreg y Fran and towards the location of turbines 73-78 on the other western side of the Afon Tywi.

027. Afon Tywi & Nant-ystalwyn.

Photo taken from the forest road at SN8077557821 looking SW, showing the meandering Afon Tywi and the settlement of Nant-ystalwyn. This photo looks over to the forestry and landscape where turbines 88-100 are to be located, and also to the location of Bronze Age barrow cemetery 8881 on the open ground in the centre of the photograph.

028. Nant Hirnant.

Photo taken from the same location as photo 27, but looking W/WNW along the Hirnant valley. Turbines 65-72 and 73-78 are proposed to run within the forest and on either side of this river.

029. Powys-Ceredigion borders.

Photo taken looking N on the Tregaron-Abergwesyn mountain road at the border between Ceredigion and Powys at SN8044856879. The photo looks towards the location of the Esgair Gerwyn barrow cemetery (8881) and to the forest where turbines 65-78 are to be located. This road is part of a designated scenic tour popular with locals and tourists.

030. View from cairn 8528. The first of a panorama of three photos taken from Bronze Age cairn 8528, showing the view from W-SSE. This photo looks W across the view (which will be interrupted by turbine 142) towards the Bryn y Gorlan upland plateau (on which a cluster of Bronze Age cairns are located) and where turbines 109-111, 114-116, 122-123, 127-128, 131-132 and 135 are proposed to be located.

031. View from cairn 8528.

Second in a panorama of three photos looking W-SSE across the open uplands from Bronze Age cairn 8528. This photo looks SSW across the Doethie valley, with standing stone 9117 (a large white quartz boulder) visible on the left of the photo.

032. View from cairn 8528.

The last of three photos showing the view from cairn 8528. This photo looks SSE directly towards standing stone 9117 visible in the centre of the photograph and SE towards proposed turbines 144, 146, 149, 151 and 154. The view beyond standing stone 9117 shows the interlocking spurs of the Doethie valley running towards Rhandirmwyn.

033. View from 9118.

Photo taken looking NE from prehistoric mound 9118 over towards standing stone 9117 (visible in the centre of the photograph) and cairn 8528. The photo also shows the edge of the Blaen-Nant-rhiw forest along which turbines 137-148 are proposed to run.

034. View from 9118.

Photo looking WNW along the Doethie and Doethie Fach valleys towards turbine 142 and across to the Bryn Gorlan uplands and its associated Bronze Age sites and proposed cluster of turbines.

035. View from 9118.

Photo taken looking SE from prehistoric mound 9118 over towards the proposed locations of turbines 146, 149, 151 and 154-165. The view of the open landscape from this site, and from neighbouring sites 8528 and 9117 will be severely visually impacted by the locations of these turbines, whilst the construction processes involved in the building of these turbines will almost undoubtedly impact on these sites if the proposed turbines remain in their currently suggested positions.

036. View from turbine 138.

Photo taken from the suggested location of turbine 138 looking NNW and over towards the uplands of Esgair Fforch and Esgair Cerrig and the locations of turbines 105-108, 112-113, 117-121, 124-6, 129-130, 133-134 and 137. The Bryn y Gorlan uplands and associated prehistoric sites and proposed turbines lie immediately to the left of the photograph.

037. View from turbine 139.

Photo taken from turbine 139 looking SSE down the Doethie valley towards turbines 142, 144, 146, 149-165. The Brecon Beacons are visible in the distance and show the enormity of the view from this part of the landscape.

038. Standing stone 9117.

Photo of standing stone 9117 looking SSE down the Doethie valley and across the vista that will be severely visually impacted by turbines 144, 146, and 149-165.

039. Standing stone 9117.

Record shot of Bronze Age standing stone 9117 showing similar views to photo 38, with the Brecon Beacons visible on the horizon.

040. Standing stone 9117.

Record shot of Bronze Age standing stone 9117 looking ESE and showing the edge of the forest along which turbines 145, 147 and 148 are proposed to run, as well as the open landscape in which turbines 150 and 153 are also to be located. These turbines would have a major physical and visual impact on these sites if constructed in the positions currently proposed.

041. View along turbines 70-65.

Photo taken looking ESE along turbine string 70-65. Photo taken between turbines 70 and 71 at SN7838258864.

042. View along to turbines 71 and 72.

Photo taken from same location as photo 41 looking WNW along the continuation of turbine string 65-70, looking at the last two turbines in the string, numbers 71 and 72.

043. View from turbine 1.

Photo taken from turbine 1 looking S/SSW over open moorland towards Cefncerrig, Esgair Ffrwd and the beginning of the Camddwr valley. In the distance, turbine strings beginning with 108, 113 and 120 would be visible. A large number of archaeological sites lie within this viewshed, clustered around the Nantymaen settlement, and will be severely visually impacted by the siting of the turbines on the open landscapes of Esgair Saeson, Esgair Cerrig, Esgair Hir, Esgair Fforch, Esgair Wynt, Bryn Du and Gamallt. An anemometer is visible in the centre of the photograph.

044. Turbine 1.

Photo taken from location of turbine 1 looking N/NNE along turbine string 1-4.

045. Cerrig Maesycawnau.

Photo taken at SN7692759004 looking S/SSW. This photo shows the rocky outcrop of Cerrig Maesycawnau in the middle of the picture and the open landscape of the Nant y Maen valley.

046. Cerrig Maesycawnau.

Photo taken from Cerrig Maesycawnau at SN7701558875 looking W across Esgair Ambor and Blaen Camddwr. The rooftops of the Nantymaen settlement (still inhabited) are visible amongst the clump of trees in the middle of the photograph.

047. Cefncerrig.

Photo taken at SN7655058403 looking SSW and towards the upland open landscape on which turbines 108, 113, 120 and their strings will be located. In the Camddwr valley there are a large number of archaeological sites clustered within this area around the Nantymaen settlement, which will be severely visually impacted by the construction of the turbines in their currently proposed locations.

048. Doethie Fawr.

Photo taken at SN7363454042 looking ENE over towards Bryn y Gorlan and the Doethie Fawr valley. Turbines 101-135 are proposed to be sited on the uplands visible across the photograph and will severely impact both physically and visually the significant prehistoric archaeological sites located in this area.

049. Blaendoethie.

Photo taken from same location as photo 48 but looking ESE towards Llyn Brianne and the location of turbines 154-165 along the uplands on the eastern side of the Afon Doethie valley.

050. Cerrig Ysgyfarnog.

Photo taken from same location as photos 48 and 49 but looking N/NNE towards turbines 101-136 with the edge of the Cwm Berwyn plantation visible on the left hand side of the photo, against which string 101-108 is proposed to be located. The views over this landscape will be severely visually impacted by the construction of these turbines, as will the surrounding archaeology.

051. Turbine 102.

Looking NE from the position of turbine 102 towards turbine 108. The edge of the Cwm Berwyn plantation is visible on the left hand side of the photograph.

052. Turbine 102.

Looking E from the position of turbine 102 towards turbines 111, 129, 133, 134 and 136. The edge of the Blaen Nant-y-rhiw forest along which string 137-148 will run is visible in the centre of the picture, with the larger Bron-y-Helm forest visible on the horizon.

053. Turbine 102.

Looking SE from turbine 102 towards the location of turbines 110, 115-116, and 123, which is also the area in which the Bryn Gorlan group of Bronze Age scheduled ancient monuments (sites 9001-9004) are located.

054. Cairn 9005.

Photo taken from Bronze Age cairn 9005 looking ESE over to Blaen Nant-y-rhiw forest and the location of turbines 137-150.

055. Cairn 9005.

Photo taken from Bronze Age cairn 9005 looking E/ENE and towards the rest of the Bryn Gorlan group of Bronze Age scheduled ancient monuments, of which this cairn is a part. This view would be severely visually impacted by turbines 114-116 and 122-123, and these turbines would also severely encroach upon the prehistoric archaeology of this area.

056. Cairn 9005.

Record shot of cairn 9005 looking N, and towards the location of turbines 101-104.

057. View from cairn 9005.

Photo of the dramatic landscape view from Bronze Age cairn 9005 looking SW.

058. Turbine 114.

Photo taken from the suggested position for turbine 114 looking NE towards turbines 115 and 116 and to the Bryn Gorlan group of Bronze Age scheduled ancient monuments. An anemometer is visible on the right hand side of the photograph and lies between the Bryn Gorlan stone circle (9001) and prehistoric cairn (9003), and its construction has impinged on the scheduled area protecting these monuments.

059. Turbine 114.

Photo taken from the proposed position of turbine 114 looking SE towards the string which runs along the edge of Blaen Nant-y-rhiw forest (137-148) and across the open landscape down towards Llyn Brianne.

060. Turbine 114.

Photo taken from turbine 114 looking NNW towards the open landscape and high ground on which turbine string 101-1104 and 109-111 are proposed to be located.

061. Stone circle 9001.

Photo taken looking N/NNE from within the Bryn Gorlan stone circle (9001), a scheduled ancient monument, towards turbines 116-121 and 124-126.

062. Stone circle 9001.

Photo taken towards the S and the proposed location of turbines 122, 123, 127, 128, 131, 132 and 125, as seen from within the Bryn Gorlan stone circle (9001). One of the stones of this circle is visible in the foreground of the photo: the remaining stones are hidden within the long grass and are most visible during the winter months when the vegetation has died back.

063. Standing stone 9002.

Record photo of fallen Bronze Age standing stone 9002 looking N, part of the Bryn Gorlan group of scheduled ancient monuments, which lies a short distance to the SE of stone circle 9001. This monument has been severely encroached upon by vehicle tracks running within two metres of the stone and which continue up to cairn 9003, also scheduled and part of the Bryn Gorlan group. These vehicle tracks are presumably associated with the anemometer sited within a few metres of both the stone circle and cairn. This wind monitor has been constructed within the scheduled area designed to protect these important prehistoric monuments and has impacted on these sites, with the associated vehicle tracks also posing a high level of threat to the archaeology in this area.

064. Standing stone 9002.

Record photo of standing stone 9002 looking S showing the view from the site towards turbines 123, 128, 131, 132 and 135 and down the Doethie valley.

065. Panorama-Cairn Saith-wraig.

The first of a four-photo panorama taken from the Bronze Age Cairn Saith-wraig (5555) which pans round from SW to NW. This shot, looking SW, shows the edge of the platform cairn and looks down the valley of the Nant Iwrch which flows into the Afon Doethie.

066. Panorama-Cairn Saith-wraig.

The second photo in the panorama taken from Bronze Age cairn 5555. This shot looks WSW/W showing the valley of Nant Iwrch to the left and the high open upland slopes of Craig Nant-Iwrch in the centre.

067. Panorama-Cairn Saith-wraig.

The third photo of a four-photo panorama taken from Cairn Saith-wraig. This shot looks W/WNW towards the location of turbine 146 which would be located on the slope in the foreground on the right of the picture, visually impacting on the site, and across to the upland in the distance on which turbines 131, 132 and 135, etc. are proposed to be located. This photo also shows recent disturbance to the Saith-wraig platform cairn caused by the dumping of a pile of fencing posts on top of the cairn. There was also evidence of a small fire having been lit and vehicle tracks encroaching on the E edge of the monument.

068. Panorama-Cairn Saith-wraig.

The last photo in the panorama taken from this Bronze Age cairn. This shot looks NW and up towards the suggested location of turbine 144, and also shows the N edge of the platform cairn.

069. Cairn Saith-wraig.

Record photo taken looking W from the knoll which lies just behind this platform cairn to the E, showing the extensive views from the site over the surrounding dramatic landscape.

070. Cairn 9009.

Record photo of Bronze Age cairn 9009 looking W down the valley of Nant Iwrch and to the open upland of Craig Nant-Iwrch.

071. Cairn 8527.

Record photo of Bronze Age cairn 8527 looking S and towards the proposed position for turbines 149 and 151 which will visually impact the site.

072. Soar-y-Mynydd Chapel.

View of the Soar-y-Mynydd chapel looking E and taken from the track which leads to Brithdir farmstead (9113). This chapel and the surrounding area are likely to be severely compromised by the construction and use of the proposed turbines on the uplands to the W of here.

073. View over Blaen Mwyro.

Photo taken at SN7828862037 looking NNE over the open landscape of Blaen Mwyro and Pen-y-Bwlch which will be visually impacted by the proposed turbines in Tywi forest.

074. Nant Rhyd-y-meirch.

Photo taken at SN7838362506 looking E towards the valley of Nant Gorgsg and beyond to Moel Prysgau and the forestry in which turbines 22-50 are proposed to be sited.

075. Nant Rhyd-y-meirch.

Photo taken from same location as photo 74 but looking SSE towards the turbine string 8-12 and 14-21 which would be running through the forest.

076. Caron-uwch-clawdd.

First of two photos showing the view from the edge of the forest close to the location of turbine 87 taken at SN7755962827. This first photo is taken looking WNW over the open landscape of Caron-uwch-clawdd, where a number of archaeological sites are clustered. These sites would be visually impacted by the proposed turbines forming string 81-87, and would also change the character of this peaceful landscape via noise pollution generated by the turbines.

077. Caron-uwch-clawdd.

Second of two photos showing the view from close to turbine 87. This photo looks W across the rest of Caron-uwch-clawdd and from this one point there is a huge vista across a wide area of the landscape, over towards the coast at New Quay and through to the NW towards Aberystwyth as shown in the previous photo. From this one landscape point two wind farms were clearly visible on the horizon: one near Llanrhystud visible at 300 degrees and one at Rheiddol visible at 340 degrees. Clearly then, the turbine development proposed for this area would itself be visible for miles around thus visually impacting and changing the nature of the virtually unspoiled landscape as it exists today.

078. Llyn Du quarry.

Photo of the Llyn Du quarry (36691) taken at SN7727262204 looking SW.

079. Llyn Du quarry and turbines 84-81.

Second photo of Llyn Du quarry taken from the top of the spoil tip looking SW and along the proposed route of turbine string 84-81.

080. Llyn Du quarry and turbines 85-87.

Photo taken from same location as photo 79 on top of the spoil tip relating to the Llyn Du quarry but looking NE down the proposed route for turbines 85-87.

081. View from Llyn Du quarry.

Photo taken from the modern quarry (36691) looking E/ENE over to turbines 10-12 and 79, towards the Bronze Age round barrow (8419) on the unforested upland and over in the distance towards turbines 22-27 in the Powys section of the Tywi forest.

082. View from Llyn Du quarry.

Same vista as photo 81, but taken from the same location using the zoom facility to more clearly see the open landscape below Crug Gynon and the forest in which turbines 22-27 are to be located.

083. Llyn Du airstrip.

Photo taken from the position of turbine 81 looking SW down an old runway strip that was built and used in the forest c.25 years ago for spraying the trees with fertiliser and pesticides, etc.. The track looks out to the open upland landscape of Esgair Ambor.

084. Esgair Hirnant.

Photo taken at SN7769460298 close to the source of Nant Hirnant looking SE along turbine string 78-73 to the left of the photo and string 72-65 running through the forest on the right of the picture.

085. Cefn y Cwnc.

Photo taken from the same location as photo 84 but looking SSW over the open upland of Cefn y Cwnc on which there are at least two prehistoric round barrows. The experience of this open landscape would be compromised both visually and audibly by the

construction and use of the turbines within the forest and those on the unforested uplands of Esgair Cerrig, Esgair Hir and Gamallt.

086. Pen y Maen.

Photo taken from same location as photos 84 and 85, looking SW/WSW over the unforested uplands of Pen y Maen and along the edge of the forest where turbines 1-3 will be located. The Cefn y Cwnc open uplands taken in photo 85 are visible on the left of this photo.

087. Bryn Mawr.

Photo taken at SN7905757246 looking E/ESE over towards the unforested part of the steep-sided valley of the Afon Tywi and towards turbines 63 and 64. The photo was taken close to the locations of turbines 89 and 96-98, which will be visible from Craig Ddolgog and Castell Llygodyn and other parts along the Tywi valley.

088. Esgair Hir.

Photo taken at SN7834255538 looking W/WSW over towards Esgair Fforch and the turbines proposed to be sited there (numbers 136, 133-134, 129-130, 124-126, 121, 117-119, 112, and beyond to 105-6 on the horizon following the edge of the forest).

089. Allt Serth.

Photo taken at SN7817155082 looking WNW/NW over the Camddwr valley towards Bryn Du and the location of turbines 121, 119, 112-113, 106-108, 120 and 126.

090. Allt Serth.

Photo taken from same location as photo 89 but looking N/NNE towards Gamallt and the location of turbines 90-94 and 99-100.

091. Bwlch Esgair Gelli.

Photo taken at SN7826257640 looking SW/WSW towards Bryn Du and Esgair Hir and the locations of turbines 126, 120, 113, 108 and their respective strings.

092. Esgair Gelli.

Photo taken at SN7779157568 looking SSW towards the lake lying between Gamallt and Bryn Du and towards the location of turbines 126, 130, 134 and 136.

093. Nant y Gelli.

Photo taken at SN7719957396 looking S/SSE over the lake and valley of Nant y Gelli towards Gamallt and the locations of turbines 90, 91, 93, 94 and 99.

094. Nant Tyhelyg.

Photo taken at SN7663257525 from the top of the rock outcrop adjacent to Nant Tyhelyg looking S down the meandering Camddwr river towards Llyn Brienne.

095. Nant Tyhelyg.

Photo taken from the same location as photo 94 looking SSE towards the lake and unforested high ground of Gamallt to the left of the picture, which is the proposed location of turbines 90, 91, 93, 94, 99 and 100.

096. Banc Gwyn.

Photo taken at SN7823854539 looking WNW/NW along the Camddwr and up to the unforested high ground on which turbines 126, 120, 121, 119, 112, 113 and 106-108 are to be located.

097. Pen y Gurnos.

Photo taken at SN7836851452 close to the proposed location of turbine 162 looking ESE/SE towards turbines 164 and 165 and the Llyn Brianne reservoir.

098. Pen y Gurnos.

The first of three photographs taken from the top of Pen y Gurnos trig point (and Bronze Age round barrow (43198)). This photo looks NW over the open unforested landscape of Foel Fraith and Craig Nant-Iwrch along the Doethie valley and towards the proposed locations of turbines 154-158, 146, 149, 151 and in the very distance to turbines 135 and 131-132 etc. on the high ground at Gouallt. As far as the eye can see in this direction the open landscape will be dotted with wind turbines which will have a dramatic visual and experiential impact on the entire area.

099. Pen y Gurnos.

The second of three photos forming a panorama through the northern sector taken from Pen y Gurnos trig point (SN77685131). This shot is taken looking N towards turbines 155-158, 152, 153 and 150. The edge of the forest at Blaen Nant-y-rhiw is visible in the centre of the picture along which turbines 148-145 would also be clearly visible. A series of Bronze Age ritual and funerary monuments are located throughout this landscape and would have been intertwined by the processional movement between these different sites across this area during the ritual cycle: it is not just the monuments themselves that are significant archaeologically, but also the 'buried' archaeology which lies between these monuments. The proposed turbines and their tracks will irreparably damage this archaeology, and also impact greatly on the phenomenological engagement with these monuments for future generations.

100. Pen y Gurnos.

The final photo in the panorama taken from Pen y Gurnos trig point and Bronze Age round barrow. This photo is taken looking NE towards turbine 159, proposed to be located a short distance away, thus greatly impacting on this site.

101. Pen y Gurnos round barrow.

Record photo taken looking ENE clearly showing the presence of a round barrow on top of which a modern trig point has been subsequently added.

102. Pen y Gurnos.

Photo taken looking SW from Pen y Gurnos trig point and Bronze Age round barrow towards the proposed location of turbine 160 a short distance away which will greatly impact on this prehistoric site.

103. Nant-llwyd standing stone pair.

Record photo of Nant-llwyd standing stone pair looking N. The site is located at SN7892052910 on a steep slope a short distance above the banks of the Camddwr. Although not directly impacted physically by the proposed construction of the turbines, the turbines themselves will change the way in which this whole landscape is felt and experienced, and this site may well be affected by the accompanying noise pollution.

104. Nant-llwyd standing stone pair.

Record photo of Nant-llwyd standing stone pair (43214) looking WSW.

105. The Camddwr at Banc Gwyn.

View looking WNW along the course of the Camddwr and up to the unforested uplands of Bryn Du and Esgair Hir. From here it will be possible to see turbines 126, 120, 121, and 119, as well as hear the noise generated by turbines 136-148 on the uplands off to the left of the photo.

106. Gamallt and Nant y Gelli.

Photo taken at SN7697156456 just to the W of the lake looking NE/ENE along the Nant y Gelli valley and over the open uplands on which turbines 90-94 and 99-100 are to be located.

107. Nant Gruffydd.

Photo taken from the same location as photo 106 but looking W/WSW along the valley of Nant Gruffydd and up to the open uplands of Bryn Du and Esgair Hir and towards the proposed locations of turbines 126-124 and 121-117.

108. Esgair Saeson.

Photo taken from the Abergwesyn road at SN7527157593 looking SSE towards turbines 108-105, 113-112, 119-117, 120, 121, 126-124, 130, 129, 134, 133 and 136-7. The whole vista of this landscape will be radically altered by the construction of these turbines.

109. Esgair Saeson.

Photo taken from the same location as 108 but looking ESE over to Gamallt and the proposed location of turbines 88-100.

110. Panorama over the Camddwr valley.

The first of three photos forming a panorama through the southern sector overlooking the unforested uplands either side of the Camddwr on which a large number of turbines are proposed to be constructed. This photo, taken looking S/SSW, looks out over Esgair Saeson in the foreground, the edge of the Cwm Berwyn forest on the right and up to the

high ground of Esgair Cerrig on the left. Turbines 108-105, 112-113 and possibly 117-119 would be visible from this point.

111. Panorama over the Camddwr valley.

The second of three photos forming a panorama overlooking the Camddwr valley. This photo is taken from the same location as photo 110 but looks SSE/SE over Esgair Saeson in the foreground and up to Esgair Hir in the centre of the picture. From here turbines 108, 113 and 120 at least would be visible, and there would also be considerable noise pollution from the many other turbines proposed for this area.

112. Panorama over the Camddwr valley.

The final photo in the panorama overlooking the Camddwr valley. This photo is taken looking SE/ESE over the lake, Nant y Gelli and towards the unforested uplands of Gamallt on which turbines 90-92, 93,94 and 99-100 are to be located. Together these three photos depict a dramatic view of a virtually unspoilt open upland landscape which would be forever changed by the construction of a wind farm in this area. This area is not only popular with walkers, cyclists and tourists of a human kind, but is also haven to a number of migrating birds and enjoys an ESA/SSSI classification for the bulk of the unforested area.

113. Panorama along the Camddwr.

A wide-angled view of the Camddwr valley and the open landscape on which a number of turbines are to be placed. This shot was created by stitching together photos 110-112 within Adobe Photoshop.

114. Panorama overlooking Caron-uwch-clawdd.

A wide-angled view over Caron-uwch-clawdd, formed by the joining of photos 076 and 077.

115. Panorama overlooking the Powys side of the Tywi forest.

A wide-angled view over the Tywi valley towards the high ground of Drum Nantyrhelyg, Carreg y Fran and Castell Llygoden, formed by the joining of photos 022-025 taken from Esgair Gerwyn.

116. Panorama from cairn 8528.

A wide-angled view taken from cairn 8528 looking from the SSE through to the SW and down the Doethie valley, with standing stone 9117 visible on the left hand side of the photo.

117. Panorama from Cairn Saith-Wraig.

A wide-angled view over platform cairn 5555 looking SW and W.

118. Esgair Gerwyn.

Record shot of the Bronze Age cist forming part of prehistoric cairn 9614, one of six monuments within the Esgair Gerwyn barrow cemetery (8881). Shot taken looking NNE.

119. Esgair Gerwyn.

Record shot of cist 9614, looking NNE/NE and towards prehistoric cairns 9616 and 9617, also part of the Esgair Gerwyn barrow cemetery.

120. Camddwr valley.

Photo taken at SN7733757399 looking S over the lake at the foot of the Gamallt uplands with the Brecon Beacons clear in the distance.

121. – 127. Panorama of seven photos spanning the open uplands, running from the W (overlooking Esgair Cerrig) round to the E (the Gamallt uplands).

128. Maes Glas ridge and furrow.

Record photo of a section of ridge and furrow (43216) associated with DRS 91357.

129. View from boundary stone 91360.

Photo taken looking S towards turbines 136, 134, 133 and the beginning of string 137 which runs along the edge of the forest.

130. View from turbine 126.

View looking SW from the location of turbine 126 towards turbines 130, 129, 125 and 124.

131. View from turbine 126.

View taken from turbine 126 looking W/WNW towards turbines 121, 118, 119, 105, etc..

132. Panorama of Gamallt.

First of two photos forming a panorama over the Gamallt uplands, and the location of turbines 90-92, 93-94 and 99-100. Photo taken looking ENE.

133. Panorama of Gamallt.

Second of two photos forming a panorama over the Gamallt uplands. Photo taken looking NE from the location of turbine 126.

134. View over Esgair Hir.

Photo taken at SN7588856103 looking N over to the Nant-y-Maen farmstead and part of the Tywi forest containing turbines 81-87 and 1-9.

135. View from trig point 43215.

View taken from trig point 43215 looking N to turbines 113 and 108, over to the Nant-y-Maen settlement and Tywi Forest.

136. View from trig point to turbines 118 and 117.

Photo taken looking SSW/SW along turbine string 118 and 117 towards Cynrau.

137. View from trig point looking SSE.

Photo taken SSE from trig point looking towards turbines 124, 129, 133 and the string running along the edge of Blaen Nant-y-rhiw forest beginning with turbine 137.

138. View towards trig point 43215.

Photo taken at SN7552556020 looking NNE towards trig point 43215. The natural rock outcrops as vertical strata in this area and gives the appearance of possible prehistoric standing stones from a distance. This area could have been imbued with symbolic significance in the Bronze Age and been the focus of ritual activity if these stones were perceived to have been constructed by 'the ancestors', with other standing stones in the area quite possibly erected to mirror these natural outcrops.

139. View from 91359 towards turbines 106-108.

Photo taken at SN7580356322 looking NE from the location of site 91359 towards turbines 106-108.

140. View from turbine 105 towards turbines 104-101.

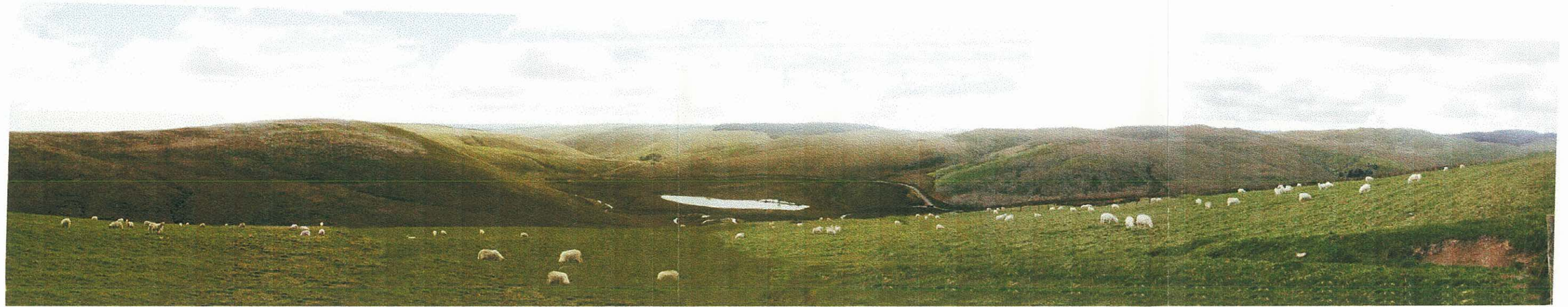
Photo taken from turbine 105 looking SSW along turbine string 104-101.

141. Long hut 9284.

Record photo of the Nant Esgaircerrig dwelling looking S.

142. Long hut 9284.

Photo of the Nant Esgaircerrig long hut dwelling looking SW/SSW and over to the high ground of Esgair Wynt on which turbines 104-101 will be located.



Panorama view of the open moorland landscape within the proposed project area stretching from Gamallt (on the left) round to Esgair Cerrig (at the far right of the picture). Taken at SN7733757399



Moel Prysgau DRS (36653) and view over common land (13686), looking S.



Blaen Nant-y-rhiw recumbent standing stone (9117), looking S

APPENDIX II

Gazetteer of sites

This section contains detailed descriptions of archaeological sites and features within the study area arranged in numerical order by their primary record number (prn).

Terminology

PRN/NPRN	the primary record number assigned to the site within the Dyfed Regional Sites and Monuments Record (SMR) or RCAHMS's NMR.
Site status	reveals whether the site has scheduled ancient monument status (SAM) or is a listed building
NGR	National Grid Reference for the site
Site type	places the monument within a defined category of monument type, and is based on English Heritage's Monument Class Descriptions
Period	a temporal category referring to the era in which the site originated
Form/Condition	refers to the form and present condition of a site based on its physical features and graded on a sliding scale (see abbreviations)
Area status	informs on whether the area around the site has been designated a particular special landscape area (see abbreviations)
Category	refers to the allocated category of archaeological importance
Description	space for a text-based description of the site including any other relevant information

Abbreviations

Area Status

CL	common land
ESA	environmentally sensitive area
SPA	special protection area
SSSI	site of special scientific interest

Form

Building	built structures such as dwellings, houses, chapels, etc.
Documents	sites known only from documentary sources
Earthwork	a monumental form other than a building, e.g. ring cairn, round barrow, etc.
Finds	a site where artefacts have been found with no other surface features
O.Struct	other structures, e.g. standing stones, cists, which would not conform to general descriptions such as buildings, earthworks, etc.
Topog.	topographical feature, e.g. field shapes, land classification

Condition

A	intact
B	substantially intact
C	damaged
D	substantial destruction
E	destroyed
R	restored
U	unknown
M	moved

Categorisation of Archaeological Sites & Features

Category A	sites of national importance
Category B	sites of regional/ county importance
Category C	sites of district or local importance
Category D	minor or damaged sites
Category E	sites requiring further investigation

Sites within the proposed project area

(extracted from Cambria's SMR)

PRN 2052
NGR SN7766062560
NAME RHYD Y MEIRCH
TYPE PLATFORM
PERIOD Medieval?;Post Med?
FORM Building/D
SITE STATUS
AREA STATUS ESA
CATEGORY B
DESCRIPTION

A platform set into the hillside. Three or four large stone slabs were visible on the platform when the site was visited during fieldwork.

PRN 5554
NGR SN746545
NAME CERRIG YSGYFARNOG
TYPE STONE CIRCLE?
PERIOD Neolithic?;Bronze Age
FORM Landform
SITE STATUS
AREA STATUS ESA
CATEGORY A
DESCRIPTION

The given siting lies upon a rocky ridge falling south-westwards towards a valley. Here the natural rock strikes northeast-southwest and gives rise to broken ridges of near-vertical outcrops. No trace of the stone circle when this area was surveyed by the OS in 1978 which led them to conclude that this site is a natural feature. Recent fieldwork also suggests this to be a natural feature, although it is quite possible that the site was symbolically important and perhaps used for ritual activity in the Bronze Age.

PRN 5555
NGR SN77105297
NAME CARN SAITH-WRAIG
TYPE ROUND BARROW?;RING BARROW?
PERIOD Bronze Age
FORM Earthwork/C
SITE STATUS
AREA STATUS ESA; SSSI; SPA
CATEGORY A
DESCRIPTION

This is a large, disturbed composite ring-cum-round cairn. It is situated on a shelf in a secluded position on the south-west side of a broad ridge at 430m above OD. It comprises a ring of earth and stones, 4m wide and 21.5m in diameter overall. Where best preserved, in the north-east quadrant, the ring is 0.4m high on the outside and 0.3m high on the inside. Within the ring is a mass of tumbled stone and it is reasonable to suppose that this mass represents a round cairn formerly existing at the centre of the ring. The mass has been cleared to ground level along a line from the north-east side to the centre and beyond, and a cutting has been made through the ring to the south-west. There is no sign of a cist. A pile of fence posts have been dumped on top of the cairn and a small fire has recently been lit. Vehicle tracks are encroaching upon the site and pose an immediate threat.

PRN 7844
NGR SN78535328
NAME SOAR-Y-MYNYDD
TYPE CHAPEL
PERIOD Post Med
FORM Building/A
SITE STATUS Grade II Listed Building
AREA STATUS ESA; SSSI; SPA
CATEGORY A
DESCRIPTION

Small stone-built chapel with adjacent house, possibly dating to c.1820. The symmetrical front faces the river with doorways towards the gates and two round-headed windows with wooden 'tracery' and voussoir-arched heads with keystones. The church was refitted in c.1900 with pitchpine. The house is probably contemporary with the chapel, but has also been refurbished. All windows are sashes, there are soft-wood beams and the roof is low-pitched. The schoolroom contains two possibly original bench-desks with moulded brackets and pen-grooves in the desktop. Listed Grade II as one of the best examples in Wales of an extremely isolated chapel of pre-1840 date built to serve a widely scattered community. The Calvinist Methodist cause was first established in this isolated rural area in the 18th century. Rev. Howl Harris preached in farmhouses from 1740. The first and present chapel was built in 1822. The chapel is of historic importance and also of symbolic importance to the Calvinist Methodist cause and people travel from all over the world to visit this site.

PRN 8527
NGR SN77185288
NAME CARN SAITH-WRAIG
TYPE ROUND BARROW
PERIOD Bronze Age
FORM Earthwork/D
SITE STATUS
AREA STATUS ESA; SSSI; SPA
CATEGORY A
DESCRIPTION

A round cairn situated at 430m above OD, upon a low ridge in open moorland. Composed of stones and small boulders with some quartz and turf covered along the perimeter, it has a diameter of c.13.5m and a maximum height of 0.8m. It has been dug to the centre from the north, east and west sides. At the centre are a number of flagstones up to 0.5m across, possibly the remains of a cist/cists, but at present they are lying in disarray within the central crater. There are no traces of kerbing. This cairn is intervisible with nearby cairn 9009, but not with cairn 5555.

PRN 8528
NGR SN76765347
NAME BLAEN NANT-Y-RHIW
TYPE ROUND BARROW
PERIOD Bronze Age
FORM Earthwork/B
SITE STATUS
AREA STATUS ESA; SSSI; SPA
CATEGORY A
DESCRIPTION

A small round cairn on the highest point of a broad ridge at 461m above OD. The site consists of a rough platform of large stones, 6m in diameter and 0.2m high. The feature is grass-covered and would appear to be undisturbed except for a small modern marker cairn, 1.2m in diameter and 0.3m high surrounding a

wooden post, which has been erected at the centre of the monument. The cairn is intervisible with standing stone 9117 and another possible prehistoric cairn, 9118 to the S and SW of this site respectively. The site enjoys extensive views out down the Doethie valley and over to the Brecon Beacons.

PRN 8551
NGR SN7730060100
NAME ESGAIR LLYN DU
TYPE STANDING STONE?
PERIOD Bronze Age?
FORM O.Struct/D
SITE STATUS
AREA STATUS ESA
CATEGORY A
DESCRIPTION

A stone recorded by the OS in 1978. J Jones, a forester knew of no stone at the location recorded by the OS but knew of one at SN773601 that had since been lost. Site remains unlocated despite being thoroughly searched for. Site trenched and planted with firs, c.1977.

PRN 8552
NGR SN79426163
NAME ESGAIR SAESON
TYPE SETTLEMENT
PERIOD Medieval?;Post Med?
FORM Building/D
SITE STATUS
AREA STATUS ESA
CATEGORY B
DESCRIPTION

Surveyed by the OS in 1978. A Mediaeval or later farmhouse situated on the east bank of a stream in open moorland. The house is orientated NW-SE and measures internally 14.5m x 5m. There are traces of two cross walls, 3m and 9m from the SE end. The turf-covered, collapsed drystone walling is up to 2m across, and roughly 0.25m in height. The entrance was probably on the SW side but the house has been damaged by constant overflowings of the stream. There are traces of small embanked enclosures for 20m to the NW of the house.

PRN 8881
NGR SN80275737
NAME ESGAIR GERWYN
TYPE BARROW CEMETERY
PERIOD Bronze Age
FORM Earthwork/C
SITE STATUS SAM
AREA STATUS ESA
CATEGORY A
DESCRIPTION

A cluster of 4 surviving small cairns located c.360m above OD on a shelf in the south-facing slope of Esgair Gerwyn, close to the junction of the Gerwyn and Towy valleys with commanding views. The cairns are grass-covered and heavily denuded. Cairn 1 (9614), which contains an open cist 1.1m long NE-SW and 0.8m wide, is roughly circular, measuring some c.3.5m in diameter. Cairn 2 (9615) survives as a mound only on its eastern side, but may originally have been c.5m in diameter, whilst a hollow at its centre suggests there may have once been a cist. Cairn 3 (9616) is a roughly circular stony mound some 6.5m in diameter with a central depression again possibly representing the one-time presence of a cist. The most

northerly cairn in the group, Cairn 4 (9617), consists of a stone mound piled upon a rock outcrop with an overall height of c.1.2m. The presence of a possible orthostat and central depression again suggests that originally this cairn would have contained a cist. These and other possible cairns have been considerably damaged/ robbed during road-building and the construction of later field boundaries. Also within this barrow cemetery and Scheduled area are two other possible cairns: one which is c.8m in diameter lying to the north-east of Cairn 4, and another just to the north-west of Cairn 1, c.3m in diameter.

PRN	9001
NGR	SN74945473
NAME	BRYN GORLAN
TYPE	STONE CIRCLE
PERIOD	Neolithic;Bronze Age
FORM	O.Struct/C
SITE STATUS	SAM
AREA STATUS	ESA
CATEGORY	A
DESCRIPTION	

Part of a larger prehistoric ritual complex, this stone circle lies close to the highest point of the undulating plateau on which this and other Bronze Age ritual monuments are sited and survives as a semi-circle of ten visible stones, suggesting an original diameter of c.18m for the entire circle. The largest stone stands to nearly 1m in height, with the remaining others surviving only as small stumps.

PRN	9002
NGR	SN75005467
NAME	BRYN GORLAN
TYPE	STANDING STONE
PERIOD	Bronze Age
FORM	O.Struct/D
SITE STATUS	SAM
AREA STATUS	ESA
CATEGORY	A
DESCRIPTION	

A fallen stone, lying 90m south-east of the stone circle (9001), broken at its base. Originally it would have stood some 1.8m high, with a maximum width of 1.5m. Its long axis was aligned east-west and the stone was located close to the south-east scarp of the plateau just beyond which the ground begins to fall away steeply. The site has been recently encroached upon by vehicle tracks which run within 2 metres of the stone towards an anemometer which lies between stone circle 9001 and cairn 9003 a short distance away to the north and must be seen as posing a significant threat to this site and the others within the Bryn Gorlan group.

PRN	9003
NGR	SN74985476
NAME	BRYN GORLAN
TYPE	ROUND BARROW
PERIOD	Bronze Age
FORM	Earthwork/B
SITE STATUS	SAM
AREA STATUS	ESA
CATEGORY	A
DESCRIPTION	

About 110m to the north of stone 9002 lies a low, grass-grown mound measuring 2.5m in diameter. At its centre is a small circular hollow, which may have once held a standing stone. The cairn has been

recently threatened by the erection of an anemometer which has impinged on the scheduled area between this cairn and stone circle 9001 a few metres away to the SW.

PRN 9004
NGR SN74885463
NAME BRYN GORLAN
TYPE RING BARROW?
PERIOD Bronze Age
FORM Earthwork/C
SITE STATUS SAM
AREA STATUS ESA
CATEGORY A
DESCRIPTION

This stone setting lies just over a 100m south-west of the stone circle (9001) and consists of a discontinuous ring of upright or leaning slabs surrounding an oval grass-grown interior. On the north the slabs are contiguous whilst on the south the ring is broken by a gap 1.5m wide. Towards the centre of the interior there is a single, leaning slab, whilst a large white quartz boulder lies embedded just outside the ring, but adjacent to it, on the south-east.

PRN 9005
NGR SN74345464
NAME BRYN GORLAN
TYPE RING BARROW?
PERIOD Bronze Age
FORM Earthwork/C
SITE STATUS SAM
AREA STATUS ESA
CATEGORY A
DESCRIPTION

The most westerly stone setting in the Bryn Gorlan monument group lies on a narrow ridge and consists of seven falling or leaning slabs surrounding an oval grass-grown interior, 2 x 1.5m, with overall dimensions of 2.8 x 2.5m. A single fallen slab lies in a roughly central position.

PRN 9006
NGR SN743545
NAME CERRIG YSGYFARNOG
TYPE ENCLOSURE;STOCKPEN?
PERIOD Medieval?;Post Med?
FORM Earthwork/C
SITE STATUS
AREA STATUS ESA
CATEGORY B
DESCRIPTION

At the foot of a ridge lies a small, wedge-shaped walled structure, 5m long, with a maximum width of 2.5m and a minimum width of 2m.

PRN	9009
NGR	SN77125291
NAME	CARN SAITH-WRAIG;BLAEN NANT-Y-RHIW
TYPE	ROUND BARROW
PERIOD	Bronze Age
FORM	Earthwork/D
SITE STATUS	
AREA STATUS	ESA; SSSI; SPA
CATEGORY	A
DESCRIPTION	

A partially disturbed cairn located 100m south-east of Carn Saith-Wraig round barrow (5555) on a narrow ridge. The cairn measures roughly 13m in diameter and stands to a height of 1m and is intervisible with both cairn 5555 and another Bronze Age cairn, 8527, located a further distance away to the SE. Extensive views are achieved out over the surrounding landscape.

PRN	9109
NGR	SN76305700
NAME	BRYN-GLAS
TYPE	FARMSTEAD
PERIOD	Post Med
FORM	Building/B
SITE STATUS	
AREA STATUS	ESA
CATEGORY	B
DESCRIPTION	

Farmstead shown on Tithe map.

PRN	9111
NGR	SN77975419
NAME	NANT-Y-GRAIG
TYPE	DWELLING
PERIOD	Post Med
FORM	Building/C
SITE STATUS	
AREA STATUS	ESA
CATEGORY	B
DESCRIPTION	

Pair of buildings at right angles with one another to the north-west. Shown on Tithe map.

PRN	9112
NGR	SN77655387
NAME	BRYN-BRITH
TYPE	DWELLING
PERIOD	Post Med
FORM	Building/C
SITE STATUS	
AREA STATUS	ESA; SSSI; SPA
CATEGORY	B
DESCRIPTION	

Pair of buildings in line, shown on Tithe map and still in existence.

PRN 9113
 NGR SN78155322
 NAME BRITHDIR
 TYPE FARMSTEAD
 PERIOD Post Med
 FORM Building/C
 SITE STATUS
 AREA STATUS ESA; SSSI; SPA
 CATEGORY B
 DESCRIPTION
 Small farmstead complex now ruined. Shown as a parallel pair of buildings on the Tithe map.

PRN 9114
 NGR SN79155205
 NAME RHYD TALOG
 TYPE DWELLING
 PERIOD Post Med
 FORM Building/C
 SITE STATUS
 AREA STATUS ESA; SSSI; SPA
 CATEGORY B
 DESCRIPTION
 Dwelling complex visible on the slopes adjacent to Nant Rhytalog comprising of a house, surrounding enclosure and buildings set within a few small fields.

PRN 9115
 NGR SN791522
 NAME RHYDTALOG MINE
 TYPE METAL MINE-LEAD
 PERIOD Post Med
 FORM Earthwork/C;Building/C
 SITE STATUS
 AREA STATUS ESA; SSSI; SPA
 CATEGORY B
 DESCRIPTION
 Established during the 18th century. Redeveloped in the 19th century by the Rhydtalog Silver-Lead Mining Co. Ltd., but shut in 1873. Lead ore output-50 tons.

PRN 9117
 NGR SN76755339
 NAME BLAEN NANT-Y-RHIW
 TYPE STANDING STONE?
 PERIOD Bronze Age?
 FORM O.Struct/A
 SITE STATUS
 AREA STATUS ESA; SSSI; SPA
 CATEGORY A
 DESCRIPTION
 A large recumbent white quartz boulder, facing N-S, and intervisible with prehistoric cairns 9118 and 8528 which lie a short distance away to the SW and N respectively. The stone is situated on a small knoll which forms part of a ridge running across an undulating high plateau with extensive views, particularly in

the southern sector down the Doethie valley. The view to the N is obscured by forestry. The stone measures 1.8m in length N-S, 1.15m wide at its widest point E-W and 0.7m in height at its northern end, tapering to 0.55m in height at its southern tip. Extensive views are achieved from the site which may well have enjoyed a 360 degree panorama, and the Brecon Beacons were clearly visible to the SE.

PRN	9118
NGR	SN76605333
NAME	BLAEN NANT-Y-RHIW
TYPE	ROUND BARROW?;LONG CAIRN?
PERIOD	Bronze Age?
FORM	Earthwork/C
SITE STATUS	
AREA STATUS	ESA; SSSI; SPA
CATEGORY	A
DESCRIPTION	

The remains of a probable prehistoric cairn sited a short distance away from standing stone 9117 and cairn 8528, and intervisible with both. Fantastic views out over the Doethie valley with the Brecon Beacons also visible on the horizon to the SE. A winter visit will better establish the exact shape and nature of this monument.

PRN	9284
NGR	SN74925590
NAME	NANT ESGAIR-CERIG
TYPE	DWELLING
PERIOD	Medieval?;Post Med?
FORM	Building/D
SITE STATUS	
AREA STATUS	ESA
CATEGORY	B
DESCRIPTION	

Located on the banks of Nant Esgaircerrig just below the craggy rock outcrop. A ruined longhouse, c.8m long x c.4m wide, aligned N-S with an entrance opening to the S.

PRN	9288
NGR	SN75635431
NAME	GLOG FACH
TYPE	FARMSTEAD
PERIOD	Post Med
FORM	Building/C
SITE STATUS	
AREA STATUS	ESA
CATEGORY	B
DESCRIPTION	

Stone farmstead cut deep into slope to the west with a gentle slope containing yards/gardens/terraces to the east of the rectangular farmhouse. 2 unit lobby entry, central chimney (?hall house) with second entry in north room (both east facing). Outlines of ruined building attached.

PRN 9289
 NGR SN75765396
 NAME DOETHIE FACH
 TYPE FARMSTEAD
 PERIOD Post Med
 FORM Building/C
 SITE STATUS
 AREA STATUS ESA; SSSI; SPA
 CATEGORY B
 DESCRIPTION

Stone farmstead and enclosed in-field. Evidently in use in 20th century. Farmhouse consists of two equal sized rooms, overall length 17.7 x 6.3m east-west. Possible footing of earlier building under the western end. Collapsed roof slate. Entrances to the south into each room and through the west wall.

PRN 9292
 NGR SN77035147
 NAME NANT LLUEST-FACH
 TYPE DWELLING
 PERIOD Post Med
 FORM Building/C
 SITE STATUS
 AREA STATUS ESA; SSSI; SPA
 CATEGORY B
 DESCRIPTION

Farmstead comprising two buildings, The first is aligned NE-SW and consists of two rooms, built of dry-stone walling up to 1.3m thick, delimiting an area measuring 6m x 14m in total. There is much tumble within the building and the entrances open to the NW in each room. The SW end of the house is somewhat damaged. There is a yard to the E of the house with a boundary wall. A second earthwork building lies 11m to the NE and measures c.12m x 6.5m.

PRN 9296
 NGR SN79485066
 NAME BANC HENDRE'R DAIL
 TYPE DWELLING
 PERIOD Post Med
 FORM Building/C
 SITE STATUS
 AREA STATUS ESA; SSSI; SPA
 CATEGORY B
 DESCRIPTION

West-facing low earthwork walls indicate a rectangular building, 9m x 6m, with rounded walls. The site is cut into the hillside of the E side and is well sheltered underneath rocky crags. A pronounced gully is visible around the N, E and S sides.

PRN	9336
NGR	SN77616248
NAME	ESGAIR LLYN-DU
TYPE	FOLD?
PERIOD	Post Med
FORM	Building/C
SITE STATUS	
AREA STATUS	ESA
CATEGORY	B
DESCRIPTION	

A stone built enclosure, 17m long and 4m wide. Three sides are stone built but the fourth side utilises the rock of the hillslope. The site was originally recorded as a hafod but has been reinterpreted as a fold as a result of fieldwork.

PRN	9614
NGR	SN80275737
NAME	ESGAIR GERWYN I
TYPE	ROUND BARROW
PERIOD	Bronze Age
FORM	Earthwork/D
SITE STATUS	SAM
AREA STATUS	ESA
CATEGORY	A
DESCRIPTION	

Cairn 1 of barrow cemetery 8881. The roughly circular cairn measures 3.5m in diameter and contains within it a rectangular open cist, 1.1 x 0.8m. One side slab is missing and the capstone lies to the south. This cairn is intervisible with the other cairns in the group and has fantastic views out down the Tywi valley to the S and over to a narrow waterfall to the E.

PRN	9615
NGR	SN80275737
NAME	ESGAIR GERWYN II
TYPE	ROUND BARROW
PERIOD	Bronze Age
FORM	Earthwork/D
SITE STATUS	SAM
AREA STATUS	ESA
CATEGORY	A
DESCRIPTION	

Cairn 2 of barrow cemetery 8881. Lying to the east of 9614 and damaged on its western side. A grass covered cairn, c.5m in diameter with a roughly circular hollow perhaps the site of a former cist. Shares the same extensive views as 9614 and the other cairns in the cemetery group.

PRN	9616
NGR	SN80275737
NAME	ESGAIR GERWYN III
TYPE	ROUND BARROW
PERIOD	Bronze Age
FORM	Earthwork/D
SITE STATUS	SAM
AREA STATUS	ESA
CATEGORY	A

DESCRIPTION

Cairn 3 of barrow cemetery 8881. A grass covered cairn c.6.6m in diameter and 0.3m high. A robbing hollow and possible orthostats lie on the east side. Shares the same extensive views as 9614 and the other cairns in the cemetery group.

PRN	9617
NGR	SN80275737
NAME	ESGAIR GERWYN IV
TYPE	ROUND BARROW
PERIOD	Bronze Age
FORM	Earthwork/D
SITE STATUS	SAM
AREA STATUS	ESA
CATEGORY	A

DESCRIPTION

Cairn 4 of barrow cemetery 8881. A roughly circular, grass-covered cairn situated on top of a natural outcrop, c.8m in diameter and 1.75m high. Shares the same extensive views as 9614 and the other cairns in the cemetery group.

PRN	13686
NGR	SN803606
NAME	ESGAIR SAESON
TYPE	COMMON LAND
PERIOD	Medieval;Post Med
FORM	Topog
SITE STATUS	
AREA STATUS	ESA
CATEGORY	C

DESCRIPTION

An area of open and unforested upland within the Twyi forest located on the west banks of the Afon Tywi. Tracks and folds are visible on its slopes which may have been associated with the Moel Prysgau settlement (prn 36653).

PRN 35625
 NGR SN80635808
 NAME ABER HIRNANT
 TYPE LONGHOUSE
 PERIOD Medieval?;Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

Large, ruined dwelling. On terrace alongside Afon Tywi. Multi-celled, with 3 possibly 4 compartments. Overall measurements 19 x 7m, defined by broad earth and stone banks, 2m wide x 1m high. At edge of forest, not over-planted itself but an associated field system is obscured by the plantation. Harvesting may prove a threat to the dwelling and field boundaries.

PRN 36062
 NGR SN75255337
 NAME TY'N CORNEL
 TYPE PLATFORM
 PERIOD Medieval?;Post med?
 FORM Earthwork/B
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

Probable platform. Cross-contour, facing SW. Hood 4m, platform 7m, fan 5m long x max. 8m wide. In the same field are apparent natural depressions, one or two of which may be man-made platforms.

PRN 36064
 NGR SN75235359
 NAME TY'N CORNEL
 TYPE PLATFORM
 PERIOD Medieval?;Post med?
 FORM Earthwork/B
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

5m north of 36063. Cross contour platform. Fan 6m long, platform 12m long, fan indeterminable, blending into natural slope.

PRN	36143
NGR	SN7756
NAME	RHYDYMEIRCH
TYPE	HISTORICAL SITE
PERIOD	Medieval?
FORM	Place-name
SITE STATUS	
AREA STATUS	ESA; SSSI; SPA
CATEGORY	E
DESCRIPTION	

A holding referred to as Rhydymeirch on the tithe apportionment. Rhydymeirch can be translated as "Ford of the Cavalry". Lewis (1833) refers to a ford with such a name as being associated with a battle between the sons of Cadwgan ap Bleddyn, Gronw and Llewelyn and the princes of South Wales, Rhys ap Owain and Rhydderch ab Caradoc.

PRN	36144
NGR	SN7756
NAME	RHYDYMEIRCH
TYPE	FARMSTEAD
PERIOD	Medieval?;Post Med?
FORM	Complex/B
SITE STATUS	
AREA STATUS	ESA; SSSI; SPA
CATEGORY	B
DESCRIPTION	

A small farmstead shown on the tithe map with the house lying in the southern part of the area.

PRN	36145
NGR	SN7555
NAME	CASTELL
TYPE	MOTTE?
PERIOD	Medieval
FORM	Documents/U
SITE STATUS	
AREA STATUS	
CATEGORY	E
DESCRIPTION	

Lewis mentions an earthwork still extant in 1833, "the remains of a military work.... constructed by Rhys ap Owain". The only locational guide he gives is that the site was on the western bank of the Camddwr. Unable to located monument during fieldwork.

PRN 36530
 NGR SN8026457522
 NAME NANT Y STALWYN
 TYPE ROUND BARROW
 PERIOD Bronze Age
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY A;E
 DESCRIPTION

Three small cairns identified by J Jones in 1982. Possibly a duplication of barrow cemetery 8881, or cairns additional to this cemetery.

PRN 36531
 NGR SN7966759667
 NAME NANT Y BONT
 TYPE ROUND BARROW?
 PERIOD Bronze Age?
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY A;E
 DESCRIPTION

A possible round barrow identified from the tithe map of 1836 but not located on the ground during fieldwork due to the density of the forest.

PRN 36532
 NGR SN8034259223
 NAME NANT Y BONT
 TYPE LONG HUT?
 PERIOD Post Med?
 FORM Earthwork/D
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

A longhut identified by J Jones in 1982. Little remained of the site when visited .

PRN 36533 NGR SN8003061450
 NAME BWLCH RHYD Y MEIRCH
 TYPE TRACKWAY
 PERIOD Medieval?
 FORM Earthwork/B
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

A trackway that is known locally as a drovers route. The trackway is in the form of a hollow way and is mostly intact. The trackway is only mapped within the confines of the forestry at present.

PRN 36534
 NGR SN8037058550
 NAME ESGAIR HIRNANT
 TYPE TRIANGULATION POINT
 PERIOD Modern
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

An Ordnance Survey triangulation point shown on the Ordnance Survey maps as 430m above sea level.

PRN 36535
 NGR SN8045258380
 NAME ESGAIR HIRNANT
 TYPE FOLD
 PERIOD Post Med?;Modern?
 FORM O.Struct/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

A sheepfold shown on the 1902 Ordnance Survey map. Site consists of a stone-built circle measuring approximately 10m diameter about 1.5m high and 1m thick. Appears to have raised ground level in the centre of the fold compared to level outside.

PRN 36646
 NGR SN8042059190
 NAME NANT GWYN
 TYPE LONG HUT?
 PERIOD Medieval?
 FORM Building/D
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

A long hut noted by J Jones in 1982. When the site was visited only a few stones remained.

PRN 36647
NGR SN7884059060
NAME HIRNANT
TYPE FOLD?;LONG HUT?
PERIOD Unknown
FORM Documents/U
SITE STATUS
AREA STATUS ESA
CATEGORY E
DESCRIPTION

A structure marked on the tithe map of 1836 but not visited as part of the Forest Enterprise Welsh Heritage Assets survey . Marked on the Tithe map (1836). Site not located during thorough search. Area has been ploughed and planted.

PRN 36648
NGR SN7912058990
NAME HIRNANT
TYPE ROUND BARROW?
PERIOD Unknown
FORM Documents/D?
SITE STATUS
AREA STATUS ESA
CATEGORY A;E
DESCRIPTION

A possible round barrow marked on the tithe map of 1836 but not located during fieldwork.

PRN 36649
NGR SN8089060240
NAME ESGAIR SAESON
TYPE LONG HUT
PERIOD Post Med
FORM Building/B?
SITE STATUS
AREA STATUS ESA
CATEGORY B
DESCRIPTION

A long hut recorded by J Jones in 1982 and was in use recently.

PRN 36652
NGR SN8077060890
NAME SAESON
TYPE SHEEP PEN
PERIOD Modern
FORM O.Struct/U
SITE STATUS
AREA STATUS
CATEGORY C
DESCRIPTION

A sheep pen and dipping pool on the river Tywi noted by J Jones in 1982.

PRN 36653
 NGR SN8058061100
 NAME MOEL PRYSGAU
 TYPE FARMSTEAD
 PERIOD Post Med
 FORM Complex/B
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

A farmstead noted by J Jones in 1982 when it was becoming ruinous. An older house exists behind the more modern house. Farmhouse and surrounding enclosures sited adjacent to the narrow meandering banks of the Afon Tywi. Circular earthwork and ruined foundations of an earlier drystone walled house visible within the complex.

PRN 36654
 NGR SN8037061460
 NAME MOEL PRYSGAU
 TYPE TRIANGULATION POINT
 PERIOD Modern
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

An Ordnance Survey triangulation point shown on the Ordnance survey maps at 473m above sea level.

PRN 36682
 NGR SN7881058690
 NAME ESGAIR GELLI
 TYPE TRIANGULATION POINT
 PERIOD Modern
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

An Ordnance Survey triangulation point shown on the Ordnance survey maps at 504m above sea level.

PRN 36683
 NGR SN7802060450
 NAME TYWI FECHAN
 TYPE STANDING STONE?
 PERIOD Unknown; Bronze Age
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY A;E
 DESCRIPTION

A possible standing stone noted by J Jones in 1982. Not located at grid reference location; the whole area was beginning its second rotation and was ploughed during first planting. It is doubtful if the stone would have survived these forestry operations.

PRN 36684
 NGR SN7685861315
 NAME LLYN DU
 TYPE ROUND BARROW?
 PERIOD Bronze Age?
 FORM Documents/E?
 SITE STATUS
 AREA STATUS ESA
 CATEGORY D;E
 DESCRIPTION

A possible round barrow noted from an RAF aerial photograph from 1947. No sign of barrow when visited as part of the Camddwr wind farm assessment either. Site has probably been destroyed by the construction of the modern forest track which runs down to the Llyn Du lake.

PRN 36685
 NGR SN7967361167
 NAME NANT MELYN
 TYPE ROUND BARROW?
 PERIOD Bronze Age?
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY A;E
 DESCRIPTION

A possible round barrow identified from a 1960 RAF aerial photograph but not located on the ground during fieldwork.

PRN 36687
 NGR SN7919061230
 NAME TYWI FECHAN
 TYPE FARMSTEAD
 PERIOD Post Med
 FORM Complex/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

A large farmstead with a farmhouse, yard, barn, cowshed and animal pen, now partially destroyed. There is a large square enclosure, PRN 36688, just to the north of the farmstead. J Jones in 1982 recalled that his grandfather remembered stone being removed from a farmstead at Aberdauddwr, prn 36690, to build Tywi Fechan.

PRN 36688
 NGR SN7920061315
 NAME TYWI FECHAN
 TYPE ENCLOSURE
 PERIOD Post Med
 FORM O.Struct/B
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

A large square enclosure, just north of farmstead prn 36687. The enclosure has an earth and stone bank which stands on average to 1m in height. The bank is near intact along all of its length.

PRN 36689
 NGR SN7894261313
 NAME TYWI FECHAN
 TYPE LONG HUT?
 PERIOD Unknown
 FORM Building/D?
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

A possible long hut as noted by J Jones in 1982 but not located during fieldwork.

PRN 36690
 NGR SN7955361452
 NAME ABERDAUDDWR
 TYPE FARMSTEAD
 PERIOD Unknown
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY E
 DESCRIPTION

A farmstead called Aberdauddwr, according to J Jones in 1982, and shown on the 1st edition OS map. The farmstead predated Tywi Fechan, prn 36687, and J Jones recalled his grandfather talking of stone being removed from Aberdauddwr to build Tywi Fechan. Not located during fieldwork.

PRN 36691
 NGR SN7721062100
 NAME LLYN DU
 TYPE QUARRY
 PERIOD Modern
 FORM Earthwork/A
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

A large modern quarry spanning the forest road.

PRN 36694
 NGR SN7890560377
 NAME TYWI FECHAN
 TYPE ROUND BARROW?
 PERIOD Bronze Age?
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY A;E
 DESCRIPTION

A possible round barrow marked on the tithe map of 1836 but not located during fieldwork and thought to have possibly been destroyed by forestry operations.

PRN 36696
 NGR SN7769062620
 NAME RHYD Y MEIRCH
 TYPE FOLD
 PERIOD Unknown
 FORM O.Struct/D?
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

A fold noted by J Jones in 1982 but not relocated during fieldwork.

PRN 36697
 NGR SN7761062590
 NAME RHYD Y MEIRCH
 TYPE TRIANGULATION POINT
 PERIOD Modern
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

An Ordnance Survey triangulation point shown on the Ordnance survey maps at 504m above sea level. Marked on OS 6 inch 2nd edition 1905 map.

PRN 36700
 NGR SN7766062640
 NAME RHYD Y MEIRCH
 TYPE STRUCTURE
 PERIOD Medieval?
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY E
 DESCRIPTION

A structure noted by J Jones in 1982 but not located during fieldwork due to the density of Sitka spruce.

PRN 36712
 NGR SN7843161222
 NAME TYWI FECHAN
 TYPE ROUND BARROW?
 PERIOD Bronze Age?
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY A;E
 DESCRIPTION

A possible round barrow identified from a 1960 RAF aerial photograph but not located during fieldwork.

PRN 36713
 NGR SN7919559462
 NAME CEFN Y CNWC
 TYPE TRIANGULATION POINT
 PERIOD Modern
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

An Ordnance Survey triangulation point shown on the Ordnance survey maps at 506m above sea level.

PRN 36716
NGR SN7722061890
NAME LLYN DU
TYPE BOULDER
PERIOD Unknown
FORM Documents/U
SITE STATUS
AREA STATUS
CATEGORY ESA
DESCRIPTION E

A boulder noted by J Jones in 1982, but not located during fieldwork.

PRN 36719
NGR SN7720060800
NAME WHITE BOULDER
TYPE BOULDER
PERIOD Unknown
FORM Documents/U
SITE STATUS
AREA STATUS
CATEGORY E
DESCRIPTION

A white stone noted by J Jones in 1982 but not located during fieldwork.

PRN 43212
NGR SN7843753249
NAME SOAR-Y-MYNYDD
TYPE FARMSTEAD
PERIOD Post Med
FORM O.Struct/C
SITE STATUS
AREA STATUS
CATEGORY ESA; SSSI; SPA
DESCRIPTION B

Lying immediately to the W and in front of Soar-y-Mynydd chapel (7844) is a two-celled building, terraced into the hillside and cut into outcropping bedrock on its N side. The walls stand to a height of c.0.4m and the settlement was sited adjacent to Nant Brithdir stream. Although much ruined it is still possible to see the walls of the house itself which measure 10m x 6m, aligned NW-SE, measuring some 0.7m wide in places and standing on average to a height of 0.3m. The N cell is the smaller of the two, measuring 3m x 6m, with access through the E side. The second cell is roughly square, measuring 6m x 6m. The E side of the building is much disturbed and possibly robbed. A small garden or animal plot lies immediately abutting the house on its E side and is evidenced by an artificial platform, possibly of laid stone, although the feature was too disturbed to properly assess it. There appears to be no ancillary outbuilding associated with the house, but the long grass prevented a thorough examination and the site would benefit from being properly surveyed and re-visited in the winter months when the vegetation has died back. There was, however, a substantial stone and earth boundary bank running N-S c.13m to the W of the house, 1.4m wide and partitioning the land from the edge of the track leading up to the Brithdir settlement (9113) down to the Nant y Brithdir stream which creates a natural boundary to the house on its southern side.

PRN 43213
 NGR SN76506096;SN7685461518
 NAME LLYN DU AIRSTRIP
 TYPE RUNWAY
 PERIOD Modern
 FORM O.Struct/B
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

An old airstrip now part of a forest road which was built and used 30 years ago for spraying the trees with fertiliser and pesticides when the forest was in its infancy.

PRN 43214
 NGR SN7892052910
 NAME NANT LLWYD
 TYPE STONE PAIR
 PERIOD Bronze Age
 FORM O.Struct/B
 SITE STATUS
 AREA STATUS ESA; SSSI; SPA
 CATEGORY A
 DESCRIPTION

A possible stone pair, one stone standing, the other recumbent, set in a steep slope on the banks of the Camddwr river. At least one of the stones appears to be a genuine standing stone, earthfast and certainly not a natural feature. The stones lie close to small stream which flows down to the main Camddwr river at the bottom of the slope c.100m away to the N. Fantastic views from the site down the Camddwr valley to the W. The site consists of two huge boulders, the earthfast one measuring some 2m wide at its base and 1.7m high with the large flat face looking E. It is a gritstone with a large number of quartz inclusions. The second stone which lies recumbent may possibly have been standing originally and is of similar size and shape to stone 1.

PRN 43215
 NGR SN7564056140
 NAME ESGAIR HIR
 TYPE TRIANGULATION PILLAR
 PERIOD Modern
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

An Ordnance Survey triangulation pillar marked on the OS map at 484m above sea level.

PRN 43216
NGR SN77475620
NAME RHYDMEIRCH
TYPE RIDGE AND FURROW
PERIOD Medieval?; Post Med?
FORM Earthwork/A
SITE STATUS
AREA STATUS ESA; SSSI; SPA
CATEGORY C
DESCRIPTION

An area of ridge and furrow cultivation associated with adjacent DRS (nprn 91357) located on the banks of Nant y Gelli. The site is located opposite a disused quarry on the edge of the road leading down to Soar y Mynydd. The ridge and furrow extends for approximately 50m before the vegetation (reeds) makes it impossible to assess. The lines run NW-SE and are evidence of hand-cultivation of the area, dating from the Medieval/Post Medieval period.

Sites within the proposed project area (extracted from CPAT SMR)

PRN 805
NGR SN8119056870
NAME Castell Llygoden Cairn
TYPE Round barrow
PERIOD Bronze Age
FORM Earthwork/B
SITE STATUS SAM
AREA STATUS ESA
CATEGORY A
DESCRIPTION

Platform cairn, 13.7m in diameter by 0.3m high with possible kerb. Topped by modern cairn 1.5m high. Possible cist noted by RCAHM archive (1972).

PRN 3436
NGR SN8250057400
NAME Esgair Cloddiaid Stone
TYPE Standing Stone
PERIOD Bronze Age
FORM O.Struct/U
SITE STATUS
AREA STATUS ESA
CATEGORY A
DESCRIPTION

Standing stone recorded by the OS (1835). Area densely afforested and OS were unable to locate feature during field survey in 1977.

PRN 3439
 NGR SN805575
 NAME Nant Ystalwyn Find
 TYPE Finds
 PERIOD Neolithic
 FORM
 SITE STATUS
 AREA STATUS ESA
 CATEGORY A;E
 DESCRIPTION

Flint finds comprising one crude thumb scraper, 3 cores and spalls and fragments found at Nant-y-Stalwen (Grimes 1951). Now in the National Museum, Cardiff.

PRN 13870
 NGR SN8129663150
 NAME Crug Yr Wyn Trig Point
 TYPE Trig Point
 PERIOD Modern
 FORM
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

Marked on OS 6 inch Second Edition 1905 map.

PRN 13869
 NGR SN8132263212
 NAME Crug Yr Wyn Mound I
 TYPE Boundary Mound
 PERIOD Post Med
 FORM
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13868
 NGR SN8148163303
 NAME Crug Yr Wyn Mound II
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13867
 NGR SN8152463290
 NAME Crug Yr Wyn Mound III
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13877
 NGR SN8158263300
 NAME Crug Yr Wyn Mound IV
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13866
 NGR SN8199663423
 NAME Crug Yr Wyn Mound V
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13865
 NGR SN8213463446
 NAME Crug Yr Wyn Mound VI
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN	13864
NGR	SN8214463351
NAME	Crug Yr Wyn Mound VII
TYPE	Boundary Mound?
PERIOD	Post Med?
FORM	Earthwork/C
SITE STATUS	
AREA STATUS	ESA
CATEGORY	C
DESCRIPTION	

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN	13863
NGR	SN8213463248
NAME	Crug Yr Wyn Mound VIII
TYPE	Boundary Mound?
PERIOD	Post Med?
FORM	Earthwork/C
SITE STATUS	
AREA STATUS	ESA
CATEGORY	C
DESCRIPTION	

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN	13862
NGR	SN8198763138
NAME	Crug Yr Wyn Mound IX
TYPE	Boundary Mound?
PERIOD	Post Med?
FORM	Earthwork/C
SITE STATUS	
AREA STATUS	ESA
CATEGORY	C
DESCRIPTION	

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN	13881
NGR	SN8281057900
NAME	Esgair Cloddiaid Boulder
TYPE	Boulder
PERIOD	Unknown
FORM	O.Struct/U
SITE STATUS	
AREA STATUS	
CATEGORY	A;E
DESCRIPTION	

Block of quartzite noted on original OS drawings. Possibly a prehistoric standing stone.

PRN 13861
 NGR SN8200362820
 NAME Crug Yr Wyn Mound X
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13860
 NGR SN8203562323
 NAME Carreg Wen Fawr Mound II
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13859
 NGR SN8211962196
 NAME Carreg Wen Fawr Mound III
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13858
 NGR SN8213062082
 NAME Carreg Wen Fawr Mound IV
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13878
NGR SN8216962708
NAME Carreg Wen Fawr Mound I
TYPE Boundary Mound?
PERIOD Post Med?
FORM Earthwork/C
SITE STATUS
AREA STATUS ESA
CATEGORY C

DESCRIPTION

Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13872
NGR SN8176862091
NAME Nant Rhydlyd House Site
TYPE House site
PERIOD Unknown
FORM Building
SITE STATUS
AREA STATUS ESA
CATEGORY C

DESCRIPTION

Possible remains of house site and small enclosure

PRN 13871
NGR SN8094062550
NAME Ty-Hir Farmstead
TYPE Building
PERIOD Post Med?
FORM Building
SITE STATUS
AREA STATUS ESA
CATEGORY C

DESCRIPTION

Remains of Ty-Hir and circular fold as noted by Jones (1982).

PRN 13873
NGR SN8167262497
NAME Nant Yr Esgair Round Barrow
TYPE Round Barrow?
PERIOD Bronze Age?
FORM Earthwork/U
SITE STATUS
AREA STATUS ESA
CATEGORY A

DESCRIPTION

Possible round barrow visible on AP 10G/UK 1407 3439.

PRN 13854
 NGR SN8116061290
 NAME Nant Loyw Cairn
 TYPE Cairn?
 PERIOD Bronze Age?
 FORM Earthwork/U
 SITE STATUS
 AREA STATUS ESA
 CATEGORY A
 DESCRIPTION
 Clearance cairn or mound. Not located during fieldwork.

PRN 13856
 NGR SN8256761996
 NAME Carreg Wen Fawr Mound IV
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION
 Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13857
 NGR SN8222962306
 NAME Carreg Wen Fawr Mound V
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION
 Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13855
 NGR SN8284461473
 NAME Carreg Wen Fawr Mound VII
 TYPE Boundary Mound?
 PERIOD Post Med?
 FORM Earthwork/C
 SITE STATUS
 AREA STATUS ESA
 CATEGORY C
 DESCRIPTION
 Mound marked on OS 6 inch First Edition 1891 map. Possibly boundary markers for the parish boundary.

PRN 13853
NGR SN8222061380
NAME Gwaen Sarnau Trig Point
TYPE Trig Point
PERIOD Modern
FORM
SITE STATUS
AREA STATUS ESA
CATEGORY C
DESCRIPTION
Marked on OS Second Edition 1905 map.

PRN 13874
NGR SN8146659932
NAME Maesnant Carin
TYPE Cairn?
PERIOD Bronze Age?
FORM Earthwork/U
SITE STATUS
AREA STATUS ESA
CATEGORY A
DESCRIPTION
Possible cairn visible on AP 10G/UK 14073439

PRN 13875
NGR SN8177060328
NAME Tywi Forest Cairn I
TYPE Cairn?
PERIOD Bronze Age?
FORM Earthwork/U
SITE STATUS
AREA STATUS ESA
CATEGORY A
DESCRIPTION
Possible cairn visible on AP 10G/UK 1407 3439

PRN 13876
NGR SN8183160203
NAME Tywi Forest Cairn II
TYPE Cairn?
PERIOD Bronze Age?
FORM Earthwork/U
SITE STATUS
AREA STATUS ESA
CATEGORY A
DESCRIPTION
Possible cairn visible on AP 10G/UK 1407 3439

PRN 13852
NGR SN8292060160
NAME Aberceingau Bothy
TYPE Bothy
PERIOD Post Med
FORM Building
SITE STATUS
AREA STATUS ESA
CATEGORY B
DESCRIPTION

Local tradition has it that the shepherd here ambushed and killed his brother at Ffynnon-y-Brodyr.

PRN 25905
NGR SN80525755
NAME NANTSTALWYN HOUSE
TYPE Building
PERIOD Post Med?
FORM Building
SITE STATUS
AREA STATUS
CATEGORY B
DESCRIPTION

House all of one build. Plain elevation.

PRN site A
NGR SN82106247
NAME Carreg Wen Fawr stones
TYPE Standing stone pair
PERIOD Bronze Age
FORM
SITE STATUS
AREA STATUS
CATEGORY A
DESCRIPTION

Extracts from OS notes held at RCAHMS (OS ref: SN86SW no. 3): 1976: 'A recumbent and partly buried block of quartz which crowns a local summit in a vast and featureless moorland with extensive views in all directions. It measures 1.4m in length x 1.14m in width and 0.5m in thickness. It has probably fallen to the north. Two small quartz slabs are partly buried under the north end and may be packing stones or broken pieces from the main stone. At 1m to the east there is another recumbent quartz pillar, 1.37m in length x 0.55m in width and 0.25m in thickness, probably also fallen, though in which direction is uncertain.' 1977: 'Carreg Wen Fawr remains as described, ...just outside the boundary fence of a Forestry Commission plantation. The second stone could not be found.'

Sites within the proposed project area (extracted from RCAHMW NMR)

The following sites were new monuments discovered within the National Monuments Record archive held by the Royal Commission during the desk-based element of the project and which were not already duplicated within the Regional SMR held at the offices of Cambria Archaeology in Llandeilo. These sites were discovered during fieldwork privately undertaken by T & H James in 1998 and the information submitted to the NMR. Copies of this data are held within the computerized database at Cambria Archaeology but may still be considered Crown Copyright. These sites were visited as part of the fieldwork phase of the Camddwr project and have thus been allocated prns within the Cambria SMR.

PRN	43196
NPRN	91301
NGR	SN79195228
NAME	NODDFA
TYPE	DRS
PERIOD	Medieval; Post-Med
FORM	Earthwork/B
SITE STATUS	
AREA STATUS	ESA; SSSI; SPA
CATEGORY	B
DESCRIPTION	

A set of earthworks that suggest the presence of at least two buildings. One building is represented by a platform measuring 9.5m x 4.2m, with the second feature possibly defining a long hut, 8.3m x 4.1m, associated with other enclosure banks.

PRN	43197
NPRN	109172
NGR	SN79485065
NAME	BANC HENDRE'R DAIL
TYPE	DRS
PERIOD	Medieval; Post Med
FORM	Building/C
SITE STATUS	
AREA STATUS	ESA; SSSI; SPA
CATEGORY	B
DESCRIPTION	

Small farmstead comprising a single room, 47m x 6m, with an addition abutting to the S, 4.5m x 6m. An entrance opens to the W and the walls are approx. 0.6m wide. Possible earlier earthwork building apparent beneath and to the S of the extension. An enclosed garden was visible to the W, and also the remains of a trackway.

PRN 43198
NPRN 91303
NGR SN77685131
NAME PEN Y GURNOS
TYPE ROUND BARROW
PERIOD Bronze Age
FORM Earthwork/B
SITE STATUS
AREA STATUS ESA; SSSI; SPA
CATEGORY A
DESCRIPTION

A large prominent barrow, with trig point on top. The barrow measures some 20m in diameter, with part of a kerb visible on its SE side. Sited on a local highpoint within undulating upland on an ENE-WSW running ridge. Extensive views achievable from the site, and an almost 360 degree panorama which is today obscured in the SE by forestry and which blocks the view over to the Brecon Beacons visible on the approach to the site. The ground to the S of the site is very boggy and there are substantial peat deposits. To the W the views were clear enough to see Mynydd Pencarreg and just visible on the horizon were the Preselis.

PRN 43199
NPRN 91310
NGR SN75725451
NAME GLOG
TYPE DRS
PERIOD Medieval?; Post Med?
FORM Building/B
SITE STATUS
AREA STATUS ESA; SSSI; SPA
CATEGORY B
DESCRIPTION

A rectangular dry-stone building located within the NW part of a square enclosure. Both the enclosure and building have entrances to the E. A possible dam is represented by a length of wall outside to the NW. Lines of stones were noticed edging the stream above the site to the NW.

PRN 43200
NPRN 91317
NGR SN75705337
NAME NANT Y RHIW
TYPE DRS
PERIOD Medieval?; Post Med?
FORM Building/B
SITE STATUS
AREA STATUS ESA; SSSI; SPA
CATEGORY B
DESCRIPTION

Single-unit long hut, 9m x 5.6m, with stony banks, c.0.5m high, and aligned N-S. An entrance opens to the E. The hut is set into the slope with a drop to a stream to the S and E. SE corner is gradually being eroded.

PRN 43201
 NPRN 91325
 NGR SN75395531
 NAME MAES-Y-BETTWS
 TYPE DRS
 PERIOD Medieval?;Post Med?
 FORM Building/B
 SITE STATUS
 AREA STATUS ESA
 CATEGORY B
 DESCRIPTION

Single unit long hut, aligned N-S, with clay-bonded stone foundations with an entrance opening to the E, with a possible blocked entrance in the W wall opposite. The building measures 7.5m x 4.25m internally. OS 6" map shows other buildings within the farmyard.

PRN 43202
 NPRN 91328
 NGR SN78885288
 NAME PENPONTREN
 TYPE DRS
 PERIOD Medieval?;Post Med?
 FORM Documents/U
 SITE STATUS
 AREA STATUS ESA; SSSI; SPA
 CATEGORY E
 DESCRIPTION

Shown on the tithe map with its own sheep-walk, becoming part of Nant Llwyd. Now possibly destroyed by forest road.

PRN 43203
 NPRN 91329
 NGR SN78325241
 NAME NANT-LLWYD
 TYPE FARMSTEAD
 PERIOD Medieval?;Post Med?
 FORM Building/A
 SITE STATUS
 AREA STATUS ESA; SSSI; SPA
 CATEGORY B
 DESCRIPTION

Sole surviving farmstead in this part of the Camddwr valley, with the exception of from Maes Glas (43210). Two storey plain vernacular building.

PRN	43204
NPRN	91330
NGR	SN76795213
NAME	DINAS
TYPE	DRS
PERIOD	Medieval?;Post Med?
FORM	Building/B
SITE STATUS	
AREA STATUS	ESA; SSSI; SPA
CATEGORY	B
DESCRIPTION	

Substantial group of farm buildings still in use in the early 20th century. At the core of the complex is a probable Medieval cruck hall.

PRN	43205
NPRN	91338
NGR	SN758547
NAME	GLOG FACH
TYPE	DRS
PERIOD	Medieval?;Post Med?
FORM	Earthwork/C
SITE STATUS	
AREA STATUS	ESA; SSSI; SPA
CATEGORY	B
DESCRIPTION	

Site spotted from an aerial oblique photograph.

PRN	43206
NPRN	91348
NGR	SN751552
NAME	CRYNAU/BROBWLL
TYPE	DRS;HAFOD
PERIOD	Medieval?;Post Med?
FORM	Documents/U
SITE STATUS	
AREA STATUS	ESA
CATEGORY	E
DESCRIPTION	

Buildings shown as 'ruins' on the Tithe map. Brobwl is a possible hafod standing within Crynau's sheepwalk.

PRN 43207
NPRN 91357
NGR SN77475604
NAME RHYDMEIRCH
TYPE DRS
PERIOD Medieval?;Post Med?
FORM Documents/U
SITE STATUS
AREA STATUS ESA; SSSI; SPA
CATEGORY E
DESCRIPTION

Building shown on Tithe map. The site may possibly have been destroyed when the road to Soar y Mynydd was relaid. There is an area of well-preserved ridge and furrow associated with this site (prn 43216) which suggests that there was indeed a dwelling here at some point in the past. The site is for the most part overgrown with reeds and vegetation which made it impossible to locate any evidence for the dwelling, but it is likely to have been destroyed.

PRN 43208
NPRN 91359
NGR SN75085629
NAME ESGAIR CERREG BOUNDARY STONE I
TYPE BOUNDARY STONE
PERIOD Medieval?;Post Med?
FORM Documents/U
SITE STATUS
AREA STATUS ESA
CATEGORY E
DESCRIPTION

Boundary stone shown on Tithe map. No evidence for a stone found during fieldwork, but the natural rock outcrops vertically in this area and the natural stone may well have been appropriated as the boundary marker.

PRN 43209
NPRN 91360
NGR SN76485588
NAME ESGAIR CERRIG BOUNDARY STONE II
TYPE BOUNDARY STONE
PERIOD Medieval?;Post Med?
FORM O.Struct/D
SITE STATUS
AREA STATUS ESA; SSSI; SPA
CATEGORY E
DESCRIPTION

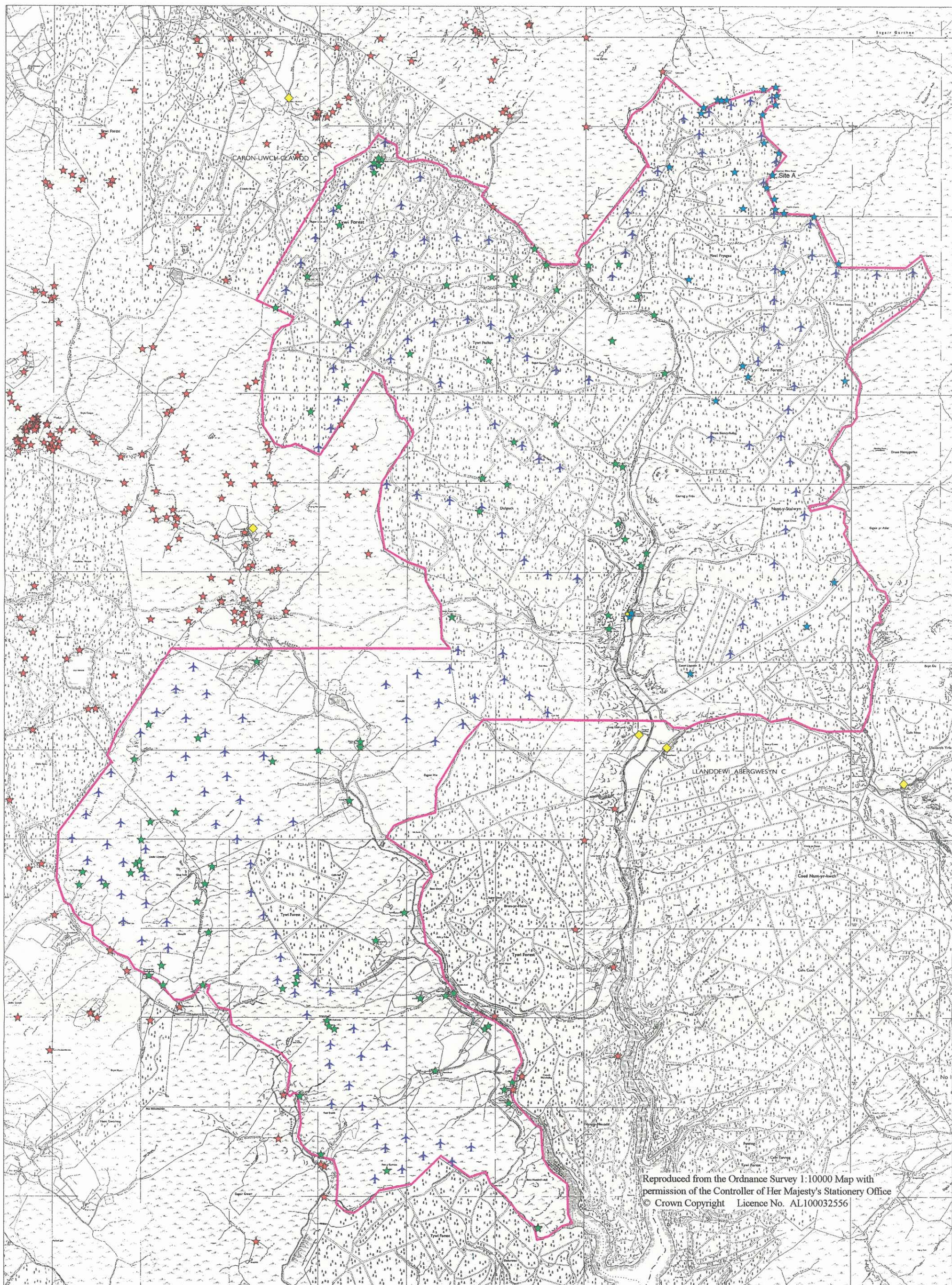
Boundary stone shown on Tithe map. Only a stump remains of this stone in the landscape and has obviously been broken at some time in the past, although the rest of it has disappeared. The site may originally have been a prehistoric standing stone which was later re-used as a boundary marker. The remaining stump suggest a N-S alignment for the stone. No nearby outcrops of rock, unlike the area around the previous site where the natural rock outcrops vertically on Esgair Cerrig.

<i>PRN</i>	43210
<i>NPRN</i>	91361
<i>NGR</i>	SN77355544
<i>NAME</i>	MAES GLAS
<i>TYPE</i>	FARMSTEAD
<i>PERIOD</i>	Building/A
<i>SITE STATUS</i>	
<i>AREA STATUS</i>	ESA; SSSI; SPA
<i>CATEGORY</i>	B
<i>DESCRIPTION</i>	

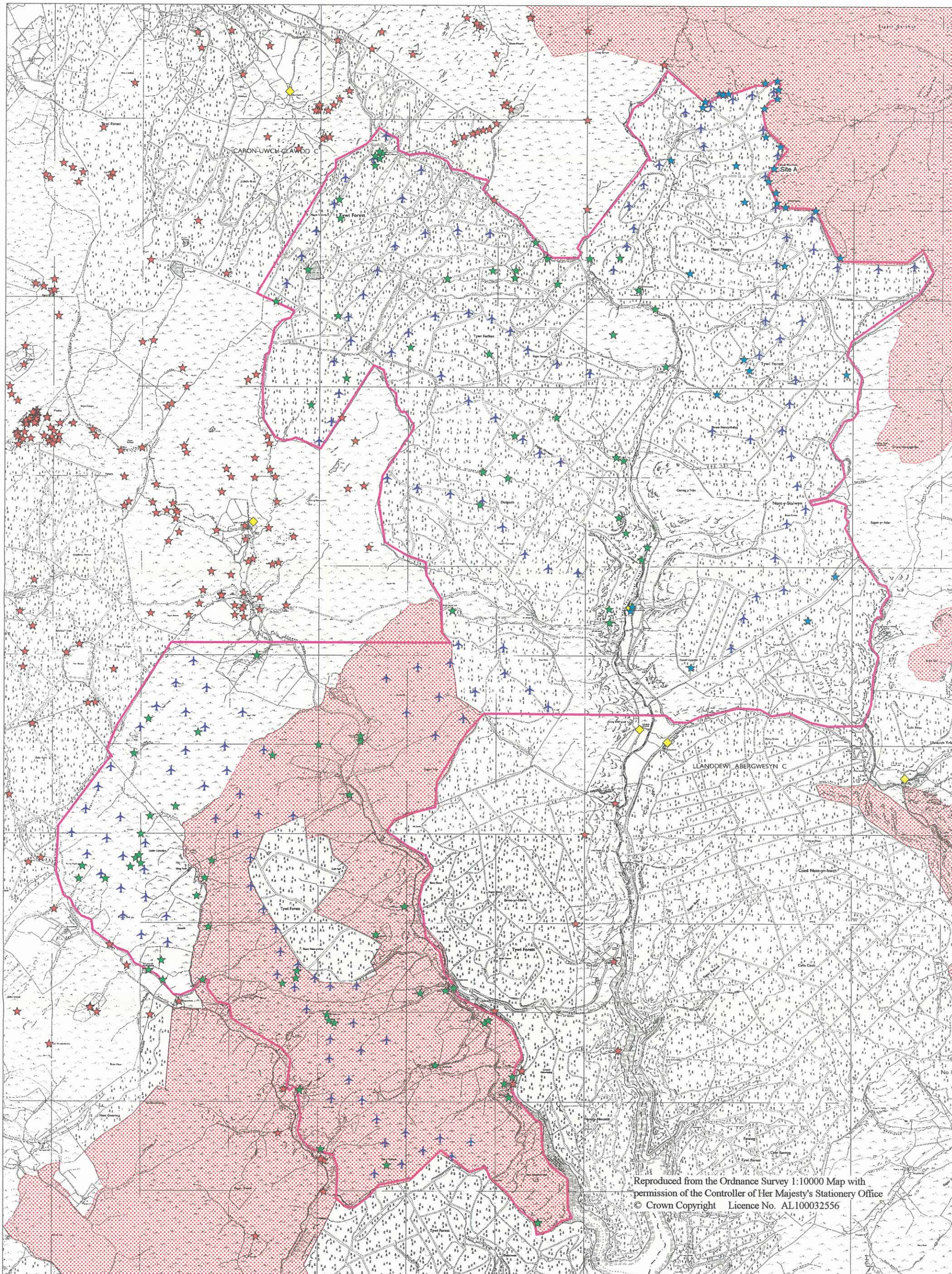
Farmstead shown on Tithe map and still in use.

<i>PRN</i>	43211
<i>NPRN</i>	91366
<i>NGR</i>	SN75095348
<i>NAME</i>	TY'N Y CORNEL
<i>TYPE</i>	DWELLING
<i>PERIOD</i>	Post Med
<i>FORM</i>	Building/B
<i>SITE STATUS</i>	
<i>AREA STATUS</i>	ESA
<i>CATEGORY</i>	B
<i>DESCRIPTION</i>	

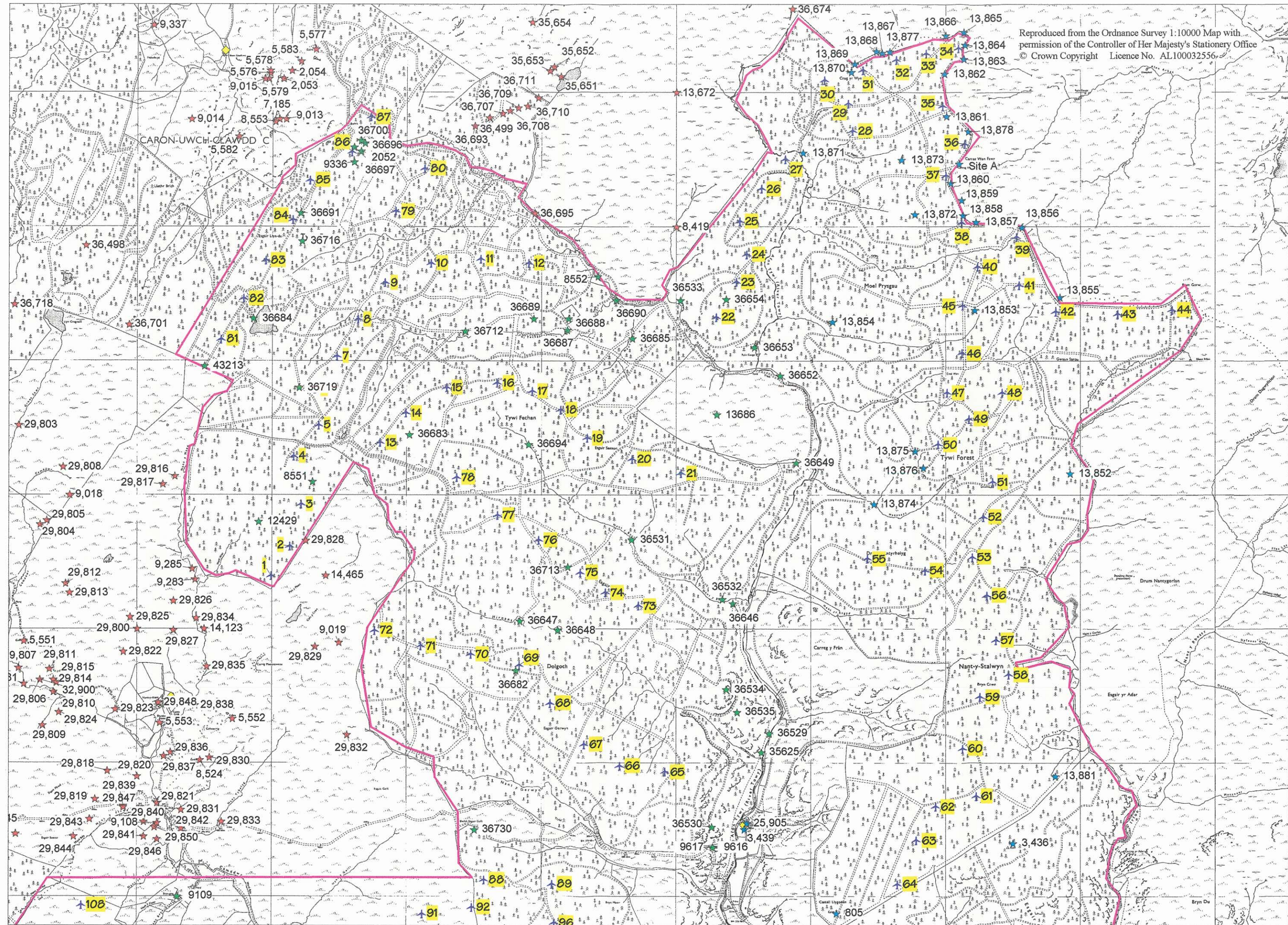
Described as a 'mansion house' in a deed of 1762 (NLW Neuadd Fawr 463). Now a Youth Hostel.



Map 1b Extent of project area showing the locations of the proposed turbines and of known archaeological sites and features scale 1: 40000



Map 2 Extent of project area with SSSI classification, showing those archaeological sites and turbines affected scale 1: 40000









Map 3. Northern portion of Camddur wind energy project, Tywi Forest, scale 1:25000

APPENDIX III

Maps

- Map 1a Extent of Project Area, showing the locations of archaeological sites and turbines scale 1: 40000 taken from OS 1: 50000 data
- Map 1b Extent of Project Area, showing the locations of archaeological sites and turbines scale 1: 40000 taken from OS 1: 10000 data
- Map 2 Extent of Project Area designated SSSI and SPA scale 1: 40000
- Map 3 Northern portion of the Project Area (Tywi Forest), showing known archaeological sites and their prns scale 1: 25000
- Map 4 Southern portion of the Project Area (Open moorland), showing known archaeological sites and their prns scale 1: 25000

Key:

-  sites from Cambria's SMR within the project area
-  sites from Cambria's SMR outside the project area
-  sites from CPAT's SMR within the project area
-  individual turbines, with their relevant numbers
-  outline of project area
-  houses

APPENDIX IV

The following analysis is based on the results obtained from the desk-based and fieldwork assessments for the project area and follows the advice note regarding the planning process issued in relation to the *Register of Landscapes of Historic Interest in Wales*.

Stage 1 *Contextual information*

The proposed project area lies just outside, but on the borders of, the 'outstanding' historic landscape defined as Upland Ceredigion within the *Register of Landscapes of Historic Importance in Wales*. The extent of the Upland Ceredigion historic area as a whole was arbitrarily defined by the *Register* but was later divided into 132 constituent historic character areas when the entire area was assessed during fieldwork undertaken as part of the Historic Landscape Characterisation process in 1998 (Murphy 1999). Some of these 132 historic character areas were found to naturally extend beyond the area originally identified as the Upland Ceredigion historic landscape, and the two historic character areas that are relevant to the Camddwr project fall within this group. The proposed area for the Camddwr wind energy development lies within historic landscape character Area 3 (Tywi Forest) and Area 13 (Bryngwyn Bach). Even though they lie immediately outside the Upland Ceredigion area defined by the register, the parts of the Tywi Forest and Bryngwyn Bach areas relevant to the Camddwr project should still be viewed as areas of outstanding historic importance within Wales.

A gazetteer of all archaeological sites recorded within the project area is presented within Appendix II. This includes a description of each site, alongside other information fields such as grid reference, status, name, type, condition, etc., as well as their Category of considered archaeological importance. Maps detailing the locations of these archaeological sites in relation to the turbines are included in Appendix III.

Area 3 Tywi Forest (extracts from Murphy 1999)

In the Medieval period most of this very large tract of upland lay within the Bishop of St. David's Llanddewi Brefi estate or within Strata Florida Abbey's Pennardd Grange. In more recent times, low-lying fringes of the area came within the control of secular estates-Crosswood owned some of the land to the north-though most was probably considered Crown land because of its unenclosed character. Late 18th-century estate maps (NLW Crosswood vol. 2, 7; NLW vol. 45, 64, 67) show limited enclosure and settlement on the northern fringes of the area around Croffau and Hafod-newydd, but all the remainder was unenclosed moorland. The area remained open moorland until the blanket afforestation of the area during the 1960s.

Today the area is a vast tract of hard-edged forestry lying across (mostly) former open land. It achieves a maximum height of over 500m, but is on average between 400-450m high. The plantations, tracks and other features of afforestation now form the major landscape components of this area. Recorded archaeology in the area consists mainly of

post-medieval settlements and Bronze Age funerary and ritual monuments. Deserted buildings of medieval/post-medieval date testify to a once populated, albeit sparsely, landscape whilst the Bronze Age round barrows/burial cairns, ring barrow and standing stones add a time-depth dimension to the landscape [and suggests that this area was equally populated from the prehistoric period onwards].

Area 13 Bryngwyn Bach (extracts from Murphy 1999)

This extremely large historic landscape area crosses from Ceredigion into Carmarthenshire. It is entirely upland and included within it are parts of the Bishop of St. David's Llanddewi Brefi estate and Strata Florida Abbey's Pennardd Grange. It is likely that by the late Medieval period both these holdings would have been divided into farms which were leased out and farmed on a commercial basis. The antiquity, however, of the upland farms contained within this area is uncertain, but it is likely that some originated in the Medieval period, in the manner indicated above, while others may well have started as squatter settlements in the 18th- or early 19th-century. The 20th century has witnessed an abandonment of these farms and only a handful are now occupied. The surviving chapel at Soar y Mynydd testifies to the once more populated nature of the area. The farms are clearly an important element in the landscape, but the vast majority of the land in the area is, and has been for the last few centuries, unenclosed, and would have been claimed by the Crown. Crossing the area are important trans-mountain natural route-ways linking the farming communities in Ceredigion with lands and towns to the east. These trans-mountain route-ways are celebrated for their use by drovers in the historical period, but they are likely to be of great antiquity, and not only provided communication across the Cambrian mountain chain, but allowed access onto the high moorland for the establishment of permanent or seasonal settlement, for the grazing of animals and for peat-cutting.

This is a very large tract of unenclosed upland with an uneven and widely dispersed settlement pattern of upland farms. At the northern end [beyond the Camddwr project area] unenclosed land runs down to as low as 200m, with heights of over 500m achieved in the central area. On average the height range is between 300 and 450m. There is abundant evidence of deserted settlements across this area, particularly along the route-ways. Occupied farms, of note is Nant y Maen, are traditionally stone built, surrounded by a collection of modern farm buildings, and situated within a system of just a few fields. Older boundaries of these fields consist of earth banks, but wire fences now provide the stock-proof barriers. These fields now comprise improved pasture, and there are further blocks of unenclosed improved pasture close to the farms. Apart from a block of recent forestry [Cefn Isaf/Blaen Nant-y-rhiw], this is a treeless landscape. The recorded archaeology of this area is rich and varied. Considerable time-depth to the landscape is provided by the numerous Neolithic/Bronze Age monuments that include single or groups of round barrows and cairns, standing stones and a stone circle. No occupation sites of this date are known, but the density of these ritual and funerary monuments surely indicates a settled landscape. Castell Rhyfel is an Iron Age hillfort site towards the border of the area, and Gwys-yr-Ychen Bannog a defensive or administrative linear earthwork. Numerous abandoned cottages and other settlement sites

indicate a greater level of population across the area up to the 19th century. Agricultural features and evidence of peat-cutting testify to this former occupation.

This is a very well-defined area, and to the east and west lie extensive forestry plantations [character areas 2 (Cwm Berwyn) and 3 (Tywi Forest)].

Stage 2 *Assessment of direct, physical impacts of development*

The methodology and results of the desk-based assessment conducted as Phase I of this project have been outlined in the first part of this report. The various maps provided in Appendix III show the location and extent of the proposed development area, and also indicate the location of Scheduled Ancient Monuments, Listed Buildings, and Conservation Areas, as well as the locations of all currently known, non-scheduled archaeological sites and monuments.

According to the Advice Note which relates to the *Register of Landscapes of Historic Interest in Wales*, direct physical impacts should be described and quantified in two ways, namely:

- a) In absolute terms with a statement indicating the actual percentage or proportion of the historic character area that is directly affected, *and*,
- b) In relative terms with statements indicating the percentages or proportions of the known resource that will be permanently lost or removed by development.

On the basis of research conducted in both Phase I and II of the Camddwr wind energy project it is considered that perhaps less than 10% of both historic character areas 3 and 13 will be directly affected by the proposed development. Although this will only result in the permanent physical loss or removal of what may appear to be a small part of the area, it is imperative to realise the way in which proposed development will have an irreversible effect on the way the landscape is experienced and used, particularly in area 13 (the open uplands). Indirect impact, in the form of visual intrusion, fragmentation of the historic character area and encroachment, are assessed later in Stage 3 of the HLC assessment. However, within this assessment of direct impact, it is necessary to mention the considerable upheaval that would be caused by the earth-moving machinery involved in the construction of the turbines and their tracks, which would cause long-lasting damage to the landscape. It is therefore crucially important to also consider the long-term implications of this development, which could also see, for example, the removal of the turbines in, say, twenty-five years time. Although the turbines themselves can be physically removed from the landscape there are other more permanent features associated with them (their tracks, access roads and concrete bases) which would leave an enduring and indelible mark on the landscape, changing it forever and with little possibility of the land reverting to its original character.

Those turbines and tracks, which appear from both the desk-based assessment and fieldwork to have a possible direct physical impact on the known archaeological

resource, were discussed in the first part of this report and are presented here in Tables 2a and 2b. The considered area which amounts to a direct physical impact is taken as a 250m radius around Category A sites, and a 100m radius around sites and features in Categories B-E.

Table 2a Assessment of historic character area 3 (Tywi Forest)

ASSESSMENT OF DIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA 3				
Absolute impact				Magnitude
Approximately 10% or less of the area directly affected				Fairly severe/low
Relative impact		Turbine no.	Status	
Stone 8551	potentially 80%	3-4	A	potentially very severe
43213 airstrip	potentially 100%	81-83	C	potentially very severe
Quarry 36691	potentially 100%	84-85	C	potentially very severe
Fold, trig point 36697, etc.	potentially 70%	86-87	B	potentially very severe
Trig point 36682	potentially 100%	69-70	C	potentially very severe
Trig point 36713	potentially 100%	75-76	C	potentially very severe
Trig point 36654	potentially 100%	22-23	C	potentially very severe
Boundary mounds 13857-70	potentially 50%	30-38	C	potentially severe
Standing stone pair (site A)	potentially 100%	36-37	A	potentially very severe

Table 2b Assessment of historic character area 13 (Bryngwyn Bach)

ASSESSMENT OF DIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA 13				
Absolute impact				Magnitude
Approximately 10% or less of the area directly affected				Fairly severe/low
Relative impact		Turbine no.	Status	
Bryn Gorlan monuments	potentially 80%	115-6, 123	A (SAMs)	potentially very severe
Cairn 9118	potentially 100%	142-144	A	potentially very severe
Sites 8528 and 9117	potentially 50%	142-144	A	potentially severe-v. severe
Cairn Saith-wraig, etc.	potentially 33%	149-150	A	potentially very severe
Pen y Gurnos	potentially 100%	160-161	A	potentially very severe
Esgair boundary stone II	potentially 100%	105-106	C	potentially very severe
Esgair boundary stone III	potentially 100%	126 & track	C	potentially very severe
Trig point 43215	potentially 100%	118-119	C	potentially very severe

From the points noted above, it is clear that a number of the currently proposed turbines and their tracks pose, for the most part, a potentially **very severe** threat to key sites within the archaeological resource, and a **fairly severe** impact on the landscape and elements of the historic character areas affected by the Camddwr project.

Stage 3 *Assessment of the indirect impacts of the development*

Although a finite area of land can be said to be directly and physically affected by a development, as assessed in Stage 2, it is clear that a much greater area will be indirectly affected by the resulting fragmentation of the historic character areas, the visual intrusion of the turbines and also their general encroachment onto the open landscape in particular, which could devalue the historic landscape area on the Register as a whole.

The importance of 'setting' is a well-established criterion in the assessment of the significance of impact of developments on Scheduled Ancient Monuments and Listed Buildings, and the same criterion is applied to historic character areas and to historic landscapes. Settings may not be so easily defined for field monuments, but it is possible to make assumptions on the basis of what is known archaeologically, and historically, about how certain types of monuments were used and regarded. In the case of prehistoric monuments, for example, it is well documented that ritual and other activity took place in a wide area surrounding the monuments, and not just in or on the specific sites themselves. Moreover individual sites and groups of monuments were often seemingly associated with each other over wide tracts of landscape, and were connected by processional routeways which formed both ritual and secular pathways of movement through the area.

Indirect impacts can be categorised as being mainly physical or visual in nature.

Indirect physical impacts can occur as a result of one, or a combination, of the following factors:

- a) An increased risk of exposure, erosion, disturbance, decay, dereliction or any other detrimental physical change to elements in the historic character area, consequent to the development.
- b) Related to the above, the likelihood of increased management needs to maintain elements as, for example, through altered habitats, water levels, increased erosion, new access provision etc., consequent to development.
- c) The severance, fragmentation, dislocation or alteration of the functional connections between related elements, for example a field system becomes 'severed' from its parent farmstead by an intervening development.
- d) The frustration or cessation of historic land use practices, for example, it becomes more difficult or impossible to manage an area in a traditional manner as a result of development.
- e) Decreased opportunities for understanding or enjoying the amenity of elements, consequent to development.

Indirect (non-physical) visual impacts can occur as a result of one, or a combination of, the following factors:

- a) Visual impact on elements of the historic landscape areas from which the development can be seen (considered up to its maximum height). Impacts can be

- ‘views to’ and ‘views from’ elements, and should be assessed with particular reference to key historic viewpoints and essential settings. In some cases, key historic viewpoints may no longer be identifiable, but it may be possible to make reasonable assumptions on the basis of archaeological or historical information. Key viewpoints should also include those that have subsequently become acknowledged as such, for example, as depicted in artists’ drawings and paintings, or as features on popular routes or trails.
- b) Impact on the visual connections between related elements, by occlusion, obstruction etc.
 - c) Conversely, the creation of inappropriate visual connections between elements not intended to be intervisible originally, by the removal of intervening barriers, shelters, screening or ground.
 - d) Visual impact of the development itself considering:
 - i) its form – the scale, number, density, massing, distribution etc. of its constituent features
 - ii) its appearance - the size, shape, colour, fabric etc. of its constituent features, in relation to the existing historic character of the area.

In terms of indirect physical impacts regarding the proposed Camddwr development, the following points are of note:

- There is a likelihood of substantial disturbance to the general ambience of the landscape, particularly in the open areas, which would impact greatly on the prehistoric monuments located on the higher ground, and may also affect the Soar y Mynydd chapel.
- In terms of the areas containing Scheduled Ancient Monuments there is the likelihood of greater management needs to maintain and protect these sites.
- As has been noted earlier in this report, it is not simply the sites themselves which are significant archaeologically but also the landscape which lies between the monuments, where there is the likelihood of as yet undiscovered archaeology relating to both ritual and domestic activity from the Neolithic/Bronze Age to the present. The proposed wind energy project will quite likely cause the dislocation of connections between these sites by virtue of the tracks associated with the turbines and the new access roads which will be created to maintain the development. The virtually unenclosed open landscape will necessarily be carved up, with the currently proposed strings of turbines serving to sever the landscape and conceptually divide the uplands.
- There may be an impact on traditional historic land use practices as a result of the substantial land use change that will inevitably be a consequence of the proposed development, particularly with reference to the open landscape. As noted earlier in this report, large tracts of this landscape have remained largely unchanged in use for the last 4000 years.
- The most significant impact will perhaps be most felt in terms of the decreased opportunities for understanding and enjoying the historical elements of the landscape. This must be seen in the context of the attraction to the landscape for other amenity and interest groups, such as those intending to appreciate its physical

beauty or ornithology. There would inevitably be a decreased understanding for such groups, as well as for other visitors, of the context of the many prehistoric monuments on the open unforested uplands as a direct result of the disturbance to their environment and their setting by the proposed turbines.

In terms of indirect (non-physical) visual impacts regarding the proposed Camddwr development, the following points are of note:

- The 'views to' and 'views from' the prehistoric monuments in particular will be severely impacted. As noted earlier in the report, these types of views are considered within archaeological thought to have been one of the crucial elements in the decision to build and use ritual and funerary monuments in these locations in the Neolithic and Bronze Age, precisely because of the extensive and uninterrupted landscape views achievable from the sites. Apart from the forestry plantations, which were developed before the current appreciation of historic landscape character, these views have remained unchanged for the last 4000 years and would be detrimentally affected by this development.
- During fieldwork, and in assessing views, we were able to see two other wind farms looking west/west-north-west from the location of turbine 87. From elsewhere in the proposed project area we had clear views over to the Brecon Beacons. If we could see the windfarms near Aberystwyth and the Brecon Beacons from this area, then the Camddwr development would equally be visible back from these locations, and from other more local viewpoints in the landscape.
- The sheer size of the proposed development, 165 turbines, makes it by far the largest wind energy project in Wales, and moreover the biggest in the UK (according to figures listed on the British Wind Energy Website (<http://www.britishwindenergy.co.uk/>)).
- The visual impact of this development would have a lasting effect on the existing character of this historic landscape. Both the size, shape, colour and fabric of the turbines may be argued to be out of character in an area where there are no 'industrial' features, and not even mains electricity or gas, and this equally applies to those turbines proposed for the forestry (historic character area 3).
- Following on from the above point, the unforested area is a rare example of a preserved Bronze Age rural landscape, and one impact of the development would be to change the visible character of this landscape from small-scale agricultural to large-scale semi-industrial, which is not in keeping with the current visual or historical nature of the area.

The digital photos, which were taken as part of the fieldwork element of this project and are described in Appendix I in this report, highlight some of these visual impact issues. In all, both the indirect physical and indirect (non-physical) visual impacts can be said to have a **severe** impact on the historic character areas affected by the proposed wind energy project.

Stage 4 *Evaluation of relative importance*

This stage aims to evaluate the relative importance of the historic character areas (or parts thereof) which are directly affected by the development in relation to the whole of the historic character areas (i.e. Tywi Forest and Bryngwyn Bach) and in relation to the importance of the wider historic landscape area (i.e. Upland Ceredigion) on the *Register*. This is then followed by an evaluation of the relative importance of the historic character areas concerned within a national context.

The following criteria are guidelines for the determining of relative importance or value of the historic character areas within this stage:

- a) Rarity in terms of period or date, and as a component of the landscape.
 - High – no broadly similar elements in the landscape
 - Moderate – fewer than 5 broadly similar elements in the landscape
 - Low – more than 5 broadly similar elements in the landscape
- b) Representativeness of a range of elements.
 - High – contains most of the elements that characterise the landscape
 - Moderate – contains c.half of the elements that characterise the landscape
 - Low – contains some of the elements that characterise the landscape
- c) Documentation which relates to the landscape, its academic value and importance.
 - High – a considerable quantity of relevant material or important sources
 - Moderate – some relevant material, or moderately important sources
 - Low – little relevant material, or only modestly important sources
- d) Group Value of the diversity (or similarity) of elements.
 - High – contains four or more elements
 - Moderate – contains three elements
 - Low – contains one or two elements
- e) Survival of the elements in the landscape.
 - Good – more than 75% of elements surviving
 - Moderate – between 50% and 74% of elements surviving
 - Fair – fewer than 50% of elements surviving
- f) Condition of the elements in the landscape.
 - Good – elements surviving in good or better condition for their class
 - Moderate – elements surviving in moderate condition for their class
 - Fair – elements surviving in fair or poor condition for their class
- g) Coherence of historic meaning and articulation of historic themes.
 - High – dominant historic theme(s) present – high articulation
 - Moderate – historic theme(s) present – moderate articulation
 - Low – historic theme(s) present, but weak – low articulation
- h) Potential within the landscape for future landscape study and analysis
 - High – considerable scope for future historic landscape study & analysis
 - Moderate – some scope for future historic landscape study & analysis
 - Low – little scope for future historic landscape study & analysis

- i) Integrity of the survival of its original character or form and amenity value
 - High – elements highly visible and easily understood by a non-specialist
 - Moderate – elements visible but not easily understood
 - Low – elements not readily visible and difficult to understand
- j) Associations of the landscape, or its elements, having important historical associations with, for example, particular institutions, cultural figures, movements or events, etc.
 - High – a significant, authentic and nationally well-known association(s)
 - Moderate-authentic, less significant, perhaps regionally known association
 - Low – unauthenticated or a little or locally known association

The evaluations of both of the historic character areas affected by the proposed Camddwr wind energy project are dealt with separately using the criterion outline above, and the results summarised in tables 3a and 3b.

For historic character area 3 (Tywi Forest) and historic character area 13 (Bryngwyn Bach), only those parts of the areas which will be affected by the proposed wind farm development have been assessed. For Area 3, which covers the whole of the Tywi Forest, there are implications for the overall classification of this landscape area by virtue of the fact that this is Forestry Commission land, with an almost blanket coverage of trees and not readily accessible to the public (with the exception of the bridleways marked on the OS Pathfinder 1:25,000 maps). However, this should not detract from its significance in both archaeological and historical terms, for much archaeology survives within the forestry plantations (as already noted earlier with reference to the example of Mynydd y Ffynnon), with perhaps the majority yet to be discovered.

Table 3a Evaluation of the relative importance of area 3 (Tywi Forest)

EVALUATION OF THE RELATIVE IMPORTANCE OF THE PART OF HISTORIC CHARACTER AREA 3 (TYWI FOREST) DIRECTLY AFFECTED BY THE DEVELOPMENT						
VALUE	HIGH/ GOOD	MODERATE/ AVERAGE	LOW/ FAIR	HIGH/ GOOD	MODERATE/ AVERAGE	LOW/ FAIR
CRITERION	for WHOLE OF CHARACTER AREA			for WHOLE OF LANDSCAPE AREA		
Rarity			4			4
Representative	4				4	
Documentation	4				4	
Group Value			4			4
Survival		4			4	
Condition		4			4	
Coherence			4			4
Potential	4			4		
Integrity/amenity			4			4
Association			4			4
EVALUATION	Moderate			Moderate-low		

Within Cambria's *Upland Ceredigion Historic Landscape Characterisation Report* (Murphy 1999) it was recommended that the Tywi Forest area needed to be examined in greater detail, and despite the afforestation this area retains much of its historic character. Indeed, the forestry has created its own distinctive landscape which has arguably become as much part of the historical continuum of the exploitation of resources in the whole landscape area as any other activity.

For historic character area 3, an overall classification of **moderate-low** was given for both the character area and landscape area as a whole as noted in Table 3a above.

In terms of *rarity*, a low grade was considered to reflect the landscape as affected by the development. The part of Tywi Forest affected by the proposed wind energy project has more than five broadly similar elements elsewhere within the forested area and within the Upland Ceredigion Registered Landscape area as a whole there are better preserved examples of such sites, which are also more readily accessible and understood.

However, the area affected by the development is seen as having a high level of *representativeness*, by virtue of it containing most of the elements which characterise the landscape (i.e. unenclosed moorland (pre-forestry), small, isolated enclosed settlements, an area of common land, individual and a group of prehistoric monuments, forest plantation today).

In terms of *documentation*, this area was given a high grading: there is a considerable quantity of relevant material, including aerial photographs (pre-forestry), 18th century estate maps, documents pertaining to Strata Florida's Pennardd Grange, Church records for the Bishop of St. David's Llanddewi Brefi estate, the Forest Enterprise Welsh Historic Assets survey, the Upland Ceredigion HLC report, as well as information from the SMR and NMR, although this is moderate in comparison to the numerous published academic articles relating to the entire historic landscape area.

This area was assigned a low *group value*, on the basis that although the part of the area directly proposed for the Camddwr project contains more than four elements which may potentially be affected by the development of part of the area as a windfarm (which include the Bronze Age standing stone pair at the edge of the forest at Carreg Wen Fawr, a group of modern features (trig points, quarry, airstrip), and post-medieval features (sheepfolds, house platform, boundary mounds) mentioned in Stage 2, the as yet undiscovered archaeology within the forest, and finally the forest itself), these elements are neither structurally nor functionally coherent (apart from the forest) because they are buried within the coniferous plantations.

The degree of *survival* of elements in the landscape was given a cautious moderate as it was impossible to assess the survival and distribution of some of the sites and monuments located deep within the forestry plantation. Indeed, as already noted, there may be many more features and elements yet to be discovered. Thus, in areas where there has been no clear-felling or re-planting of trees the archaeological resource is often well-preserved,

and so the survival of many more different elements may eventually warrant a higher grade in this regard.

Condition is in many ways linked to survival, and as noted previously, the forest can sometimes have a positive effect on preserving archaeological remains where no clear-felling or ploughing has taken place. The condition of many of the sites and monuments located within the heart of the forest again could not be assessed and so a cautious moderate has been assigned to this criterion.

In terms of *coherence*, the area was also given a low grading, on the grounds that whilst there is arguably an historical theme present within the landscape (the isolated spread of rural settlement and low-impact agriculture from the Bronze Age to the present) this has perhaps become less obvious since the change of land-use to forestry (even though some settlement and sheep-grazing continues within the area), simply because the bulk of the archaeological remains lie deep within the forest and are not readily visible or accessible.

In terms of *potential*, this area necessarily warrants a high rating, as there is considerable scope for future historic landscape study and analysis. A full prospective survey of the area would almost certainly reveal a large number of previously unrecorded archaeological sites and features, and as already mentioned, the Upland Ceredigion HLC report itself recommended that this historic character area be more fully examined.

A low *integrity/amenity* rating was given to this area on the basis that much of its original character or form (from the Bronze Age to the mid-20th century) was lost with the afforestation of the area in the 1970s, resulting in the engulfing of many archaeological features and landscape elements, which are therefore not readily visible to the non-specialist. In terms of amenity value, however, the Forestry Commission does allow general public access to the forestry land for visitors on foot, but not for vehicles.

Finally, in terms of *association*, this area was assigned a low rating on the grounds that it has a regionally well-known association with the history of the Strata Florida Abbey and Grange, and also a more widespread association as part of a scattered rural community linked perhaps to the source of the Afon Tywi, itself imbued with great Welsh historical connections. However, in comparison with the rest of the Upland Ceredigion area, these associations are neither very visible nor particularly well-known.

For historic character area 13 (Bryngwyn Bach), it is the southern part of the area that will be affected by the proposed Camddwr development and the overall evaluation for this stage returned a **high** importance for both the whole character and landscape areas, as noted in Table 3b.

In terms of *rarity*, a high grading was given on the basis of the possible direct affect of the wind farm on the Bryn Gorlan group of prehistoric monuments, one of which is a rare example of a Neolithic/Bronze Age stone circle. The Soar y Mynydd chapel, which will also be indirectly affected by the Camddwr development, similarly has no other broadly

similar parallels within both this historic character area and the Upland Ceredigion landscape area as a whole. The same applies to the Saith-wraig platform cairn, which is a fine example of this type of Bronze Age ritual and funerary monument. The fact that all the prehistoric monuments in this area continue to exist on unenclosed open moorland also adds a rarity value, in that these monuments essentially remain located in a landscape which probably remains largely unchanged since the monuments were built, and which differs from the bulk of prehistoric monuments which are today sited within fields and enclosed farmland, which necessarily detracts from an understanding of their original landscape setting.

Table 3b Evaluation of the relative importance of area 13 (Bryngwyn Bach)

EVALUATION OF THE RELATIVE IMPORTANCE OF THE PART OF HISTORIC CHARACTER AREA 13 (BRYNGWYN BACH) DIRECTLY AFFECTED BY THE DEVELOPMENT						
VALUE	HIGH/ GOOD	MODERATE/ AVERAGE	LOW/ FAIR	HIGH/ GOOD	MODERATE/ AVERAGE	LOW/ FAIR
CRITERION	for WHOLE OF CHARACTER AREA			for WHOLE OF LANDSCAPE AREA		
Rarity	4			4		
Representative	4				4?	4?
Documentation	4				4	
Group Value	4			4		
Survival	4			4		
Condition	4			4		
Coherence	4			4		
Potential	4			4		
Integrity/amenity	4			4		
Association	4					4
EVALUATION	High			High		

On the issue of *representativeness* this area has been given a moderate-low rating when assessed in relation to the whole HLC area on the *Register*, on the basis that whilst it contains a number of the elements that characterise the landscape (such as individual and groups of prehistoric monuments, deserted rural settlements (DRS), unenclosed moorland, farmsteads currently in use, no forestry and continued historical land-use practices), it doesn't contain many of the elements found elsewhere in the Upland Ceredigion Registered area (such as lead mines, field patterns, parkland, villages, etc.). However, this is because part of the Upland Ceredigion Registered landscape also includes a series of lowland areas (e.g. Ysbyty Ystwyth, Pontrhydfendigaid), which are characterised by completely different archaeological features. In terms of representativeness simply as an area of upland and as character area 13, the area affected by the development was given a high grading, as Bryngwyn Bach is only lacking the leadmines which are prevalent elsewhere in HLC area 4, but uniquely has a Bronze Age stone circle, and was thus felt to contain most of the elements which characterise this particular historic character area.

Documentation was also rated high for the same reasons as in area 3, and perhaps has even more relevant sources than the Tywi Forest because of the archaeological surveys which have been conducted in the area concerning the prehistoric monuments (Leighton 1977) and deserted rural settlements (T & H James 1998).

Group value also receives a high rating on the grounds that there are four clear groups of prehistoric monuments discretely placed in the landscape, with an equal spread of DRS sites, as well as contemporary settlements, associated small fields and trackways. These sites are also quite clearly associated with each other in certain structural or functional ways, which adds to their group value.

Survival was also given a high grading as the elements which make up this landscape survive well precisely because the area is so remote, untouched and has not been subject to modern arable agricultural practices, such as machine ploughing. As a result, of the elements which characterise this landscape it is considered that more than 75% are surviving in the area today.

The *condition* of these elements again receive a good grading on the basis that they remain largely undisturbed and have not been too badly damaged by modern social and economic practice. For the archaeology that is perhaps currently buried and yet to be discovered, the virtually undisturbed nature of the area would suggest that many features will be preserved almost intact, which again enhances the condition grading.

In terms of *coherence*, it is felt that this is a landscape of high articulation, with clear and dominant historic themes present. Some of these themes are perhaps more local or regional in their significance, but together they combine with the themes of surrounding character areas to re-affirm the historical continuum. Historical processes and patterns of land-use and settlement have been maintained, and indeed continue, so that this landscape retains much of its original social and economic function from 4000 BC to the present day. The same is true also of religious significance: from the ritual and funerary monuments of the Neolithic/Bronze Age through to the construction and continued use of the Soar y Mynydd chapel, this area has been the focus of religious activity for 4000 years. The well-documented connections with the Strata Florida Abbey and Bishop of St. David's Llanddewi Brefi estate adds to its religious connections.

In terms of *potential* this area also warrants a high grading as there is considerable scope for future historic landscape study and analysis. Comprehensive field survey at a time more conducive to fieldwork in the uplands may well result in the discovery of new sites, and there is also the consideration of the sub-surface archaeology which is yet to be discovered also adding to its potential. The spread of Bronze Age monuments throughout the most southerly part of the area does suggest that we can expect some form of contemporary prehistoric settlement to have been present in these uplands, and the current understandings that ritual activity was often focussed in a wide area around the monuments also suggests that there may be a whole host of buried features lurking within a substantial radius of the known sites. The considerable palaeoenvironmental potential evidenced by the undisturbed blanket peatland which surrounds most of the

archaeological sites and features in this area also contributes to the potential of this landscape for further historic landscape studies.

In terms of *integrity* it was considered that this area contained within it elements that were reasonably visible as well as having the potential to be easily understood by the non-specialist, especially for the DRS sites and the Soar-y-Mynydd chapel. The unenclosed and undeveloped nature of the landscape was also felt to be easily seen and understood by the non-specialist, and indeed are some of the very things, along with the chapel and bird-watching, which intentionally draw people to visit the area and take the scenic tour in the first place. The area also has a high *amenity* value, with access to the area through the Tregaron-Abergwesyn mountain road and a number of public footpaths/bridleways.

In terms of *associations* as well it was felt that this area warranted a high rating for a number of reasons. First, perhaps the most significant, authentic and (inter)nationally well known association of the area is with the Calvinist Methodist cause because of the Soar-y-Mynydd chapel built here in 1822. As mentioned earlier in the report, the Calvinist Methodist cause was first established in this area much earlier in the 18th century, when ministers preached in the isolated and dispersed farmhouses of this scattered rural community, and the chapel is of symbolic importance to those which follow this faith, and moreover is internationally known. The area is also well known in ornithological circles, and is also associated with the Youth Hostel Association with two hostels (Ty'n y Cornel and Dolgoch) both situated within this character area. On a more local, but nonetheless authentic, level the area is well-known for its association with the drovers, and the area is still popular with walkers following the drovers' trail down the Doethie valley and over to Rhandirmwyn, and north-eastwards over to Rhyader. There are also Welsh historical and mythological associations, with Rhydermeirch fold being associated with a battle between the sons of Cadwgan ap Bleddyn, Gronw and Llewelyn and the princes of South Wales, Rhys ap Owain and Rhydderch ab Caradoc (Lewis 1833). However, it was agreed to assign it a moderate-low rating in its relation to the wider Upland Ceredigion Registered Landscape because this larger landscape encompasses the Strata Florida Abbey as well as the Crosswood and Hafod estates, which are well-known national associations within the whole historic landscape area.

In terms of assessing the significance of both the Tywi Forest and open landscape areas proposed for development within a national context, the following points are of relevance:

- As mentioned above, the continued siting of the prehistoric ritual and funerary monuments within unenclosed, open moorland landscape not dissimilar to the landscape as it was seen and experienced in the Bronze Age adds a rarity to the area, as the majority of Bronze Age sites in a national perspective are today located within enclosed farmland which has removed the character of association and setting from these sites.

- The fact that these Bronze Age sites are already Scheduled Ancient Monuments or Category A sites means that they and their settings are valued as having national importance.
- This particular landscape falls within two of the historic character areas of Upland Ceredigion, which is itself one of only 36 HLC areas considered as of 'outstanding' historic interest within Wales as a whole, and thus rates this area as having considerable national importance within a pan-Wales context
- The area proposed for development, and in particular the open landscape, is typical of Welsh uplands in a national context, but is rare for its accessibility and amenity value
- The open and unforested area proposed for development is also a rare example of a surviving and intact prehistoric and historic landscape, which is not only rare within Wales but is moreover extremely rare within southern Britain.

As a whole, the area proposed for development is of importance locally, regionally, nationally, and even internationally in the case of Soar y Mynydd, and preserves within it a number of key archaeological and historical landscape elements and features.

Stage 5 *Assessment of overall significance of impact*

This final stage assesses the overall significance of the impact of the proposed development and the effects that altering the historic character areas concerned will have on the whole of the historic landscape area on the *Register*.

This assessment is achieved by combining the results of Stages 2, 3 and 4, as presented above, so that the level of damage or loss to the landscape is balanced with the relative values of the areas affected.

All landscape areas identified on the Register are of national importance, therefore developments such as this proposed wind energy project will, *de facto*, have a **severe** impact. However, within each landscape that is of national importance and consistent with the determination of relative values in Stage 4, certain areas are of particular significance. Therefore, within the 'severe' category of impact, three grades may be distinguished, namely:

Very severe

- a historic area that is of very special significance owing to its inherent importance (e.g. rarity, group value, condition, etc.)
- the development will lead to a critical reduction of value in terms of land loss, fragmentation and/or visual intrusion
- the effect of the development will be to significantly reduce the value of the historic character area as a whole, thereby appreciably diminishing the overall value of the historic landscape area on the *Register*

Moderately severe

- a historic character area with good preservation
- the development will lead to a significant reduction in value in terms of land loss, fragmentation and/or visual intrusion
- the effect of the development will be to damage key elements of the historic character area, with the appreciable lowering of the value of the area as a whole, and thereby diminishing the overall value of the historic landscape area on the *Register*

Fairly severe

- a historic character area for which there are other examples and there has already been a loss of some elements due to modern development
- the development will cause a loss in value, though this is not necessarily critical in terms of land loss, fragmentation and/or visual intrusion
- the development may lead to the further encroachment of development into the historic landscape area on the *Register*

On the basis of these above criteria, and the values already recorded in Stages 2, 3 and 4, it is considered that the proposed Camddwr wind energy project will have a **very severe** impact on the open moorland areas proposed for development within Area 13, and a **moderate-fairly severe** impact on the Tywi Forest Area 3.

The open moorland area (Area 13) is of very special significance owing to its importance in terms of all the criteria considered within Stage 4, for which it received a high grading (rarity, group value, representativeness, etc.). It is considered that there would be a critical reduction of value by virtue of the considerable visual intrusion made by the development, which would be visible for at least a 20 mile radius from other locations within the wider surrounding landscape. The historic character of the area would necessarily be significantly reduced, thus affecting the overall value of the historic landscape area as a whole. The setting and understanding of the archaeological resource would be heavily compromised in an area which has largely remained unchanged since the Bronze Age. The survival of an intact Bronze Age landscape in this area is a rare phenomenon not only within Wales but within Southern Britain as a whole, and the development of this area as a wind farm would very severely compromise the historic land-use of this very special landscape.

The Tywi Forest (Area 3) has been given a moderate to fairly severe grading for the following reasons. First, although it is an historic character area with good preservation (and the potential for a great deal more archaeology to be discovered within the plantations), there has already been some loss of its historic character due to the planting of the forest within the last 50 years, although in some ways this has itself added an additional character of its own to the historic land-use of the overall landscape. Within the kind of development proposed, there will inevitably be damage caused to the area,

however minimal, which will be damage nonetheless to elements of the historic character area. There will be a significant visual intrusion from the development, especially for the open upland areas within and bordering the forest, whilst the visual effect should the forest be clear-felled in the medium or longer term must also be considered here.

Finally, relevant to both areas is the possibility that the kind of development proposed for the landscape as suggested by the Camddwr project may well lead to the further encroachment of development into the rest of the Upland Ceredigion Area of Outstanding Historic Interest. This precedent is an aspect which requires considerable thought.

CAMDDWR WIND ENERGY PROJECT

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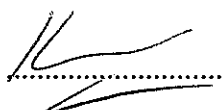
This report has been prepared by Nikki Cook

Position Project Officer

Signature N.J. Cook Date 15th October 2001

This report has been checked and approved by Ken Murphy on behalf of Cambria Archaeology,
Dyfed Archaeological Trust Ltd.

Position Principal Archaeological Officer

Signature  Date 15 October 2001

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