



Neuadd Farm Wind Turbines, Meidrim, Carmarthenshire.

Archaeological Impact Assessment



By

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ARCHAEOLOGICAL IMPACT ASSESSMENT

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The logo for Heritage Recording Services Wales features the word 'Heritage' in a large, stylized serif font. Below it, 'Recording Services Wales' is written in a smaller, simpler font. A decorative crest or emblem is positioned between the two lines of text.

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Executive Summary

The following report presents the results of an archaeological desk based assessment and site visit undertaken by Heritage Recording Services Wales (HRS Wales), commissioned by Force 5 Energy Ltd., for two proposed wind turbines at Neuadd Farm, Carmarthen, SA33 5PW positioned approximately 1.5km southwest of the village of Pen y bont and 3.5km east of the village of Llanwinio, Carmarthenshire.

Each proposed turbine is to have a hub height of 25m with a maximum blade tip up to 35.5m. Access to the turbines for construction and maintenance will be via an existing primary access road at the entrance to Neuadd Farm site and then along two temporary 3.5m wide access tracks leading to each proposed turbine site. Each turbine will also require a 7m x 7m turbine base and temporary crane hard-standing and one electrical supply box.

In summary, the desk based assessment and site visit concludes that there are no direct physical impacts on any known heritage assets from any elements of the proposed development. The assessment of the application site has also concluded that because the application site has been continually ploughed over the centuries, the chances of any surviving unknown buried archaeological remains is low and as such it is considered that an archaeological watching brief will not be necessary during groundwork for construction. The fields are presently used for dairy farming and are grazed and cut for silage.

With regards to the potential indirect effects of the proposal, the desk based assessment and site visit concluded that none of the settings of designated Scheduled Ancient Monuments (SAMs), Listed Buildings, nor any undesignated sites of schedulable quality within the prescribed 5km assessment area, would be significantly effected by the proposed development. With reference to the nearest SAM site, that of Crug y Deyrn (SAM Ref: CM127), which lies 800m southwest from the proposed development, the assessment has predicted that the magnitude of the effect on this site will be Minor and therefore the significance of effect will be Moderate/Minor and also temporary for the lifetime of the turbines.

With regards to cumulative impacts, the assessment concluded that when the proposed development is viewed cumulatively with other known turbines within 5km, there are no significant indirect adverse effects on any designated high value heritage assets.

1 Introduction

- 1.1 The following report presents the results of an archaeological desk based assessment undertaken by Heritage Recording Services Wales (HRS Wales), commissioned by Force 5 Energy Ltd, for two proposed wind turbines (hub height of 25m with a maximum blade tip up to 35.5m), positioned approximately 1.5km southwest of the village of Pen y bont and 3.5km east of the village of Llanwinio, Carmarthenshire.
- 1.2 The specific objectives of the assessment were to:
- Identify the cultural heritage baseline within and in the vicinity of the proposed two turbines;
 - Consider the application site in terms of its archaeological and historic environment potential;
 - Assess the potential and predicted effects of the construction and operation and decommissioning of the turbines on the baseline cultural heritage resource within the context of relevant legislation and planning policy guidelines; and
 - Propose measures, where appropriate, to mitigate against any predicted significant adverse effects.
- 1.3 The assessment comprised two main elements:
- i) A full desk based assessment and site visit of the application area.
 - ii) Direct and In-direct Assessment of effects on all designated and undesignated High Value sites (Scheduled Ancient Monuments, Listed Buildings) within the application area and within a 5km radius.
- 1.4 The Technical Appendices for this Chapter contains the following information:
- *Appendix I: Figures;*
 - *Appendix II: Photographs and photomontage;*
 - *Appendix III: Gazetteer of all known HER sites up to 2km radius and all designated sites and undesignated High Value sites up to 5km radius from proposed turbine locations.*
- 1.5 The assessment entailed a site visit and a desk based assessment of all readily available historical and archaeological documentary sources for the immediate application area and a desk based assessment focusing on the indirect effect of the proposed turbines on designated and undesignated high value sites within a 5km radius from the position of the proposed turbines. The proposed position of Turbine 1 is at SN 2962 2599, and Turbine 2 at SN 2965 2576. The study of the application area assessed the direct and indirect impact of the proposed development on known heritage assets and also the potential for hitherto unknown heritage assets. It also assessed the known heritage assets within a 2km radius of the proposed application area, in order to inform the assessment of the application area. Outside the application area, the assessment also considered the potential indirect impact on the setting of all designated sites (Scheduled Ancient Monuments and Listed Buildings) and undesignated high value heritage assets within a 5km radius of the proposed turbine locations, in accordance with Welsh Office Circulars 60/95 and 60/96, '*Planning and the Historic Environment: Archaeology*'.
- 1.6 All works were undertaken in accordance with the IfA's Standards and guidance: for an *archaeological desk based assessment*.

1.7 The site

- 1.8 The proposed two wind turbines are to be positioned in enclosed ploughed fields at a height of 200m AOD (Turbine 1 is at SN 2962 2599, and Turbine 2 at SN 2965 2576), approximately 1.5km southwest of the village of Pen y bont and 3.5km east of the village of Llanwinio, Carmarthenshire. The application area as a whole includes both fields to the north and south and the Neuadd Farm complex, covering an area of approximately 0.1008 square kilometers.
- 1.9 Each proposed turbine is to have a hub height of 25m with a blade tip up to 35.5m. Access to the turbines for construction and maintenance will be via an existing primary access road at the entrance to Neuadd Farm site and then along two new 3.5m wide temporary access tracks leading to each proposed turbine site. Each turbine will also require a 7m x 7m turbine base temporary crane hard-standing, and one electrical supply box.
- 1.10 The proposed development site is not located within any Registered Historic Landscape, the nearest being the registered landscape of *Drefach and Felindre* (HLW (D) 10), which lies over 9km to the northeast of the proposed turbines. Nor is the development site within any Conservation Area or any Registered Park and Garden. The nearest Registered Park & Garden is *Ffynone* (PGW (Dy) 18(PEM)), which lies approximately 13km to the northwest. There are also no Scheduled Ancient Monuments (SAMs) or Listed Buildings (LBs) within the development area.

1.11 Geology

- 1.12 The geology of the application area is predominantly of Ashgill Rocks (undifferentiated) of mudstones, siltstones and sandstones.

2 Planning Policy Context and Legislation

2.1 Ancient Monuments and Archaeological Areas Act 1979

- 2.2 Under the Ancient Monuments and Archaeological Areas Act 1979 (1979 Act) (Ref. 1), the Welsh Assembly Government and Cadw are required to compile and maintain a Schedule of monuments considered to be of national importance. The statutory consent of Cadw is required before any works are carried out which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering up a Scheduled Ancient Monument (SAM). In addition, impacts of development works upon the setting of a SAM form an important consideration in the granting or refusal of planning consent to conduct development works.
- 2.3 There are no Scheduled Ancient Monuments within the proposed development area. However there are four (4) SAM sites and twenty-two (22) Listed Building (LB) sites positioned within 5km of the proposed turbine locations.

2.4 Town and Country Planning Act 1990

- 2.5 Other known sites of archaeological/heritage significance can be entered onto county-based Sites and Monuments Records (many now called Historic Environment Records) under the 1990 Town and Country Planning Act. Historic hedgerows are protected under the Hedgerow

Regulations 1997. A hedgerow is historic if it marks a parish or township boundary which pre-dates 1850 AD, incorporates an archaeological feature or is part of or incorporates an archaeological site, marks the boundary of (or is associated with) an estate or manor which predates 1600 AD or forms an integrated part of a pre-parliamentary enclosure.

2.6 Planning (Listed Building and Conservation Areas) Act 1990

2.7 Under the Welsh Office Circular 61/96, 'Planning and the Historic Environment: Historic Buildings and Conservation Areas' and the 'Planning (Listed Buildings and Conservation Areas) Act 1990 (Ref. 1) and the Historic Buildings and ancient Monuments Act of 1953 (Ref.1), listed buildings are categorised as Grades I and II in decreasing order of special architectural and historic importance. These buildings are of acknowledged importance to the nation's built heritage. Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires planning decision makers to have special regard to the desirability of preserving listed buildings, their settings or any features of special architectural or historic interest which they possess. There are no listed buildings within the proposed development area.

2.8 Conservation Areas may be designated under the Planning (Listed Buildings and Conservation Areas) Act 1990. Section 72 of the 1990 Act requires decision makers on applications for planning consents to pay special attention to the desirability of preserving or enhancing the character or appearance of the area. As a matter of policy, planning decision makers must take into account the potential effects of development on the setting of Conservation Areas. There are no Conservation Areas within the proposed development area.

2.9 Welsh Office Circular 60/96 (Planning and the Historic Environment: Archaeology)

2.10 This guideline establishes the principles and framework within which archaeological matters are a material consideration within the planning process. It identifies how sites are preserved and recorded, and the role of local authorities and the Welsh Office working through Cadw. It states:

2.11 *Archaeological remains should be seen as a finite and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction...They are part of our sense of national identity and are valuable both for their own sake and for their role in education, leisure and tourism'. (Paragraph 3, Ref 1).*

2.12 Welsh Office Circular 60/96 places emphasis on the need for early consultation with the appropriate authorities (Paragraph 11) and includes information on the need for formal Environmental Assessments in some circumstances (Paragraph 12, Ref 1).

2.13 In Wales this guidance replaces Planning Policy Guideline (PPG) 16: Archaeology and Planning (1990).

3 Methodology and Consultations

3.1 Consultations

3.2 A scoping opinion request was forwarded to Carmarthenshire County Council (henceforth CCC) by Force 5 Energy Ltd. Following consultation with Cadw, the Dyfed Archaeological Trust (henceforth

DAT) and the authority's Landscape Officer with regard to Archaeology and Cultural Heritage, CCC response letter (dated 24th January 2013) stated that all parties consulted were in agreement that an EIA would not be required on the grounds that all possible impacts can be adequately assessed within the planning application process. As a requirement of this application CCC would require, with reference to archaeology and cultural heritage, that an assessment is undertaken of the potential impact on the setting of all designated Scheduled Ancient Monuments (SAMs) and Listed Buildings (LBs) and undesignated high value sites within a 5km radius from the proposed turbine locations.

- 3.2 Further consultation with DAT (dated 10-08-2013) and with a submitted and approved Project Specification (dated 12-08-2013), agreed that only Historic Environment Records (HER) within a 2km radius from the proposed turbine locations needed to be gathered to inform the archaeology of the wider landscape, and only designated and high value undesignated sites within 5km from the position of the proposed turbines need be assessed for the indirect impact assessment.

3.3 Methodology of Baseline Survey

- 3.4 In accordance with the IFA's *Standards and guidance*, the purpose of a desk-based assessment is to gain information about the known or potential archaeological resource within a given area or site (including the presence or absence, character and extent, date, integrity, state of preservation and relative quality of the potential archaeological resource), in order to make an assessment of its merit in context, leading to one or more of the following:

- the formulation of a strategy to ensure the recording, preservation or management of the resource;
- the formulation of a strategy for further investigation, whether or not intrusive, where the character and value of the resource is not sufficiently defined to permit a mitigation strategy or other response to be devised; and
- the formulation of a proposal for further archaeological investigation within a program of research.

- 3.5 The other aim of the assessment was to evaluate the potential direct effect of the proposed development on all cultural heritage features within the bounds of the application area, gather archaeological HER data for sites up to 2km from each proposed turbine location and to assess the potential indirect effect on the setting of all high value designated sites (Scheduled Ancient Monuments (SAMs), Listed Buildings (LBs)) and other high value undesignated sites considered to be of national importance and worthy of scheduling) within a 5km radius from each proposed turbine location. A further aim of the assessment was to evaluate the potential impact of the proposals on hitherto unknown buried archaeological remains in the proposed development area.

- 3.6 All work was conducted in compliance with the *Codes of Practice* of the Institute for Archaeologists (IFA 2000).

- 3.7 The desk based assessment considered the following:

- the nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area;

- the history of the site;
- the potential impact of the proposed development on the setting of known sites of archaeological importance; and
- a methodology for non intrusive survey and/or intrusive evaluation to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development.

3.8 In considering the above, the following repositories were consulted as part of the research assessment

- Dyfed Archaeological Trust (DAT) – HER, maps, archives, excavation reports;
- Royal Commission on Ancient and Historic Monuments of Wales (RCAHMW), Aberystwyth – NMR, aerial Photos, maps, archives;
- National Library of Wales (NLW), Aberystwyth – maps, archives;
- Cadw – SAM Listings, Listed Buildings;
- County Records Office – Maps, plans; and
- Local libraries – local histories and journals etc.

3.9 The following maps were included in the study:

- OS Surveyors drawing (1809-1836);
- Tithe apportionment and parish map of Trelech a'r Betws (1844);
- Ordnance Survey 1st Edition map of 1889 (1:2500);
- Ordnance Survey 2nd Edition map of 1906 (1:2500);
- Ordnance Survey Edition map of 1953 (1:10560);
- Ordnance Survey Edition map of 1964 (1:10560); and
- Ordnance Survey Edition map of 1973 (1:10000).

3.10 Photographs

3.11 Aerial photos consulted spanned the years 1946 – 2009.

3.12 All photographs appropriated during the site walkover were undertaken using a 10MP Olympus SLR in SHQ JPEG format and where considered necessary RAW file format were also appropriated.

3.13 Following the results of the desk based assessment, the potential for further archaeological work was considered in order to assess the viability for further study of the assessment results and to provide an indication of the relative importance of the material in any subsequent decision-making and mitigation strategies.

3.14 Assessment of Direct Impact Methodology

3.15 The system employed to evaluate the cultural value and direct effects of the proposed development on the archaeological resource is based on the site significance value scale as set out in the Design Manual for Roads and Bridges (DMRB, Volume 11, Section 3, part 2 HA

208/07) (Ref. 2).

- 3.16 The value of all the known and potential assets that may be affected by the Development should be ranked, whether they are archaeological remains, historic buildings or historic landscapes.

The value of each asset has been ranked according to the following scale:

- *Very High* - World Heritage Sites (including nominated sites). Assets of acknowledged international importance. Assets that can contribute significantly to acknowledged international research objectives;
- *High* - Scheduled Monuments (including proposed sites). Undesignated assets of schedulable quality and importance. Assets that can contribute significantly to acknowledged national research objectives;
- *Medium* - Designated or undesignated assets that contribute to regional research objectives;
- *Low* - Designated and undesignated assets of local importance. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives;
- *Negligible* - Assets with very little or no surviving archaeological interest; or
- *Unknown* - The importance of the resource has not been ascertained.

- 3.17 The following list provides an indication as to the predicted effect the Development will have on individual archaeological features. Potential impacts, direct and indirect, have been assessed in terms of their longevity, reversibility and nature (beneficial / neutral / adverse):

- **Permanent impacts** are those that persist beyond the predicted operational lifetime of the Development. All direct impacts are considered to be permanent;
- **Temporary impacts** arise as a result of the presence of elements of the Development but which would be removed by the dismantlement of those elements. Temporary impacts can be short-term (e.g. construction phase impacts); or long-term (arising from the long-term presence of the development affecting the setting of a receptor);
- **Reversible impacts** are those that are removed by the decommissioning / dismantling of the Development;
- **Irreversible impacts** are those that persist beyond the lifetime of the Development. All permanent and direct impacts are irreversible;
- **Beneficial impacts** are those that contribute to the value of a receptor through enhancement of desirable characteristics or the introduction of new, positive attributes. In terms of cultural heritage, beneficial impacts include those that add to an appreciation of the receptor and/or its setting;
- **Neutral impacts** occur where the development can be accommodated comfortably by the receptor while neither contributing to nor detracting from the value of the receptor; and
- **Adverse impacts** are those that detract from the value of a receptor through a reduction in, or disruption of, valuable characterising components or patterns, or

the introduction of new inappropriate characteristics. In terms of cultural heritage, adverse impacts include those that detract from an appreciation of the receptor and/or its setting, or compromise views to or from the receptor.

- 3.18 The magnitude of the effect needs to be viewed in conjunction with the value of the monument, in order to appreciate the overall significance of any effect on a given archaeological feature. The magnitude of the effect (degree of change) can also be negative or positive, and should be ranked without regard to the value of the asset. The total destruction of a Low Value asset will have the same magnitude of impact on the asset as the total destruction of a High Value asset; the value of the asset is factored in when the significance of the effect is assessed.
- 3.19 The magnitude of the effect was ranked according to the following scale:
- **Major:** Change to most or all key archaeological materials, such that the resource is totally altered. Comprehensive changes to setting;
 - **Moderate:** Changes to many key archaeological materials, such that the resource is clearly modified. Considerable changes to setting that affect the character of the asset;
 - **Minor:** Changes to key archaeological materials, such that the asset is slightly altered. Slight changes to setting;
 - **Negligible:** Very minor changes to archaeological materials, or setting; or
 - **No Change:** No change
- 3.20 Assessing the significance of the effects of the scheme brings together the value of the resource and the magnitude of the effect for each cultural heritage asset, using the matrix illustrated in the Table 1. The adverse or beneficial significance of effect has been expressed according to the following scale: Major; Moderate; Minor; or Negligible.
- 3.21 For the purpose of satisfying this assessment, those effects that are rated as 'moderate', 'major' or 'major/moderate' based on Table 1, are considered to be 'significant'.

Table 1. Matrix of Significance Criteria						
		Magnitude of Effect				
		No Change	Negligible	Minor	Moderate	Major
Value	Very High	Negligible	Minor	Moderate / Major	Major	Major
	High	Negligible	Minor	Moderate / Minor	Moderate / Major	Major
	Medium	Negligible	Negligible / Minor	Minor	Moderate	Moderate / Major
	Low	Negligible	Negligible / Minor	Negligible / Minor	Minor	Moderate / Minor
	Negligible	Negligible	Negligible	Negligible / Minor	Negligible / Minor	Minor

3.22 Site Inspection

- 3.23 The site visit set the context of the assessment, identifying:

- The location and character of archaeological sites and features within the proposed development area and all high value sites up to a 5km radius from the centre of the site that

Environment: Historic Environment Planning Practice Guide (2010) (Ref: 3).

- 3.33 The aim in assessing the setting of an archaeological site, particularly one that is designated, such as a listed building, a scheduled monument or further still an historic landscape, is to prevent it becoming isolated from its surroundings.
- 3.34 For the purposes of this assessment, a setting is considered to have two principal dimensions - "immediate or near setting" and "wider or far setting", although some features, by nature of their location and surroundings, may not have a wider setting.
- *immediate/near setting* - ancillary land used with the building or monument, or within the curtilage of the building, e.g. the garden of a listed building or the rear gardens of buildings around the outskirts of a conservation area. Citation boundaries can be an indication of the immediate setting; and
 - *wider/far setting* - an area around the cultural heritage feature, which may be built environment or part of the countryside and which may or may not be functionally linked or contemporaneous with the age of the feature, but which contributes to the special interest and understanding of the feature.
- 3.35 There is no requirement under current statute, guidance or even case law that the wider setting should extend to the extreme limit of visibility, although the extent of a setting will tend to widen with the importance of the principal heritage feature. Regard should be given to views from the cultural heritage feature towards the Proposal, views from the Proposal towards the cultural heritage feature and views from any other relevant location. However, visibility is only the necessary starting point and, thereafter, it must be determined just what of relevance is visible in the heritage feature and its setting, what relationships exist between these visible elements and what weight or importance should be attributed to the whole (Ref. 4).
- 3.36 Further to this approach, regard must be given to the fact that setting is primarily governed by function and even nationally important heritage features may have narrow settings.
- 3.37 Landscapes and land-use often change over time, and thus an assessment of the setting of a designated site within the wider landscape requires a balance to be achieved between the concept of its original historic setting and its development as part of the modern day landscape.
- 3.38 The study has considered the physical attributes of each site and its setting in terms of topography, its original economic function and natural resources, historic resonance with land-use, connections and communications with neighboring features of the historic landscape and inter-visibility between them, as well as cultural associations and issues of public perception. The assessment has also examined what peripheral effect the wind turbines would have on the historic views from each site, and on public appreciation of them as features of special historic and architectural interest.
- 3.39 Assessing the significance of the indirect effects of the scheme brings together the value of the resource and the magnitude of the effect for each cultural heritage asset, using the same matrix illustrated in the Table 1. The adverse or beneficial significance of effect has been expressed according to the following scale: Major; Moderate; Minor; or Negligible.
- 3.40 For the purpose of satisfying this assessment, those effects that are rated as 'moderate', 'major'

or 'major/moderate' based on Table 1, are considered to be 'significant.

- 3.41 The value of archaeological sites have been assessed in accordance with the value scale as set out in the Design Manual for Roads and Bridges (DMRB, Volume 11, Section 3, part 2 HA 208/07) (Ref. 2).
- 3.42 All designated Scheduled Ancient Monuments (SAMs), undesignated sites of schedulable quality and Grade I and Grade II* Listed Buildings have been assessed as being High Value sites and as such are of National importance.
- 3.43 All Grade II Listed Buildings have been assessed as being Medium Value sites and as such are of Regional Importance.
- 3.44 In order to aid and inform the assessment of the potential indirect effect of the proposed development on heritage assets within the 5km radius, Zones of Theoretical Visibility (ZTV) maps were produced at both hub height and blade tip (see Figures 15 and 16 in Appendix I). By examining these ZTVs specific sites, where impacts were visually predicted, were targeted and each identified site was visited and assessed on its own merits. To compliment these site visits photomontages were also produced from each site looking in the direction of the proposed development. These are reproduced in Appendix II.
- 3.45 As part of the indirect effect assessment the cumulative effect of the proposed development was assessed in conjunction with other known wind turbine sites within the 5km radius.

4 Desk-top Assessment and Baseline Conditions

4.1 Previous Archaeological Works

- 4.2 Other than general field work that has taken place in the wider landscape over the decades in the region, there has been no archaeological work undertaken within the application area itself.

4.3 Historic and Archaeological background

- 4.4 In order to put the study area into historical context a brief parish history of the area is included as described by Samuel Lewis in his extensive *Topographic Dictionary of Wales* of 1833. Following this is summary of the historic landscape aspect from LANDMAP's Carmarthenshire region. Following this are the results, in chronological order, of the desk based assessment of the application area (red line boundary) and the wider landscape study up to a 5km radius.
- 4.5 The application site is within the parish of 'Trelech a'r Betws', and according to Samuel Lewis's '*A Topographic Dictionary of Wales*' (1844), ".....a parish, in the Higher division of the hundred of Elvet, union and county of Carmarthen, South Wales, 8 miles distant (N. W. by W.) from the town of Carmarthen; containing 1620 inhabitants. This parish comprises a large tract of arable and pasture, inclosed, and a very extensive district of uncultivated land, consisting chiefly of heath and turbaries, from which latter the inhabitants principally obtain their fuel, and which also afford a supply to the neighbouring parishes. The surface is uneven, and in some parts hilly. The petty-sessions for the hundred are held here every month. Trelêch constituted a prebend in the ancient college of Llandewy-Brevi, rated in the king's books at £16, and in the gift of the Bishop of St. David's. The living is a discharged vicarage, rated in the king's books at £6. 13. 4., and endowed with £400 royal bounty, and £1200 parliamentary grant; patron, the Bishop; impropriators, the Earl of Lisburne, and Richard Price,

Esq. The impropriate tithes have been commuted for a rent-charge of £390, and the vicarial for one of £95; the impropriate glebe comprises above forty acres, and the vicarial above thirty two acres, with a glebe-house. The church, dedicated to St. Teilo, and situated within two miles of the turnpike-road from Carmarthen to Cardigan, was rebuilt in 1834, and is a neat and commodious structure: Capel Bettws is a chapel of ease to it. There are two places of worship for Independents, one for Calvinistic Methodists, and one for Baptists.

- 4.6 *A school was founded in 1804, by Mr. William Davies, formerly of Plâs-y-Park in the parish, and afterwards citizen of London, who endowed it with £4563. 15. 5., in the three per cent. consols., directing the dividends to be appropriated to the education, clothing, and apprenticing of children. It contains about seventy children, and the master's salary is £40 per annum: the total income from the dividends amounts to £136. 18. The house consists of a schoolroom on the ground-floor, and two apartments above, one for the meeting of the trustees, and the other used as a storeroom. Two or three children are apprenticed yearly with premiums of about £4, and are also supplied with clothes during their apprenticeship. The trustees are, the minister, churchwardens, overseers of the poor, and every inhabitant possessed of a freehold of £50 per annum. There are also six Sunday schools, four of them connected with the Independents, one with the Baptists, and one with the Calvinistic Methodists. Mrs. Elizabeth Lewis, of Blaendewi in the parish, bequeathed £100, of the interest of which she directed £1 per annum to be paid to the support of a meeting-house, and the remainder to be distributed among the poor; but the sum was lost by the insolvency of a solicitor, at Carmarthen, to whom it had been lent at interest. A rent-charge of 5s., by an unknown donor, is annually divided among five persons.*
- 4.7 *In the parish is a remarkable barrow, called Crûgy-Deyrn, or the "king's barrow," about sixty paces in circumference at the base, and rising with a gradual slope to the height of six yards; on the summit is a cavity, in the centre of which is a large stone of elliptical shape, three yards in length, five feet broad in the widest part, and about ten or twelve inches in thickness. On searching underneath, it was found to cover a cist-vaen, about four feet and a half in length, and three feet broad, within and around which were rude fragments of brick, and some pieces of bone, the latter supposed to have been brought there by foxes" (Ref 5).*

4.8 **Carmarthenshire Historic Landscape – LANDMAP**

- 4.9 The proposed application area falls entirely within one (1) historic Landscape character area within the LANDMAP survey region of Carmarthenshire. The Carmarthenshire region survey was completed in 2009 by Dyfed Archaeological Trust (DAT) in conjunction with the Countryside Council for Wales (CCW) and Carmarthenshire County Council (CCC).
- 4.10 The Carmarthenshire Historic Landscape was defined at Level 3 according to LANDMAP methodology (Ref 6). The application area falls within one (1) identified historic landscape area. This area is listed below followed by a detailed description of its characteristics and value to the Carmarthenshire Historic Landscape as a whole.

Trelech (LANDMAP Ref id: CRMRTL42474)

- 4.11 This character area was assessed at Level 3 and is described as a rural environment, agricultural with fieldscapes and medium Fields. Trelech is a very large area of hamlets and dispersed farms, including some large holdings, in a landscape of irregular fields. Fields become larger on higher ground to the north. Woodland on the steep, deeply incised valley sides is characteristic. Most significant archaeological element(s). Extant buildings include churches, chapels, mills, etc, Iron Age forts and small industrial sites.
- 4.12 The traditional boundary type hedge-bank. The main archaeological interests in this landscape area include documentary records, buried remains, relict stone monuments, relict earthworks and industrial archaeology. The chronological periods covered include the prehistoric, Roman, medieval, post medieval and recent. There are Scheduled Ancient Monuments, Listed Buildings and a conservation area within this character area. However, there are no Registered Parks & Gardens within this character area. There is also a Registered Historic Landscape in this Character Area.
- 4.13 The area is considered of *High* value historically and in a fair condition. Management of this area was not assessed. The following table lists the principle evaluation criteria for this character area.

Table 2 - LANDMAP Evaluation Criteria (Ref id: CRMRTL42474)					
Integrity	Survival	Condition	Rarity	Potential	Overall Evaluation
<i>Outstanding</i>	<i>Outstanding</i>	<i>Fair</i>	<i>Moderate</i>	<i>Moderate</i>	<i>High</i>

4.14 Heritage Assets within 5km radius (Historic Environment Records)

Prehistoric Periods

- 4.15 There are no known prehistoric sites of any period recorded within the application area, within the regional Historic Environment Record (HER) nor within the National Monuments Record database. However, within the prescribed 2km radius from the two proposed turbine locations, the HER database records twelve(12) known prehistoric sites, in the form of Bronze Age round barrows and standing stones, one of which is a Scheduled Ancient Monument (SAM).

- 1) *Crug y Deyrn Burial Chamber* (PRN: 3964 / SAM Ref: CM127) – This SAM site is positioned in the corner of a relatively flat field alongside a narrow country road at a height of 210m AOD, approximately 800m southwest of the nearest proposed turbine location (Turbine 2). This monument is generally described as being an earthen mound, approximately 27m in diameter and 3.2m in height. The area between the site and the road (to the S-W) is left as waste rough pasture. The top of the mound has been mutilated and a fallen stone exposed. There are also traces of erosion on the south and west sides. The mound is covered with rough grass and some gorse. The mound is also open at its northern end, which implies

that the mound has been dug out from the north and was almost certainly robbed of grave goods several centuries ago. Because of the size of the mound, with the presence of such a large fallen capstone and as the name of the monument suggests, the mound likely once was a small chambered tomb that held an individual of high status and was not simply a cist cairn. Although the monument is called 'Crug y Deyrn', the mound is recorded in English historical accounts as the 'King's Barrow', which could suggest that an early name for this earthwork was most probably 'Crug y teyrn', which translates as 'Mound of the Monarch', the word 'teyrn' having been later corrupted by cartographic entries and other English accounts into 'deyrn' and also 'dryn'. Antiquarians accounts in the 19th century suggest the tomb was dug out in the preceding century, which exposed a *stone chamber* measuring 4 ½ feet by 3 feet in extent, with the remains of fragments of *brick* (probably pottery fragments) and a few bones (Refs: 7, 8 and 9).

4.16 As well as this designated high value site, the other eleven (11) medium value prehistoric sites recorded within the HER database within the 2km radius include three (3) Bronze Age round barrows and eight (8) Bronze Age standing stones. In the case of the standing stones recorded in the HER database, no standing stone presently exists at any of the given grid references and each have been plotted solely by place-name evidence only.

i) *Parc y Garn Round Barrow* (PRN: 7458) – This marks the position of a possible Bronze Age round barrow evident from place name evidence only and marked on a former pipeline project map. A site visit in 1984 found no evidence of any barrow at the given grid reference, which lies approximately 262m south of the nearest proposed turbine location.

ii) *Parc y Coed Round Barrow* (PRN: 2233) - This site lies approximately 600m northeast of the nearest proposed turbine location. The Ordnance Survey described this site in 1974 as being a low mound having a slight oval appearance by being built on a slight natural east to west ridge. It has been considerably reduced by ploughing. The site was last ploughed in the spring of 1976. The mound stands at a height of only 0.4-5m.

iii) *Treparcau Round Barrow* (PRN: 42525) - This Bronze Age round barrow lies approximately 1.85km northwest of the nearest proposed turbine location. This site is recorded as destroyed.

iv) *Parc y Garreg Llwyd Standing Stone* (PRN: 1241) – This site is positioned approximately 1km south-south-east of the nearest proposed turbine location. Although this site is marked as a Bronze Age standing stone in the HER database, there is no

trace of a standing stone at the given grid reference.

v) *Garreg Llwyd Standing Stone* (PRN: 2226) - This site is positioned approximately 633m southeast of the nearest proposed turbine location. Although this site is marked as a Bronze Age standing stone in the HER database, the stone is presumed destroyed.

vi) *Treparcau stones Standing Stone* (PRN: 3944) - This site is positioned approximately 1.97km northwest of the nearest proposed turbine location. This standing stone is attributed as being near destroyed in the HER database with no further record details.

vii) *Pen yr Allt Stone Standing Stone* (PRN: 3974) - This site is positioned approximately 990m south of the nearest proposed turbine location. A site visit in 2001 revealed that there was no archaeological trace of a monument existing in the area indicated by the grid reference, nor in the immediately surrounding area.

viii) *Parc y Maen Standing Stone* (PRN: 8054) - This site is positioned approximately 1.79km northwest of the nearest proposed turbine location. This site is recorded by place name evidence only and no standing stone exists at the given grid reference.

ix) *Parc Maen Standing Stone* (PRN: 8055) - This site is positioned approximately 910m west of the nearest proposed turbine location. This site is recorded by place name evidence only and no standing stone exists at the given grid reference.

x) *Parc Garreg Standing Stone* (PRN: 8056) - This site is positioned approximately 910m west of the nearest proposed turbine location. This site is recorded by place name evidence only and no standing stone exists at the given grid reference.

xi) *Parc y Garreg wen Standing Stone* (PRN: 10412) - This site is positioned approximately 880m east of the nearest proposed turbine location. This site is recorded by place name evidence only and no standing stone exists at the given grid reference.

4.17 Outside the 2km radius but within the prescribed 5km radius there are no further designated prehistoric sites.

4.18 ***Iron Age and Romano-British period***

4.19 There is no known Iron Age or Romano-British sites within the application site recorded within the regional HER, nor within the National Monuments Record database.

4.20 However, within the 2km radius there are three(3) known Iron Age/Romano British sites recorded, one being the remains of Iron Age hillfort, the other a defended enclosure and the other sites represented by findspot locations.

i) *Pant y coed Hillfort* (PRN: 2228) – The remains of this hillfort are positioned approximately 985m northeast from the nearest proposed turbine location. The hillfort is identifiable only as a cropmark and visible on vertical RAF 1946 and Meridian1955

aerial photos. Surface remains have been ploughed away.

- ii) *Castell Gorwyn Defended Enclosure* (PRN: 2223) – The remains of this defended enclosure are positioned approximately 1.27km east from the nearest proposed turbine location. This circular, univallate defended enclosure lies in a field called Parc y castell on Castell Gorwyn farm and occupies a gentle northeast-facing slope (almost level) 180m above sea level. Immediately to the north, east and southeast of the enclosure the land falls steeply away. Aerial photographs show a roughly circular enclosure, with an internal diameter of c.30m, defined by a low earthwork bank. On the ground the interior of the site is marked by a dished hollow, up to 0.4m deep with traces of a low spread bank 0.3m high and up to 10m wide, best preserved on the uphill side. There is a simple entrance on the east side. The site lies in improved pasture.
- iii) *Pen y graig find-spot* (PRN: 3431) – This find is represented by a spindle whorl discovered during ploughing. The find-spot lies approximately 1.72km southwest of the nearest proposed turbine location.

4.21 Outside the 2km radius but within the prescribed 5km radius there are two (2) designated High Value Iron Age sites, one hillfort (SAM Ref: CM295) and one defended enclosure (SAM Ref: CM126).

- i) *Castell Mawr Defended Enclosure* (SAM Ref: CM126) - Castell Mawr, Trellech a'r Betws, is a sub-circular enclosure, c.92-94m in diameter set on a southwest facing slopes towards a hill-summit, defined by a bank and ditch. It is generally reduced to a scarp, except on the southwest, where a squared-off entrance facade has an additional bank.
- ii) *Pen castell Hillfort* (SAM Ref: CM295) - This designated hillfort is positioned approximately 4.86km northwest of the nearest proposed turbine location. This monument is a promontory hillfort having three, widely spaced, rampart and ditch systems on its southern side.

4.22 **Medieval Periods**

4.23 The HER records no known medieval sites within the application area, nor within the National Monuments Record database. Within the 2km radius there are only three (3) known medieval data-points and each is associated with Trelech a'r Betws parish church, the Church of St. Teilo (PRN'S: 12651 / 8070/ 49320).

- i) *Church of St. Teilo* (PRN: 12651) - Medieval parish church, entirely (re)built in 1834-5 as PRN 5251, apparently on the same site, and in the same location, as its predecessor but retaining nothing from the earlier fabric. See churchyard PRN 49320 for description of site, discussion and management recommendations. The church is

positioned approximately 1.45km northeast from the nearest proposed turbine location, immediately south of the village of Pen-y-bont.

- ii) *Church of St. Teilo, Churchyard* (PRN: 49320) - Early medieval D site. ie. possible early medieval origins. Churchyard occupied by the medieval Trelech a'r Betws parish church PRN 12651, which was entirely (re)built in 1834-5 as PRN 5251. It may have been an early 'Teilo' church, possible the 'Llandeilo Tref y Cernyw' mentioned in a 12th century entry in the Llandaff Charters; however, a better candidate for this site is represented by Crinow Church (St Teilo) in Pembs. The churchyard is markedly sub-circular/oval and may have been adapted from a defended enclosure. A rough orthostat in the churchyard, PRN 8070, is regarded as a weathered post-Conquest cross, but its original form and date are unknown. Positioned approximately 1.45km northeast from the nearest proposed turbine location, immediately south of the village of Pen-y-bont.
- iii) *Church of St. Teilo, Cross* (PRN: 8070) – Medieval cross once in churchyard of Church of St. Teilo. Now destroyed. Positioned approximately 1.45km northeast from the nearest proposed turbine location, immediately south of the village of Pen-y-bont.

4.24 Outside the 2km radius but within the prescribed 5km radius there is only one (1) designated medieval site, the medieval chapel known as 'Capel Betws' (SAM Ref: CM125).

- i) *Capel Betws* (SAM Ref: CM125) - The remains of Capel Bettws, a medieval chapel of ease, are located some 90m south-east of the farm, Gilfach-y-Bettws. The earliest known reference to the chapel dates to 1684. First edition Ordnance Survey mapping depicts a track leading from Gilfach-Bettws to the northern boundary of the field in which Capel Bettws is located. The track then branches into two routeways, one following the west field boundary and the other following the east. The east routeway can be traced for some 2km, most of which is also visible on modern Ordnance Survey mapping. Capel Bettws had fallen into disuse by 1710.

The building consisted of a nave and chancel with an added north aisle. The nave and chancel are thought to be late thirteenth century, with the aisle dating from about a century later. Measurements are given as: chancel 14ft x 13ft; nave 30ft x 16ft; north aisle 20ft x 7ft. The church was visited by RCAHMS staff in 1913. The nave arcade was noted as consisting of two bays, with a single octagonal pier. The east window was of two lights measuring some 5ft, and the chancel was lit by a single light in the north wall. The upper portions of both were gone at that time. The two arches of the aisle arcade have recently fallen. There were no windows in the aisle. A passage measuring 10ft 6in length was noted to lead from the aisle to the chancel. Its entrance was noted to be a doorway with a depressed arch in the west wall.

The remains of Capel Bettws are positioned approximately 2.75km northwest of the nearest proposed turbine location at a height of approximately 175m AOD.

4.25 **Post-Medieval periods**

- 4.26 Within the HER database there are no post-medieval sites recorded within the application area itself, most of the field boundaries, hedgerows and hedge-banks, were most likely founded in the early post medieval period, in either the late 17th century or else in the 18th century following the implementation of the Enclosure Acts.
- 4.27 As would be expected, this chronological period marks the greatest number of known sites within the wider study area, a total of 33 sites are located within the 2km radius. Site types include: 1 Blacksmiths, 3 bridges, 1 building, 2 chapels, 1 church, 11 cottages, 1 find-spot, 1 gravel pit, 1 mansion, 3 mills, 3 quarries, 2 schools, 1 vicarage, 1 well.
- 4.28 All of the post medieval sites within the 2km radius are medium value sites except for one site, the bridge at Pen-y-bont, known as 'Pont Trelech', which is a Grade II Listed building.
- i) Pont Trelech (LB Ref: 26756) – Grade II Listed building positioned approximately 1.46km northeast of proposed Turbine 1.
- 4.29 Within the prescribed 2km to 5km radius, there are a further twenty-one (21) Listed Buildings, twenty (20) of which are Grade II Listed and the remaining one (1) site is a Grade II* Listed Building. The list below is of all Listed Buildings within the 5km radius from both Turbine 1 and Turbine 2.
- i) *Capel y Graig, schoolroom and railings.* (LB Ref: 9758) – Grade II* Listed Building. Approximately 4.58km north-north-west of proposed Turbine 1.
 - ii) *Dan-y-Graig* (LB Ref: 19091) – Grade II Listed Building. Approximately 4.1km south of proposed Turbine 2.
 - iii) *Outbuilding on N side of yard at Dan-y-graig* (LB Ref: 19092) – Grade II Listed Building. Approximately 4.1km south of proposed Turbine 2.
 - iv) *Outbuilding on N side of yard at Dan-y-graig* (LB Ref: 19093) – Grade II Listed Building. Approximately 4.1km south of proposed Turbine 2.
 - v) *Outside toilet at Dan-y-graig* (LB Ref: 19094) – Grade II Listed Building. Approximately 4.1km south of proposed Turbine 2.
 - vi) *Rhyd-y-garreg-ddu* (LB Ref: 23886) – Grade II Listed Building. Approximately 2.8km east of proposed Turbine 1 and 2.
 - vii) *Coach-house at Rhyd-y-garreg-ddu* (LB Ref: 23887) – Grade II Listed Building. Approximately 2.8km east of proposed Turbine 1 and 2.

- viii) *Ystafell* (LB Ref: 23888) – Grade II Listed Building. Approximately 5km southeast of proposed Turbine 2.
- ix) *Capel y Graig and attached railings and gates* (LB Ref: 25465) – Grade II Listed Building. Approximately 4.2km west of proposed Turbine 2.
- x) *Cwmbach County Primary School* (LB Ref: 25466) – Grade II Listed Building. Approximately 4.2km west of proposed Turbine 2.
- xi) *Cilsant Farmhouse* (LB Ref: 25467) – Grade II Listed Building. Approximately 3.6km southwest of proposed Turbine 2.
- xii) *Range of outbuildings at Cilsant* (LB Ref: 25468) – Grade II Listed Building. Approximately 3.6km southwest of proposed Turbine 2.
- xiii) *Pentairrhiw* (LB Ref: 25470) – Grade II Listed Building. Approximately 2.9km southwest of proposed Turbine 2.
- xiv) *Church of St David* (LB Ref: 26745) - Grade II Listed Building. Approximately 4.9km south of proposed Turbine 2.
- xv) *Bethel Calvinistic Methodist Chapel* (LB Ref: 26746) - Grade II Listed Building. Approximately 4.8km south of proposed Turbine 2.
- xvi) *The Close* (LB Ref: 26747) - Grade II Listed Building. Approximately 4.8km south of proposed Turbine 2.
- xvii) *L-plan outbuilding to E of The Close* (LB Ref: 26748) - Grade II Listed Building. Approximately 4.8km south of proposed Turbine 2.
- xviii) *L-plan outbuilding to N of The Close* (LB Ref: 26749) - Grade II Listed Building. Approximately 4.8km south of proposed Turbine 2.
- xix) *Smithy at Danyrhiw* (LB Ref: 26750) - Grade II Listed Building. Approximately 4.8km south of proposed Turbine 2.
- xx) *Maenllwyd* (LB Ref: 26752) - Grade II Listed Building. Approximately 4.9km south of proposed Turbine 2.
- xxi) *Cwm* (LB Ref: 26754) - Grade II Listed Building. Approximately 4.8km south-southeast of proposed Turbine 2.

4.30 Cartographic Sources

OS Surveyors drawing (1809-1836)

- 4.31 This early OS map marks the site of 'Neuadd', although hard to decipher from the Photostat in the National Library. All of the boundaries presently in existence at Neuadd Farm are present on this early OS map drawing.

Tithe Map and Apportionment of the parish of Trelech a'r Bettws (1844)

- 4.32 The Tithe map and apportionment records for the parish of Trelech a'r Bettws of 1844 clearly marks the farmstead of Neuadd, but written as 'Noiodd'. Within the farm complex, within the red line boundary itself there are a number of field boundaries no longer present. Also shown is the absence of the present access road that gives access to the farm complex and divides the two fields where both turbines have been proposed. Looking at later OS maps, it appears that this access road didn't come into full use until the late 19th century. All of the land in 1844 was owned by Evan Davis, who tenanted the property out to one Frances Evans. The total acreage was 54 acres, 1 perch and 23 rods.

Table 3 - Tithe Map and Apportionment details within Application Area				
Tithe No.	Name	Owner	Occupier	Details
202	Parc y tos las	Evan Davis	Frances Evans	No details given
203	Parc + Eithin	Evan Davis	Frances Evans	No details given
204	Park with Cefn + ydian	Evan Davis	Frances Evans	No details given
205	Park Gwyn	Evan Davis	Frances Evans	No details given
206	Park dryos?	Evan Davis	Frances Evans	No details given
206*	Park y dryoi isaf	Evan Davis	Frances Evans	No details given
207	Llaml y isaf	Evan Davis	Frances Evans	No details given

OS First Edition map 1:2500 (1890)

- 4.33 This first published OS map series shows the area much as it is shown on the Tithe map of 1844, but with the development of the present primary access track linking to the main road to the west.

OS second Edition map 1:2500 (1907)

- 4.34 No great change from the earlier first edition map, apart from further development of the primary access track.

OS second Edition map 1:10560 (1953)

- 4.35 No change from the earlier first edition map.

OS second Edition map 1:10560 (1964)

- 4.36 No change from the earlier first edition map.

OS second Edition map 1:10000 (1977-80)

- 4.37 The only change on this later modern OS map is the disappearance of two hedge-banks in the northern field within the application area, otherwise no change from the OS Second Edition map series.

Aerial Photos

- 4.38 Aerial photos investigated as part of the desk based assessment included the RAF 1946 and 1955 Meridian vertical photographs. As with the early post-war map series, these early aerial photos show the application site much as it is today. No apparent cropmarks were identified on any of the aerial photos analysed.

Table 4. RAF Vertical Aerial Photos consulted

Sheet No.	Sortie	Frame No.	Date	LIB
139	106G/UK/1471	3301	04/05/1946	368
139	106G/UK/1471	3302	08/07/1946	368
139	106G/UK/1471	6299	08/07/1946	368
139	106G/UK/1471	6300	08/07/1946	368
139	106G/UK/1471	6301	08/07/1946	368
139	106G/UK/1471	6302	08/07/1946	368
139	106G/UK/1625	5101	07/07/1946	417
139	106G/UK/1625	5102	07/07/1946	417

Table 5. Meridian Vertical Aerial Photos consulted

Sheet No.	Sortie	Frame No.	Date	LIB
	27570-1	220	1955	368

- 4.39 Site Visit

- 4.40 The field visit to the site walked the perimeter of the application area noting the character and form of all of the boundaries. These were all hedgerow and hedgebank.

- 4.41 Following this, each of the fields and the proposed locations of each of the proposed turbines were walked over to assess the character of the area, whether there were any potential archaeological surface features in the area and also to assess the potential indirect effect of each of the turbines on the surrounding designated and undesignated heritage interests in the wider landscape.
- 4.42 In the area of the proposed turbines, access tracks and electrical box, no surface features were readily evident.
- 4.43 A site visit was also undertaken to a number of key sites within the 5km study area, identified by the Zone of Theoretical Visibility (ZTV) maps, in order to assess the significance of indirect impact from the proposed turbines on their setting.
- 4.44 Sites noted within the Application Area**
- 4.45 Within the application area, the regional HER database and the NMR database recorded no known archaeological sites present.
- 4.46 The cartographic study and site visit however, identified a total of three (3) sites. A list of all those identified is given below in Table 6 below.

Table 6. Heritage Assets within application site				
Site No.	PRN	Site Type	Description	Source & period
1		Hedgebank	Hedgebank now absent	Tithe map (1844)
2		Hedgebank	Hedgebank now absent	Tithe map (1844)
3		Hedgebank	Hedgebank now absent	Tithe map (1844)

5 Assessment of Effects

5.1 Direct Physical Effects

- 5.2 The desk based assessment and site visit has identified no direct physical impact from the proposals on any known heritage asset. However, given the apparent fairly rich prehistoric character of the landscape within the 2km radius from the proposed turbine locations, it cannot be ruled out that there aren't buried archaeological remains relating to the prehistoric periods present within the application site. However, because both of the fields within the application site have been repeatedly ploughed over the centuries, any potential buried archaeological remains have very likely been damaged or else destroyed.

5.3 Indirect non-physical Effects

- 5.4 Indirect physical effects associated with the development are not considered to be of sufficient magnitude in this instance to warrant separate assessment. There are no known sites within the development site boundary that include fragile deposits (for example waterlogged organic remains) that might be affected by changes in hydrology or from increased erosion. In terms of

dislocating certain features from their attendant landscapes, the development will inevitably however introduce a visual component, which is considered under indirect visual effects below.

5.5 Indirect Visual Effects

- 5.6 Within the 5km radius from the proposed turbine location, the assessment has identified twenty-six (26) designated sites. Four (4) of these designated sites are Scheduled Ancient Monuments (SAMs) and twenty-two (22) are Listed Buildings (LBs). Each of these designated sites have been assessed in terms of the indirect effect of the proposed development on their setting. To aid this assessment, Zones of Theoretical Visibility (ZTV) maps have been produced at both hub height and blade tip (see Figures 15 and 16).
- 5.7 The ZTV maps predict that at both hub height and blade tip, only two (2) of the SAM sites and only three (3) LB sites will have visibility of the proposed turbines, each Grade II Listed Buildings.
- 5.8 In view of this prediction, each one of these designated sites has been assessed individually on its own merits.

5.9 Scheduled Ancient Monuments (SAMs) Indirectly effected

5.10 1) Crug y Deyrn Burial Chamber (SAM Ref: CM127)

Location and Context

- 5.11 This burial Bronze Age burial mound is positioned approximately 800m south-south-west of the proposed Turbine 2, at a height of approximately 210m AOD. This monument is positioned within a wire fenced scheduled area enclosure on the northern side of a narrow country road, which is bounded on each side by an avenue of oak trees.

The Site

- 5.12 For descriptive account of this site please see section 4.15.

Immediate and Wider Setting

- 5.13 The immediate setting of this monument is at the highest point of a gently sloping plateau at a height of 210m AOD. Presently the monument is set within a post and wire fence scheduled area enclosure at the corner of a ploughed field. Access to the monument is not possible as there is no public access to the site. As such anyone visiting the site is limited to viewing the site from the road alongside an avenue of oak trees looking northwards, or else viewing the site from another side road to the northeast looking southwest. Immediately north and north-north-east of this monument, approximately 330m distant are the two working farm complexes of Llainlas and Nant y Helygen, which dominate views to the north and north-north-east. Views south, west and east are limited to hedgerows and hedgebanks.
- 5.14 With post medieval and modern components removed from the immediately surrounding landscape, standing at this Bronze Age monument would have allowed clear views of all neighboring summits to the northeast and south. Most likely the original setting of the site would have been one of open moor land. Topographically, it is most likely that original processional

access to this monument would have been preferably gained from the north or northeast as the topography drops down to the south slightly. However, the monument also may have been deliberately positioned at the summit of the plateau so that views from the lower valley areas to the south may have had good visibility of the mound on the higher ground.

5.17 *Assessment of Effects*

5.18 The proposed position of Turbine 1 will lie approximately 800m to the north-north-east and Turbine 2 will lie approximately 1km north-north-east of this monument. Evidently the original setting of this monument has already been considerably affected by the surrounding post medieval and modern landscape components, which include the road, hedgebanks, wire and post fencing and the immediate farm buildings approximately 330m to the north and north-north-east.

5.19 Public viewing of this monument from the road will not be affected by the proposal as the monument itself will screen views of both of the turbines to the north-north-east and even when standing at the top of the mound within the scheduled area, views to the northeast toward the proposed turbine locations will be dominated by the already existing farm complexes, both turbines only occupying a more distant partially obscured position over 800m – 1km distant and due to their relatively small scale the effect on the setting of this monument would be only slight.

5.20 Although the sensitivity of this monument is considered to be high (of national and regional importance) the indirect visual magnitude of effect is considered to be *Minor* and it is predicted that the overall significance of effect on this monument would be *Moderate/Minor* and temporary.

5.21 **2) Castell Mawr Defended Enclosure(SAM Ref: CM126)**

5.22 *Location and Context*

5.23 This SAM site is positioned in a field alongside a road. The field is presently rough pasture used as grazing for sheep. The field is completely enclosed by mature hedgebank and hedgerow on all sides. The monument is positioned at a height of approximately 175m AOD, approximately 2.8km northwest of the proposed turbine locations.

5.24 *The Site*

5.25 For a descriptive detail of this Iron Age enclosure please refer to section 4.21.

5.26 *Immediate and Wider Setting*

5.27 This monument is set within an open field used as grazing for sheep. The field is enclosed all round by mature hedgerow and hedgebanks. Access to the site is gained from a field gate at the side of the road.

5.28 With regards to the wider setting, with the post medieval boundaries removed and devoid of trees on the surrounding slopes, this site would once have been able to clearly view the hillfort of Pen Castell positioned a further 1.8km northwest. It would also very likely have had a clear vista looking toward the southeast. However, the presence of post medieval hedgebanks and hedgerow now completely screen views into the wider landscape, having already isolated this site from its original wider setting.

5.29 *Assessment of Effects*

5.30 Because of the presence of mature post medieval hedgerows and hedgebanks now completely screening this site from views into the wider landscape the indirect effect on this monument from the proposed development will be negligible.

5.31 Although the sensitivity of this monument is considered to be high (of national and regional importance) the indirect visual magnitude of effect is considered to be *Negligible* and it is predicted that the overall significance of effect on this monument would be *Minor* and temporary.

5.32 Listed Buildings (LBs) Indirectly effected

5.33 1) Cilsant House (LB Ref: 25467)

5.34 *Location and Context*

5.35 This farm complex is situated at the end of a long drive off a minor road some 2 km southeast of Cwmbach village. It is positioned approximately 3.6km southwest of the proposed Turbine 2 location at a height of approximately 140m AOD.

5.36 *The Site*

5.37 The present Cilsant house (PRN: 47113) is a Grade II Listed Building. The house is built on or close to the foundations of a 12th century fortified manor house. The present 19th century farmhouse retains 'antique features'.

5.38 *Immediate and Wider Setting*

5.39 Cilsant House is situated at the end of a long 800m drive or track, positioned on a flat terraced area at a height of approximately 140m AOD. The house sits within a working farm complex, with an extensive farm building complex immediately to the northwest and a further range of designated outbuildings to the west. The front façade of the house faces north-north-west and looks toward another building to the north.

5.40 With regards to the wider setting of the house, views into the wider landscape are presently screened by mixed woodland to the north and northeast and hedgerow to the west. These landscape components also partially screen views looking down toward the village of Gellywen in the lower valley.

5.41 *Assessment of Effects*

5.42 The ZTV maps at both hub height and blade tip predict that both of the proposed turbines at Neuadd Farm will be visible from this listed building. However, due to screening from intermediate landscape components, including mixed woodland and hedgerow on hillslopes to the northeast, this view will be diminished. Also, due to the small scale of the proposed development and the fact that this listed building is positioned 3.6km southwest of the proposed turbines, views of the turbines will only be slight and their presence will only merge with other landscape components at this distance.

5.43 So, although the sensitivity of this monument is considered to be medium (of regional importance) the indirect visual magnitude of effect is considered to be *Minor* and it is predicted that the overall significance of effect on this monument would be *Minor* and also temporary for the lifetime of the turbine.

5.44 **2) Cilsant Farm Range of Outbuildings (LB Ref: 25468)**

5.45 *Location and Context*

5.46 This farm complex is situated at the end of a long drive off a minor road some 2 km southeast of Cwmbach village. It is positioned approximately 3.6km southwest of the proposed Turbine 2 location at a height of approximately 140m AOD.

5.47 *The Site*

5.48 The range of outbuildings at Cilsant are Grade II Listed and are associated with the 19th century Cilsant farmhouse.

5.49 *Immediate and Wider Setting*

5.50 The range of outbuildings at Cilsant are situated at the end of a long 800m drive or track, positioned on a flat terraced area at a height of approximately 140m AOD. The outbuildings sit within a working farm complex, with extensive an extensive farm building complex immediately to the north. To the east of this range is Cilsant House.

5.51 With regards to the wider setting of this range of outbuildings, views into the wider landscape are screened by existing farm buildings, mixed woodland to the north and northeast and the main Cilsant House to the east.

5.52 *Assessment of Effects*

5.53 The ZTV maps at both hub height and blade tip predict that both of the proposed turbines at Neuadd Farm will be visible from this designated site. However, due to screening from other farm buildings at Cilsant all views of the proposed development will be screened.

5.54 So, although the sensitivity of this monument is considered to be medium (of regional importance) the indirect visual magnitude of effect is considered to be *No Change* and it is predicted that the overall significance of effect on this monument would be *Negligible* and also temporary for the lifetime of the turbine.

5.55 **3) Pont Trelech (LB Ref: 26756)**

5.56 *Location and Context*

5.57 This stone bridge is positioned approximately 1.5km northwest of the proposed Turbine 1 location at a height of approximately 140m AOD, within the village of Pen-y-bont.

5.58 *The Site*

5.59 The stone bridge at Pen-y-bont is a single arch bridge crossing the river Dewi Fawr.

5.60 *Immediate and Wider Setting*

5.61 The immediate and wider setting of this bridge is a village context set within a narrow valley

surrounded by steep wooded hillslopes.

5.62 *Assessment of Effects*

5.63 The ZTV map at blade tip predicts that one of the turbines at Neuadd Farm will just be visible from this bridge. However, due to intervening mature woodland and other landscape components, both turbines will be completely screened from view.

5.64 Although the sensitivity of this monument is considered to be medium (of regional importance) the indirect visual magnitude of effect is considered to be *No Change* and it is predicted that the overall significance of effect on this monument would be *Negligible* and also temporary for the lifetime of the turbine.

5.65 *Summary of Indirect Effects on Designated sites within 5km*

5.66 The ZTV maps at both hub height and blade tip, predicted that only two (2) SAM sites and three (3) LB sites will have visibility of the proposed turbines. However, the indirect effects assessment on these sites and further informed by site visits, has predicted that none of these designated sites will be significantly affected by the proposed development. A summary table giving the results of the assessment is shown in Table 7 below.

Site Ref	Site Name	Site Type	Distance turbine	Magnitude of Effect	Significance of Effect
CM127 (SAM)	Crug y Deyrn Burial Chamber	Bronze Age burial mound	800m	Minor	Moderate/Minor
CM126 (SAM)	Castell Mawr Defended Enclosure	Iron Age Defended Enclosure	2.8km	Negligible	Minor
25467 (LB)	Cilsant House	19 th century farmhouse	3.6km	Minor	Minor
25468 (LB)	Cilsant Farm outbuildings	19 th century Farm outbuildings	3.7km	No Change	Negligible
26756 (LB)	Pont Trelech outbuildings	Stone bridge	1.5km	No Change	Negligible

5.67 *Significance of the remains*

5.68 In terms of rarity with regards to sites within the application area, the site visit identified no visible surface sites or features which were deemed to be of any importance, apart from post-medieval field boundaries, most of which are either 18th century in date.

5.69 The potential for discovery of any significant buried remains in the area is considered to be low given the fact that the application area has been continually ploughed over the centuries, and

as a result any potential buried archaeological remains have most likely been severely damaged or else already destroyed.

6 Mitigation

6.1 The best mitigation for the impact of any development on the archaeological resource is to avoid direct physical impacts upon all known archaeologically significant sites and features. Where avoidance is not considered possible, or where the existence, exact location or extent of a feature is uncertain, additional mitigation measures may be required. A number of mitigation measures can be undertaken in advance of a planning application that will both inform, and potentially reduce or remove the need for archaeological mitigation at a later date. These options are outlined below:

6.2 *Preservation In situ*

6.3 This is the preferred option for all significant cultural heritage features and can be achieved by avoiding direct physical impact upon known features through careful consideration at the design stage. In this instance however there are no heritage assets that will be directly impacted upon by the proposed development.

6.4 *Evaluation*

6.5 If there is an unavoidable impact upon a known archaeological site, or where it is uncertain if there will be an impact because the existence, exact location or extent of the or any archaeology is not known, then an archaeological evaluation (before the submission of the development scheme for planning approval) may be advisable in order to assess the presence or absence of archaeological features and their vulnerability from the development. The results of the evaluation can then inform decisions as to whether to re-design the scheme in order to avoid the features, or to mitigate the development impact through 'preservation by record' (see 'excavation' below). In this instance, there are no known heritage assets that will be directly impacted upon by the proposed development.

6.6 *Excavation*

6.7 Where previously identified archaeological features cannot be avoided by the development, or are considered to be of insufficient importance to warrant preservation *in situ*, then 'preservation by record' can be undertaken to excavate and record archaeological deposits before development commences. Such mitigation may also be required as a condition of granting planning consent.

6.8 *Watching brief*

6.9 Development impact upon minor sites, or where the absence of archaeological features has not been established by other methods, can be mitigated against by undertaking an archaeological watching brief to record any unforeseen archaeological features that may be encountered during construction. This can however, result in delays during construction while archaeological recording is undertaken.

6.10 In this instance, as the desk based assessment and site visit has identified no archaeological sites within the application area and the fact that the area has been continually ploughed over

the centuries, it is considered that no archaeological watching brief would be necessary in this instance.

6.11 Assessment of Cumulative Effects

- 6.12 Within the 5km radius from the proposed application site, there are only four other known wind turbine sites. Each of these are single turbines and each are between 19m and 47m to blade tip. Three of these turbine sites, one at Wernlwyd, Penybont, approximately 2.6km west, one at Cilhire Uchaf, Talog, approximately 3km to the southeast and one at Blaengelli, approximately 4.3km to the west, are all in the planning process and are presently being considered. The fourth turbine site is an approved site but not yet constructed. This approved turbine is to be positioned 1.3km south-south-east of the application site on the summit of Crug Bach at a height of 203m AOD. This turbine is to be only 18m high to blade tip.
- 6.13 Within the 5km radius from the application area, neither of the three turbine sites presently been considered in the planning process will have any significant cumulative effect with the Neuadd Farm turbines on any designated sites. However, although the approved turbine site at Crug Bach would have a cumulative effect on the setting of the designated SAM site of Crug y Deyrn burial chamber, because of the turbine's small scale, it is predicted that this effect will be *Negligible* and therefore of only *Minor* significance.

Table 8. List of known cumulative turbine sites within 5km radius.

Site Name	NGR	Distance from Neuadd site	Turbine dimensions	Planning status
Wernlwyd, Penybont	SN2726	2.6km	19m hub, 23m tip	Being considered
Cilhire Uchaf, Talog	SN3233324398	3km	19m hub, 23 m tip	Being considered
Blaengelli, SA34 ODN	SN25522472	4.3km	37m hub, 47m tip	Being considered
Crug Bach	SN3015224527	1.35km	18m tip height	Granted. Not constructed

6.14 Assessment of Residual Effects

- 6.15 The long-term residual effects of the proposed development are considered to be neutral with regard to direct effects on cultural heritage.
- 6.16 There will be no loss of known cultural heritage assets, due to the position of the proposed turbines, access tracks and electrical box.

- 6.17 Taking into account the known baseline and the archaeological mitigation, the residual direct effect on the archaeological resource is assessed to be of a *No Change* magnitude and therefore of *Negligible* significance. In terms of the residual in-direct effect on all of the designated sites assessed, this will inevitably only be temporary and only lasting the lifetime of the wind turbines. As such, the residual effect is considered to be Negligible and temporary, therefore of Negligible significance.

6.18 Summary of Effects and Conclusions

6.19 Direct Effects and Conclusions

- 6.20 In summary, the desk based assessment and site visit has concluded that there are no direct physical impacts on any known heritage assets from any elements of the proposed development. The assessment of the application site has also concluded that because the application site has been continually ploughed and improved over the centuries, the chances of any surviving unknown buried archaeological remains is low and as such it has been considered that an archaeological watching brief would not be necessary during groundwork for construction.

6.21 Indirect Effects and Conclusions

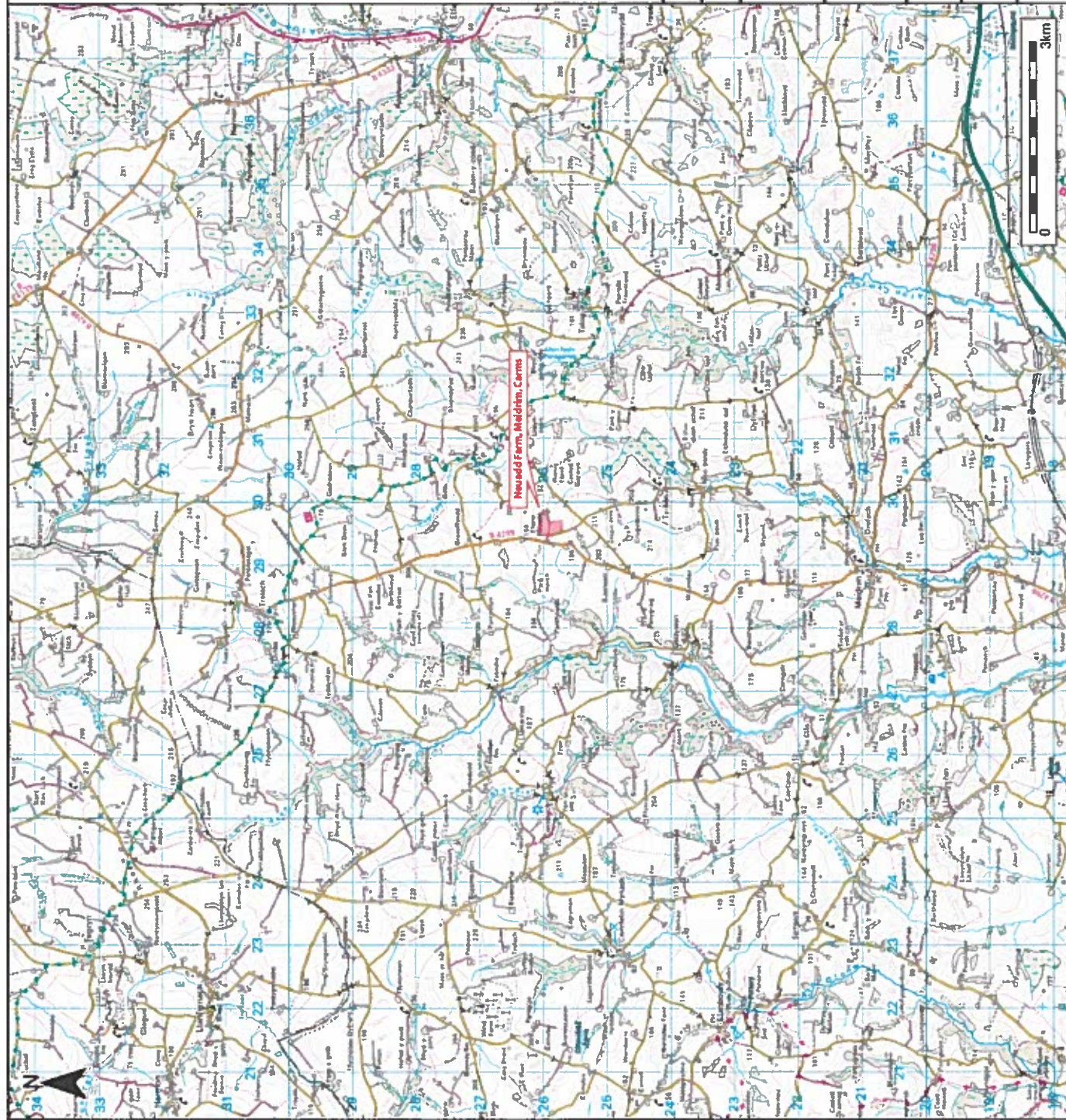
- 6.22 In summary, the desk based assessment and site visit concluded that none of the settings of designated Scheduled Ancient Monuments (SAMs), Listed Buildings, nor any undesignated sites of schedulable quality, would be significantly effected by the proposed development. With reference to the SAM site of Crug y Deyrn (SAM Ref: CM127), which lies 800m southwest from the proposed development, the assessment has predicted that the magnitude of the effect will be Minor and therefore the significance of effect will be Moderate/Minor and also temporary for the lifetime of the turbines.
- 6.23 With regards to cumulative impacts, the assessment concluded that there are no known turbine sites within a 5km radius from the proposed development, whether operational, proposed or under construction, that will have any significant effect on any designated or undesignated high value sites.

7 References

- Ref 1 Welsh Office Circular 60/96 (Planning and the Historic Environment: Archaeology)
- Ref 2 *Design Manual for Roads and Bridges* (DMRB, Volume 11, Section 3, part 2 HA 208/07)
- Ref 3 *Planning Policy Statement 5 (PPS5)*, March 2010, *Planning for the Historic Environment: Historic Environment Planning Practice Guide (2010)*
- Ref 4 Colcutt, S 1999, *The setting of Cultural Heritage Features*.
- Ref 5 Samuel Lewis in 'A *Topographical Dictionary of Wales*' (1833).
- Ref 6 Carmarthenshire LANDMAP Historic Landscape – Technical Report (DAT Report 2009)
- Ref 7 Fenton, J 1860 *Archaeologia Cambrensis* 3rd Series, Vol. 6, p. 323
- Ref 8 Hunter, R 1974 *Megalithic Tombs of SW Wales* CRM 30
- Ref 9 Lhuyd, E 1695 *Camden's Britannia* ed. Gibson, Col. 751

APPENDIX I:

Figures



Legend



Study Area

Approximate Scale (at A3): 1:100,000

Date: August 2013

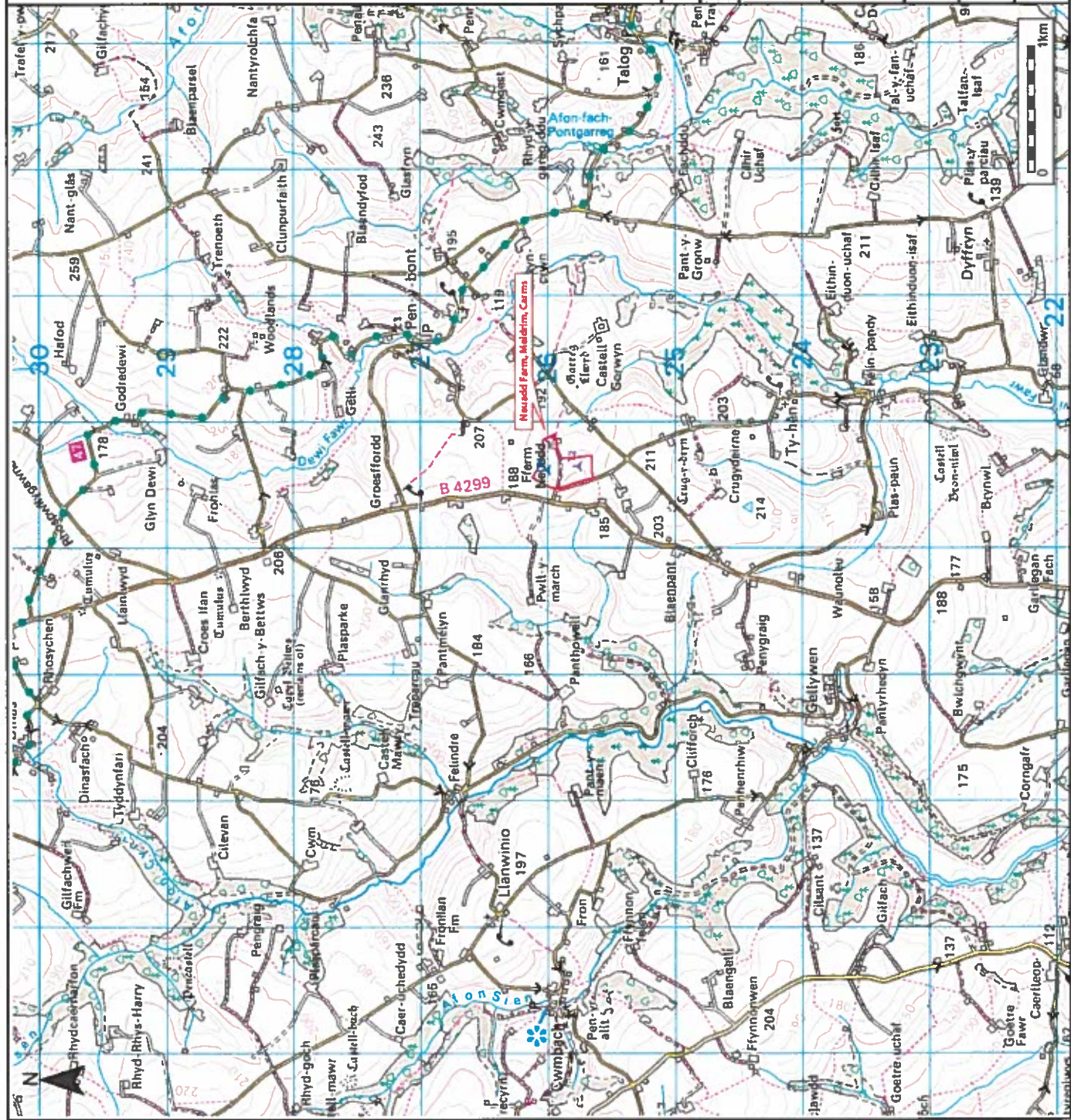
Prepared by:
Heritage
Recording Services Wales

On behalf of:

Client:
Force 5 Energy Ltd.

Project Title:
Neuadd Farm Wind Turbines

Figure 1. Site Location



Legend

- Site Boundary
- Turbine locations

Approximate Scale (at A3): 1:50000

Date: August 2013

Heritage
Recording Services Wales

Prepared by:

On behalf of:

Client: Force 5 Energy Ltd.

Project Title: Neuadd Farm Wind Turbines

Figure 2. Site and proposed turbine location



Legend

- Site Boundary
- Turbine locations
- Access track

Approximate Scale (at A3): 1:30,000

Date: August 2013

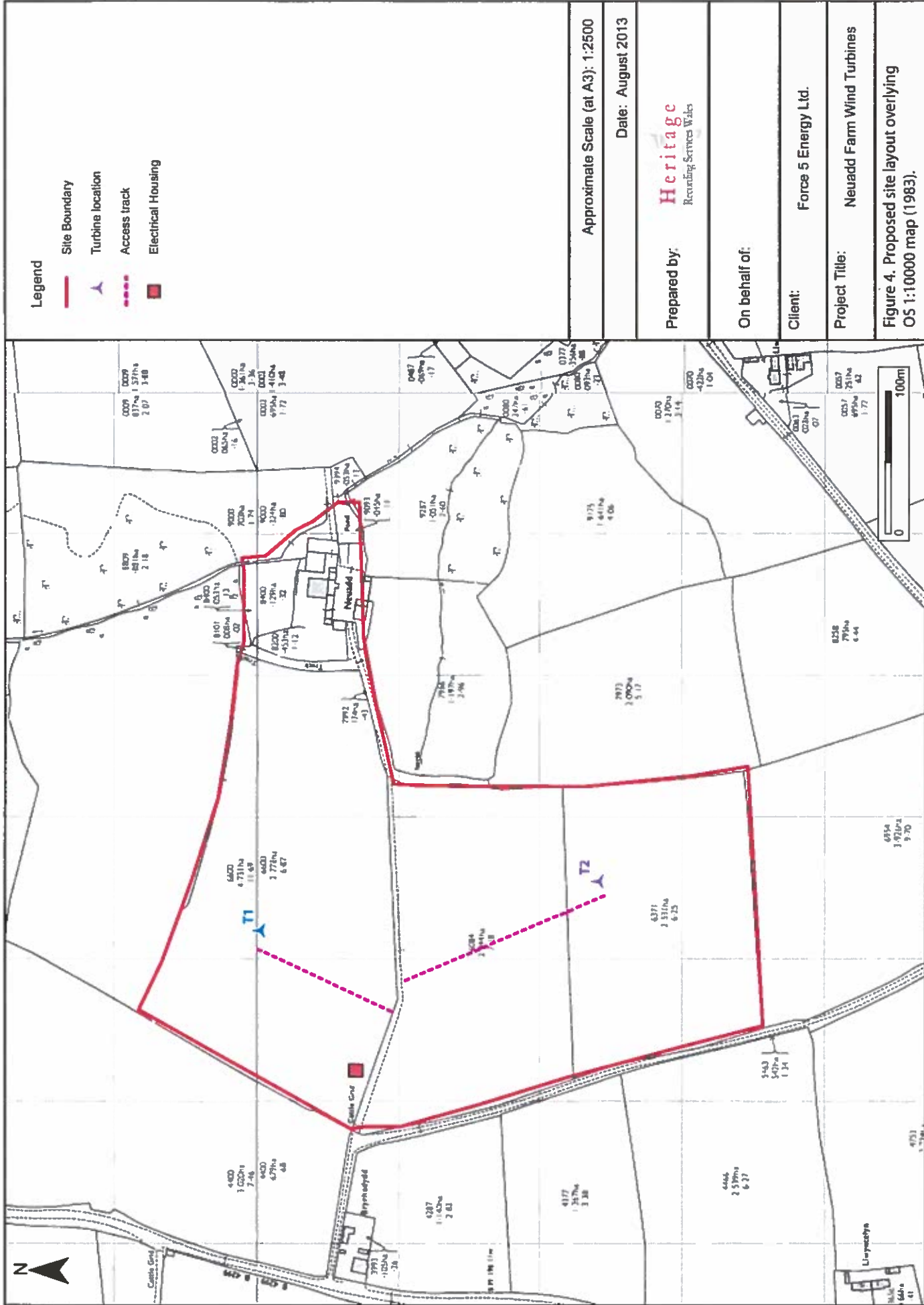
Prepared by: **Heritage**
Recording Services Wales

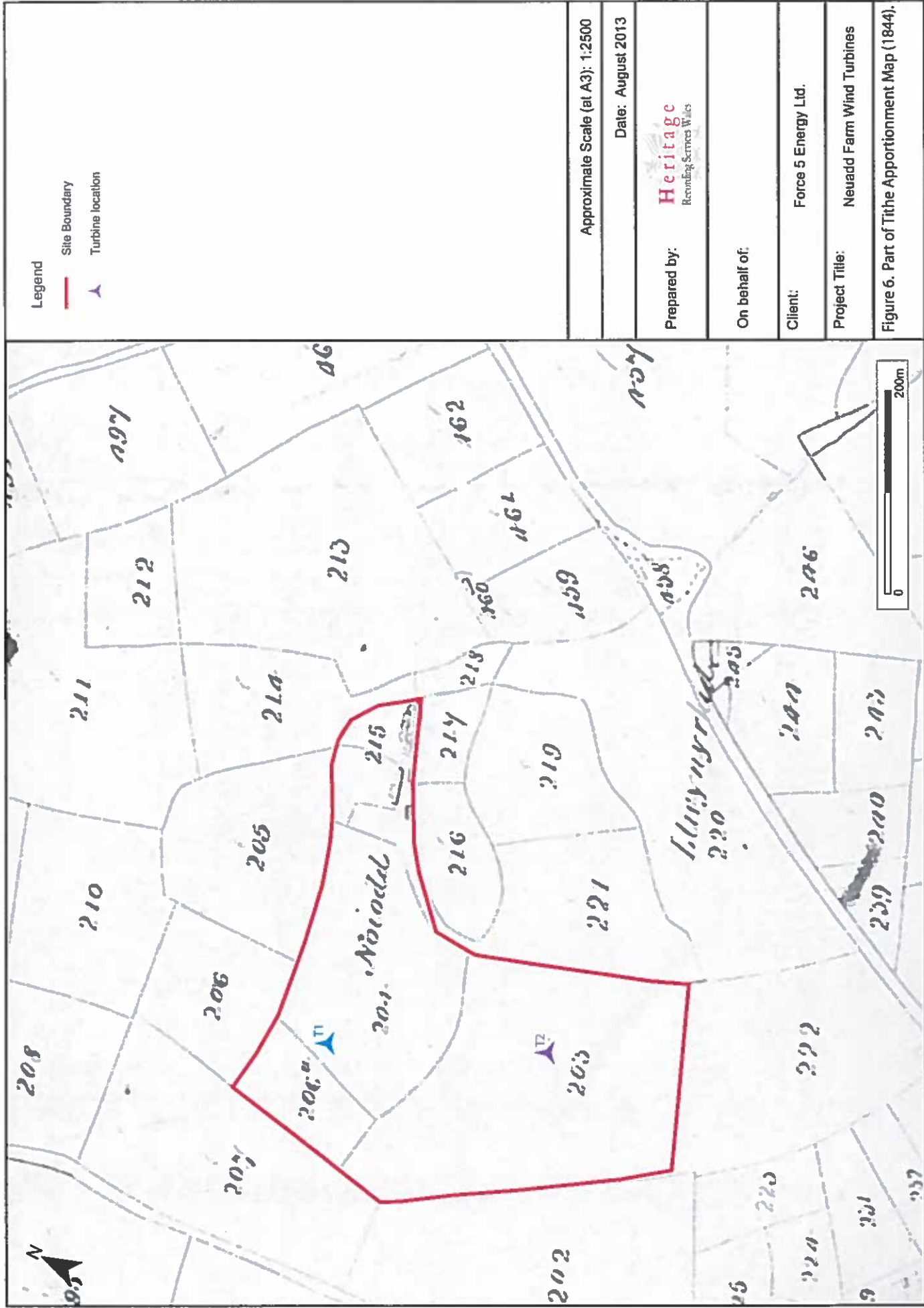
On behalf of:

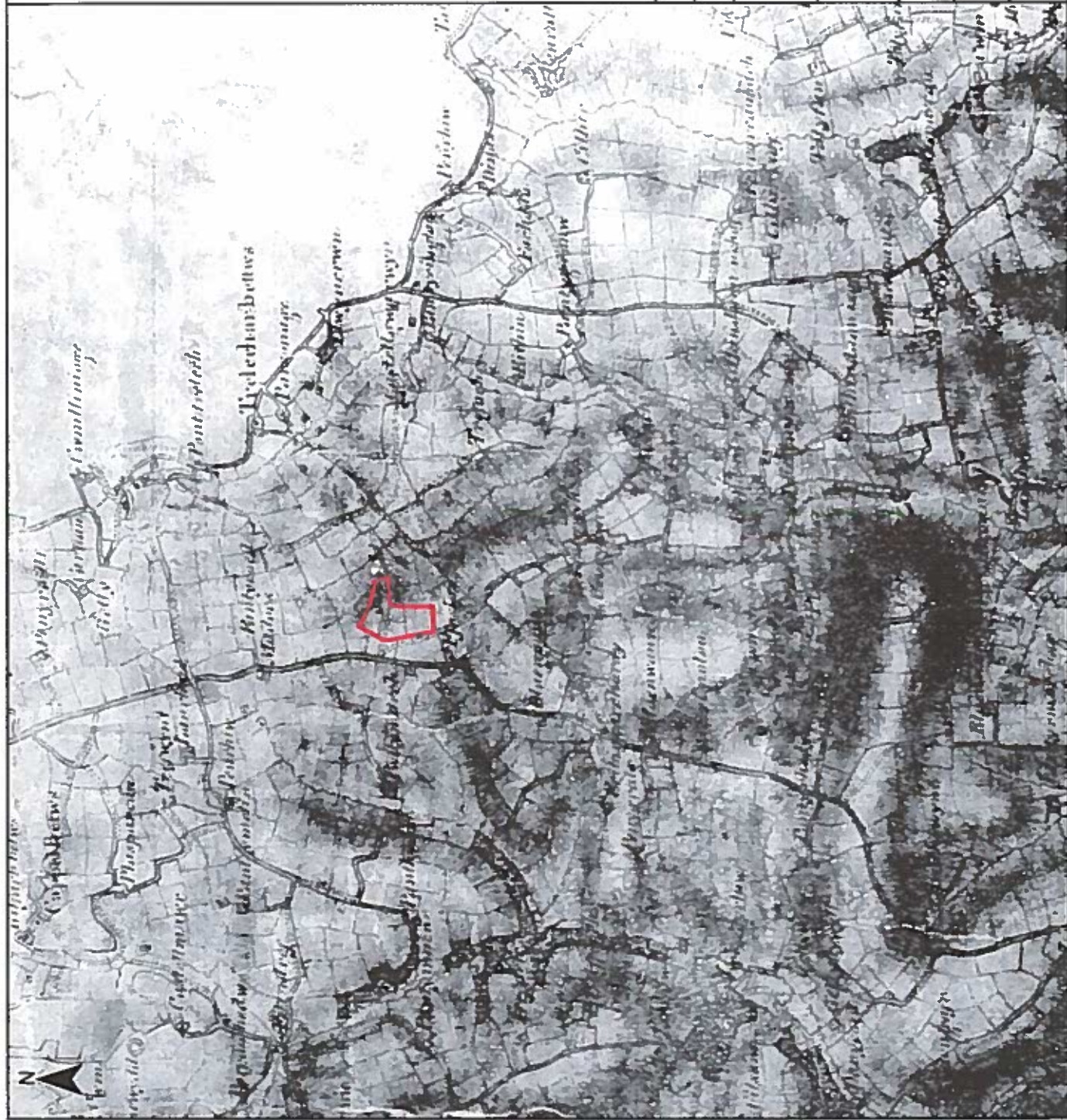
Client: Force 5 Energy Ltd.

Project Title: Neuadd Farm Wind Turbines

Figure 3. Proposed turbine location overlying aerial photo (Google 2009)







Legend
— Study Area Boundary

Approximate Scale (at A3): 1:60000

Date: August 2013

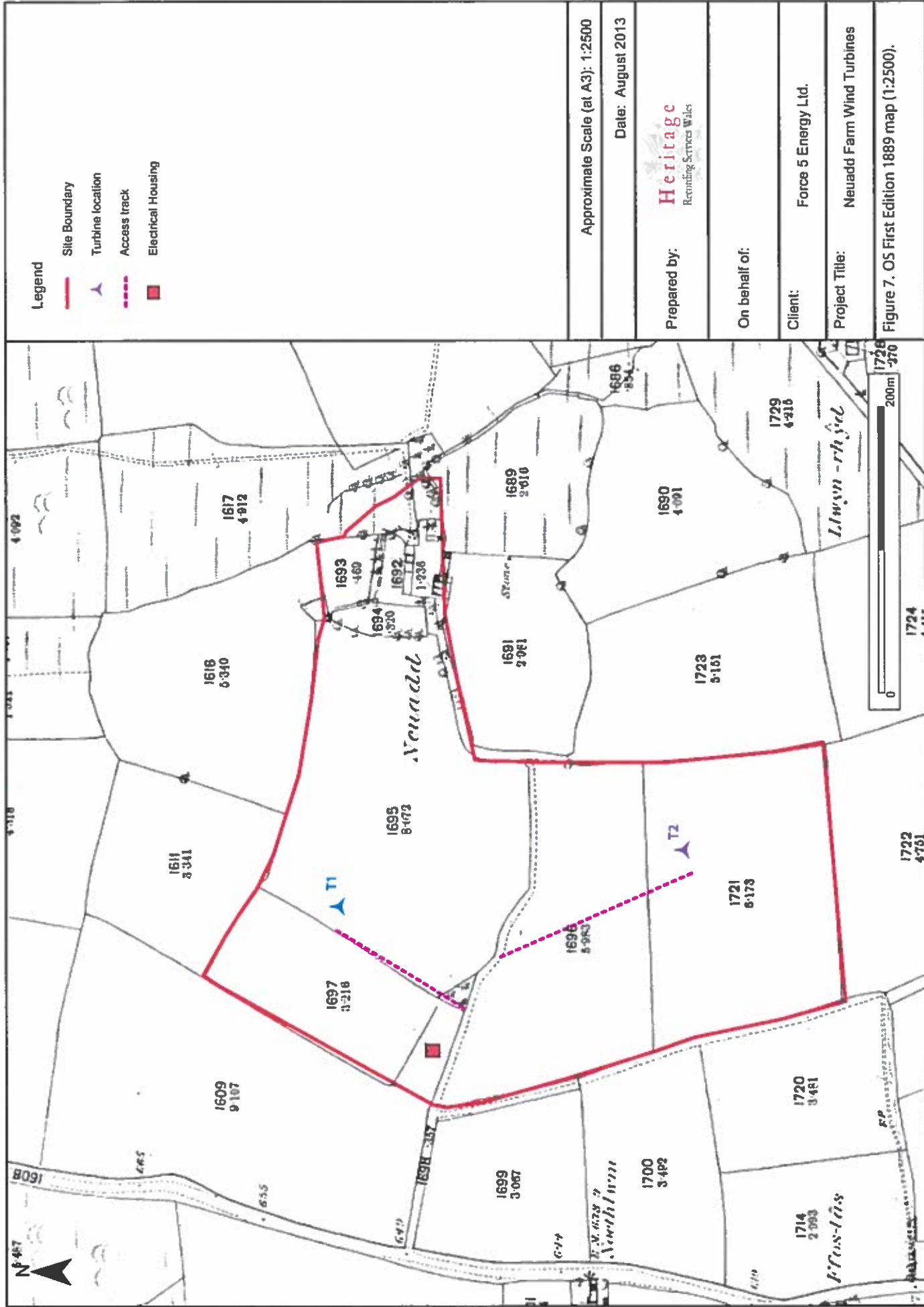
Prepared by: **Heritage**
Revolving Services Wales

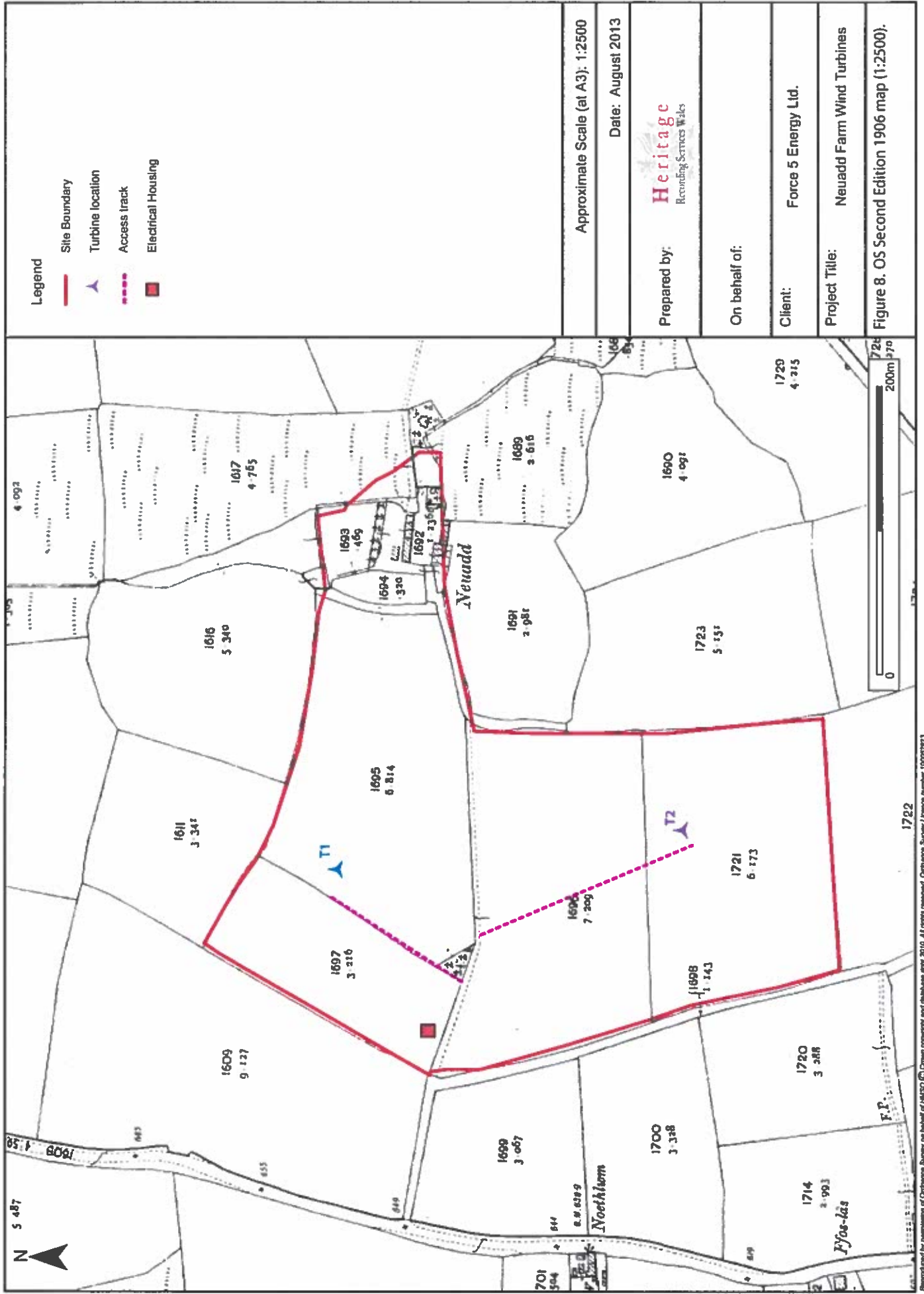
On behalf of:

Client: Force 5 Energy Ltd.

Project Title: Neuadd Farm Wind Turbines

Figure 5. OS Surveyors drawing (1809-1836).







Legend

- Site Boundary
- Turbine location

Approximate Scale (at A3): 1:15,000

Date: August 2013

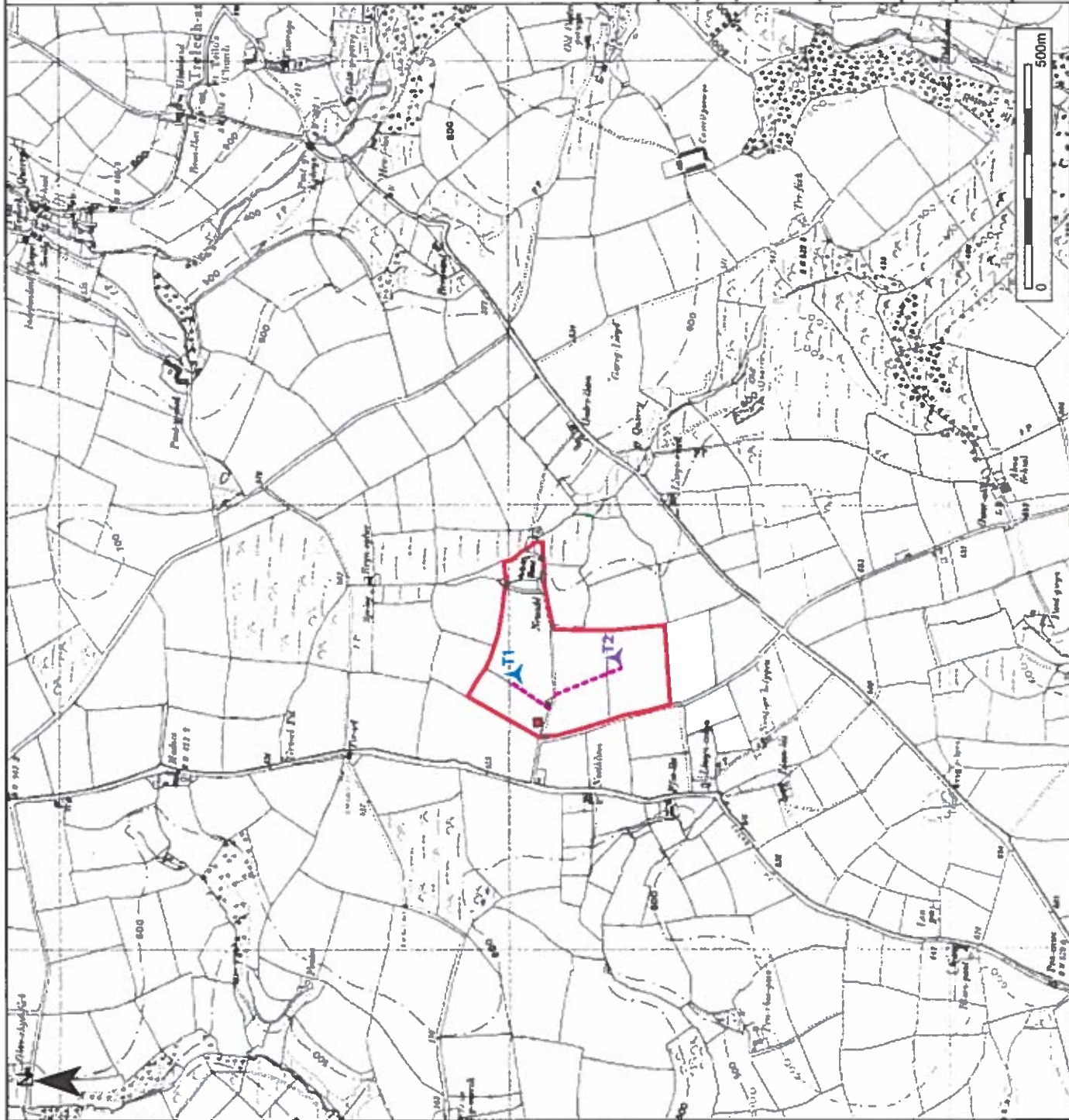
Prepared by: **Heritage**
Recording Services Wales

On behalf of:

Client: Force 5 Energy Ltd.

Project Title: Neuadd Farm Wind Turbines

Figure 9. RAF Aerial Photo (1946).



Legend

- Site Boundary
- Turbine location
- Access track
- Electrical Housing

Approximate Scale (at A3): 12,000

Date: August 2013

Heritage
Recording Services Wales

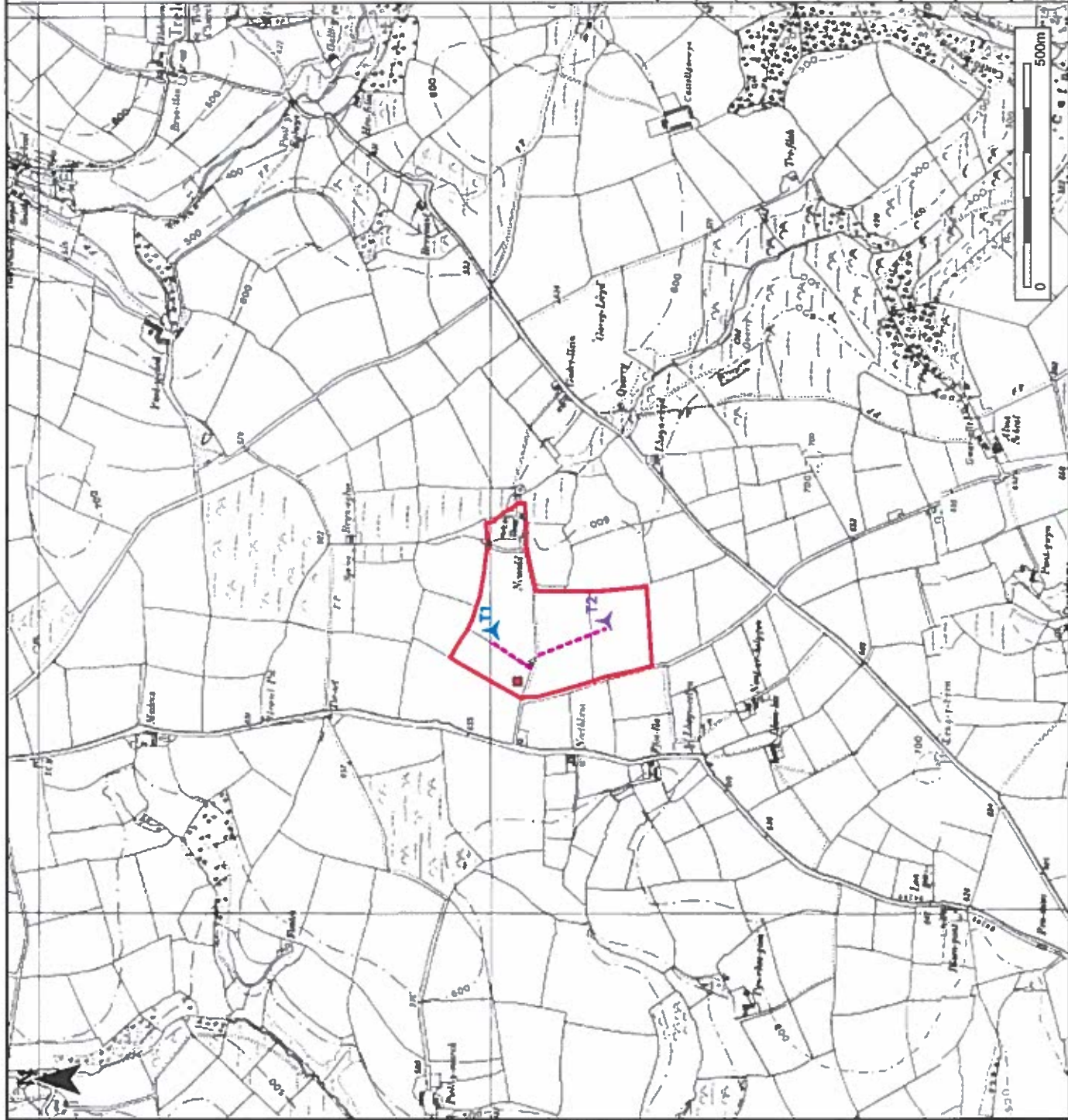
Prepared by:

On behalf of: Force 5 Energy Ltd.

Client:

Project Title: Neuadd Farm Wind Turbines

Figure 10. OS 1953 edition map (1:10560).



Legend

- Site Boundary
- T1 Turbine location
- Access track
- Electrical Housing

Approximate Scale (at A3): 12,000

Date: August 2013

Prepared by:

Heritage
Recording Services Wales

On behalf of:

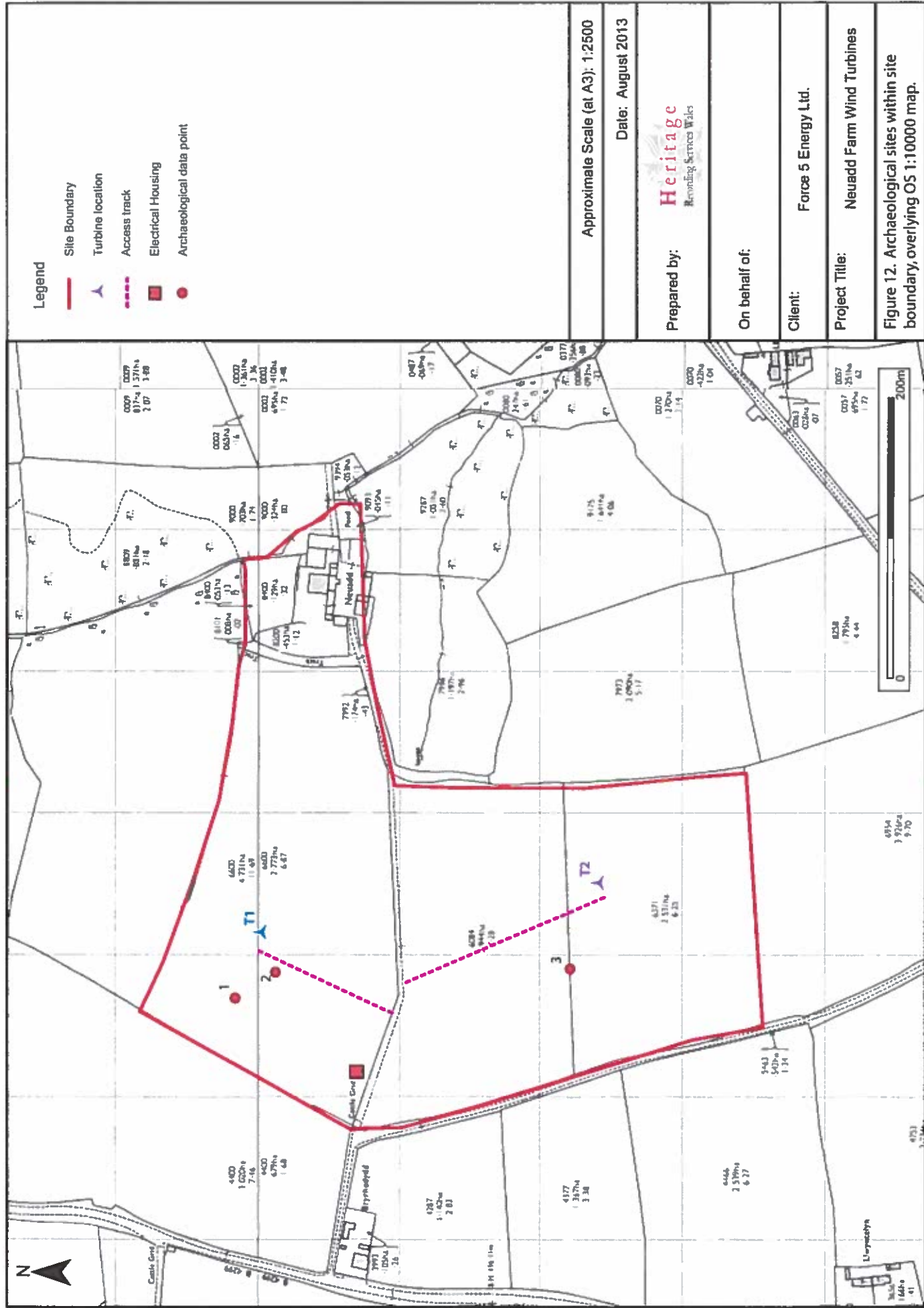
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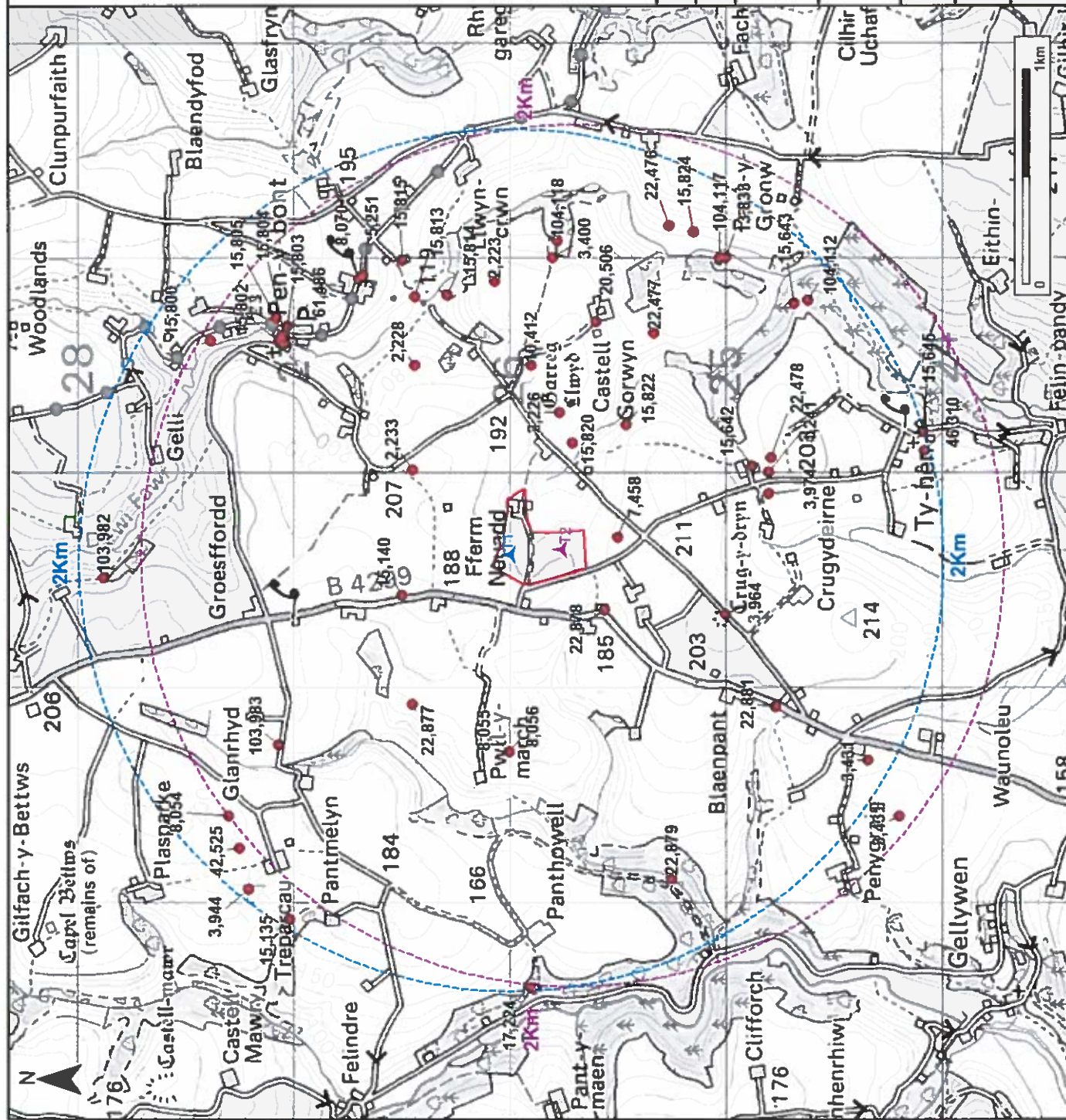
Force 5 Energy Ltd.

Project Title:

Nauadd Farm Wind Turbines

Figure 11. OS 1964 edition map (1:10560).





Legend

- Site Boundary
- Buffer Zones (Km)
- ▲ Turbine location
- Archaeological data point

Approximate Scale (at A3): 1:30,000

Date: August 2013

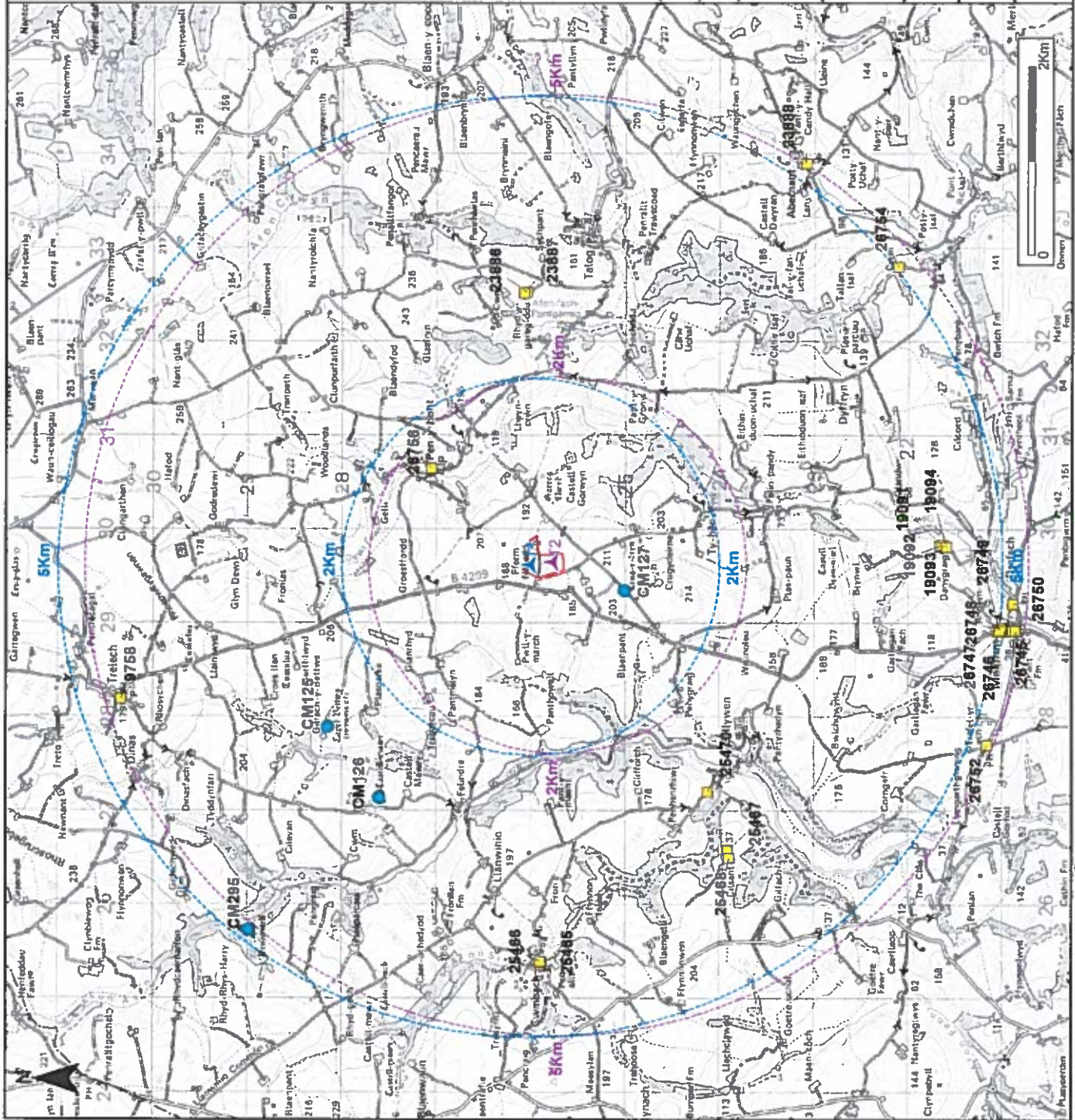
Prepared by:
Heritage
Recording Services Wales

On behalf of:

Client: Force 5 Energy Ltd.

Project Title: Neuadd Farm Wind Turbines

Figure 13. HER data sites within 2km from proposed turbine locations.



Legend

- Site Boundary
- Buffer Zones (Km)
- Turbine locations
- Archaeological data point
- Scheduled Ancient Monument (SAM)
- Scheduled Area
- Listed Building (LB)

Approximate Scale (at A3): 1:50000

Date: August 2013

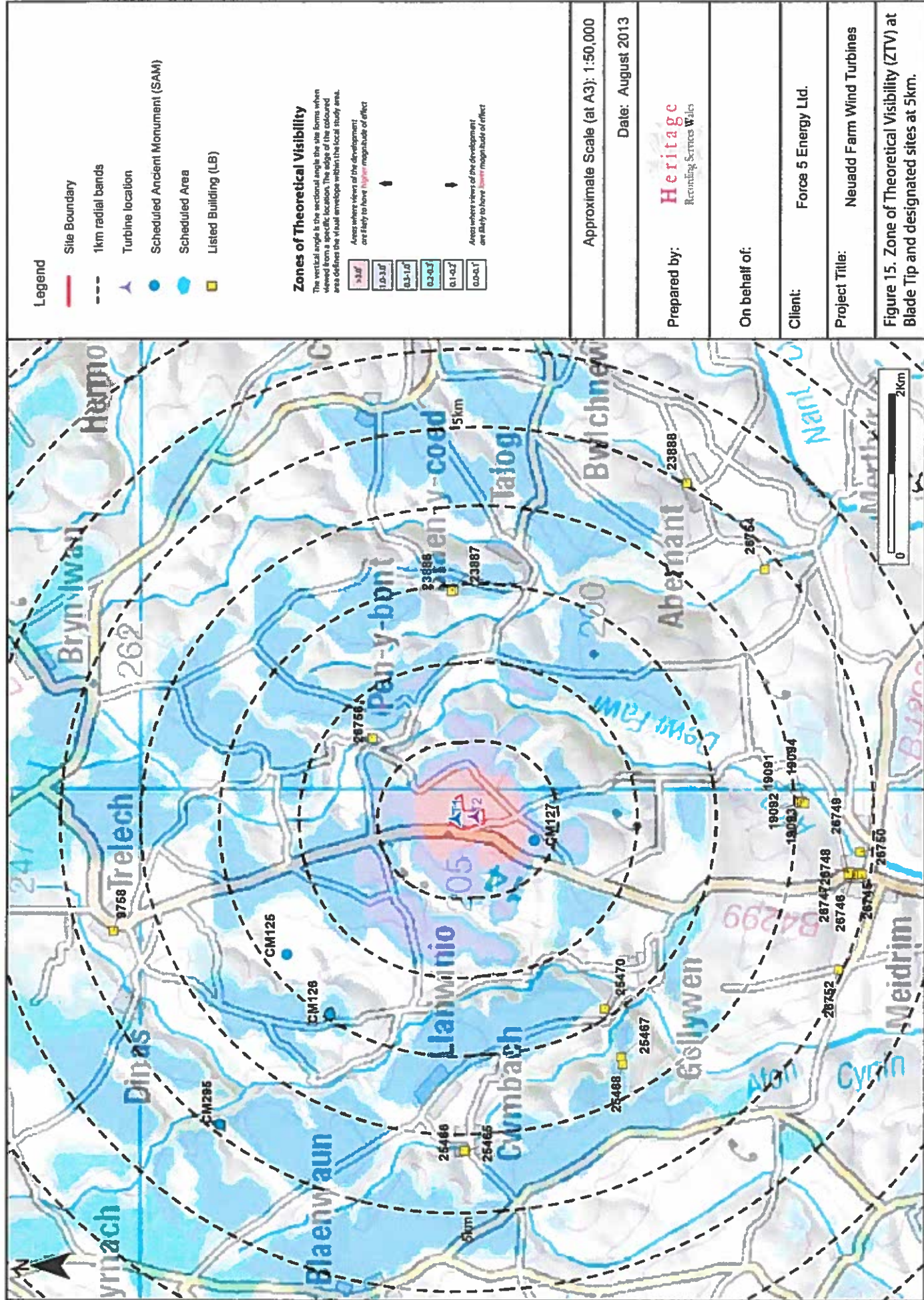
Prepared by:
Heritage
Reinventing Services Wales

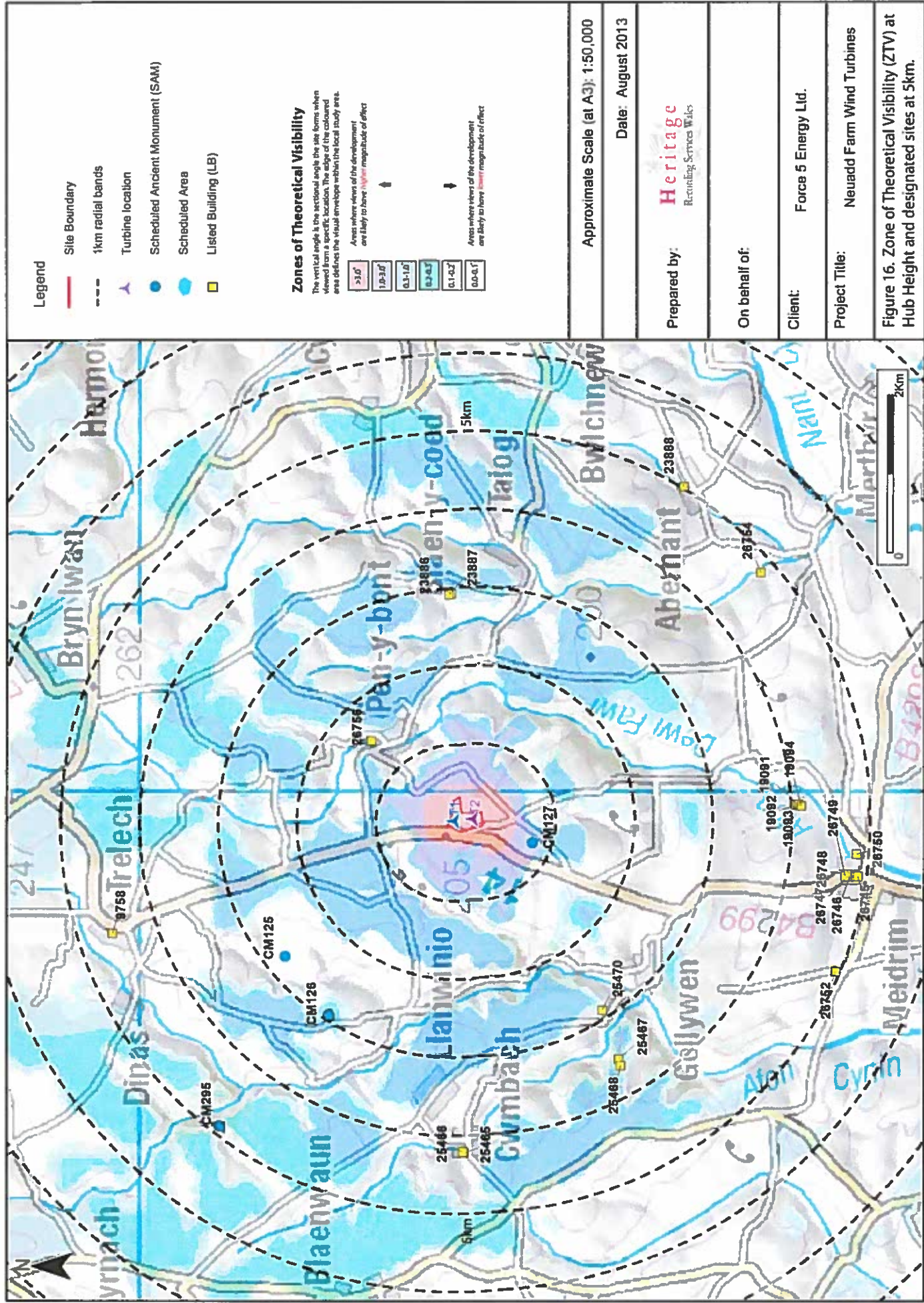
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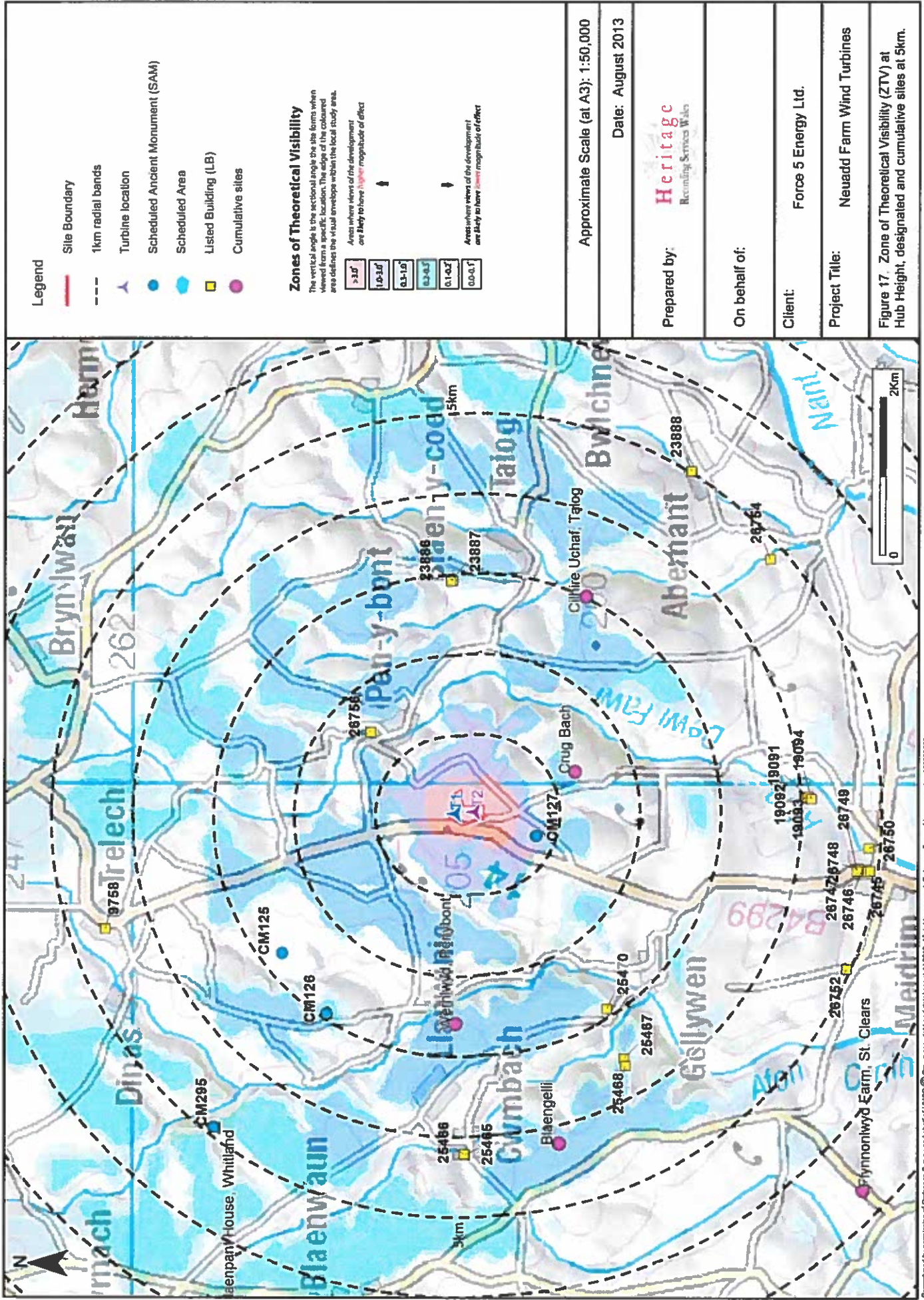
Client:
Force 5 Energy Ltd.

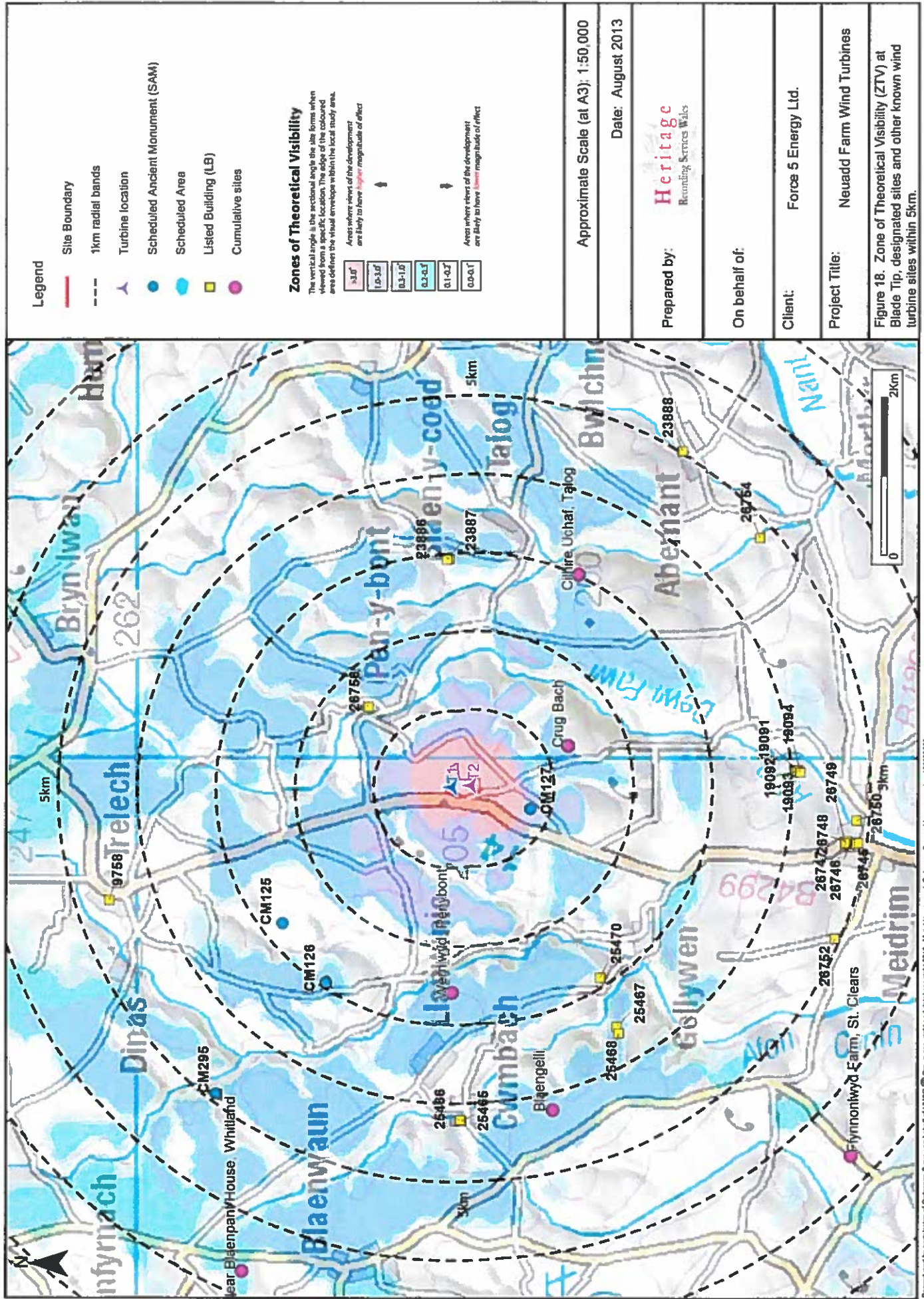
Project Title:
Neuadd Farm Wind Turbines

Figure 14. Designated SAM sites and LB sites within 5km from proposed turbines.









APPENDIX II:

Photo plates



Plate 1. Entrance to Neuadd Farm. Looking southeast.



Plate 2. View of proposed location of Turbine 1, looking east toward Neuadd Farm.



Plate 3. View of proposed location of Turbine 2, looking north.



Plate 4. Neuadd Farm complex. Looking eastwards.

Date: August 2013

Prepared by: **Heritage**
Reinforcing Services Wales

On behalf of:

Client: Force 5 Energy Ltd

Project Title: Neuadd Farm Wind Turbines

Photo plates: 1-4



Plate 5. View of Crug y Deyrn burial chamber (SAM Ref: CM127), from side of road looking north-north-east.



Plate 6. View of Castell Mawr Defended Enclosure (SAM Ref: CM126), looking southeast.

Date: August 2013

Prepared by: **Heritage**
Reunio Services Wales

On behalf of:

Client: Force 5 Energy Ltd

Project Title: Neuadd Farm Wind Turbines

Photo plates: 5-6

North

T1 T2



Plate 7. View north-north-east toward proposed wind turbines from top of Crug y Deyrn burial chamber (SAM Ref: CM127)

Date: August 2013

Prepared by: **Heritage**
Recording Services Wales

On behalf of:

Client: Force 5 Energy Ltd

Project Title: Neuadd Farm Wind Turbines

Photo plate(s): 7

Southeast

T1 T2



Plate 8. Castell Mawr (SAM Ref: CM 126) - View looking southeast toward proposed wind turbines at Neuadd Ffarm.

Date: August 2013

Prepared by: **Heritage**
Recording Services Wales

On behalf of:

Client: Force 5 Energy Ltd

Project Title: Neuadd Ffarm Wind Turbines

Photo plate(s): 8

T2 T1
Southwest



Plate 9. Pont Trelech (LB No. 26756) - View looking southwest toward proposed wind turbines at Neuadd Farm.

Date: August 2013

Prepared by: **Heritage**
Recording Services Wales

On behalf of:

Client: Force 5 Energy Ltd

Project Title: Neuadd Farm Wind Turbines

Photo plate(s): 9

APPENDIX III:

Site Gazetteer

APPENDIX III

Site Gazetteer

of

Historic Environment Record (HER) Sites within 2km from turbine locations

&

Scheduled Ancient Monuments (SAMs) and Listed Buildings (LBs) within 5km radius

A) Historic Environment Record (HER) Sites within 2km from turbine locations

PRN: 1241 **Type:** Standing stone **Period:** Bronze Age **NGR:** SN300248
Site Name: PARC Y GARREG LLWYD

Summary Text:

Community: Trelech

Site Status:

PRN: 2223 **Type:** Defended enclosure **Period:** Iron Age **NGR:** SN30892607
Site Name: CASTELL GORWYN;PARC Y CASTELL

Summary Text: This circular, univallate defended enclosure lies in a field called Parc y castell on Castell Gorwyn farm and occupies a gentle northeast-facing slope (almost level) 180m above sea level. Immediately to the north, east and southeast of the enclosure the

Community: Trelech

Site Status:

PRN: 2226 **Type:** Standing stone **Period:** Bronze Age **NGR:** SN30282577
Site Name: GAREG LLWYD;GODRE LLAIN

Summary Text:

Community: Trelech

Site Status:

PRN: 2228 **Type:** Hillfort **Period:** Iron Age **NGR:** SN30502644
Site Name: PANT Y COED

Summary Text:

Community: Trelech

Site Status:

PRN: 2233 **Type:** Round barrow **Period:** Bronze Age **NGR:** SN30012645
Site Name: PANT Y COED

Summary Text:

Community: Trelech

Site Status:

PRN: 3400 **Type:** Findspot **Period:** Unknown **NGR:** SN310258
Site Name: OLD CASTELL GORWYN

Summary Text:

Community: Trelech

Site Status:

PRN: 3431 **Type:** Findspot **Period:** Roman,Iron Age **NGR:** SN284242
Site Name: PEN Y GRAIG
Summary Text:
Community: Trelech **Site Status:**

PRN: 3431 **Type:** Findspot **Period:** Roman,Iron Age **NGR:** SN28662434
Site Name: PEN Y GRAIG
Summary Text:
Community: Trelech **Site Status:**

PRN: 3944 **Type:** Standing stone **Period:** Bronze Age **NGR:** SN2805927208
Site Name: TREPARCAU STONES
Summary Text:
Community: Trelech **Site Status:**

PRN: 3964 **Type:** Round barrow,Chambered tomb **Period:** Neolithic;bronze Age **NGR:** SN29342500
Site Name: CRUG Y DEYRN;CRUG Y DWRN
Summary Text: The barrow is situated in an arable field and was ploughed at the time visited. It has a diameter of 33.0m and a height of 1.3m. Some quartz stones were observed. ER Evans 1984
Community: Trelech **Site Status:** scheduled ancient monument

PRN: 3974 **Type:** Standing stone **Period:** Bronze Age **NGR:** SN299248
Site Name: PEN YR ALLT STONE
Summary Text: No archaeological traces of a monument exist in the area indicated by the grid reference, nor in the immediately surrounding area. Site destroyed. NB. 2001.
Community: Trelech **Site Status:**

PRN: 5251 **Type:** Church **Period:** Post-medieval **NGR:** SN30922668
Site Name: ST TEILO'S
Summary Text:
Community: Trelech **Site Status:**

PRN: 7458 **Type:** Round barrow **Period:** Bronze Age **NGR:** SN297255
Site Name: PARC Y GARN
Summary Text:
Community: Trelech **Site Status:**

PRN: 8054 **Type:** Standing stone **Period:** Bronze Age **NGR:** SN284273
Site Name: PARC Y MAEN
Summary Text:
Community: Trelech **Site Status:**

PRN: 8055 **Type:** Standing stone **Period:** Bronze Age **NGR:** SN287260
Site Name: PARC MAEN
Summary Text:
Community: Trelech **Site Status:**

PRN: 8056 **Type:** Standing stone **Period:** Bronze Age **NGR:** SN287260
Site Name: PARC GARREG
Summary Text:
Community: Trelech **Site Status:**

PRN: 8070 **Type:** Cross **Period:** Early Medieval **NGR:** SN309267
Site Name: ST TEILO'S CHURCH
Summary Text:
Community: Trelech **Site Status:**

PRN: 10166 **Type:** Deleted **Period:** Unknown **NGR:** SN309267
Site Name: ST TEILO DEDICATION
Summary Text: Record deleted during Cadw Early Medieval Ecclesiastical Sites Project PRN 44753. Record now merged with PRN 49320. NDL 2004
Community: Trelech **Site Status:**

PRN: 10412 **Type:** Standing stone **Period:** Bronze Age **NGR:** SN305259
Site Name: PARC Y GARREG WEN
Summary Text: No archaeological traces of a monument exist in the area indicated by the grid reference, nor in the immediately surrounding area. Site destroyed. NB. 2001.
Community: Trelech **Site Status:**

PRN: 12651 **Type:** Church **Period:** Medieval **NGR:** SN30922668
Site Name: TRELECH A'R BETWS PARISH CHURCH;ST TEILO'S
Summary Text: Medieval parish church, entirely (re)built in 1834-5 as PRN 5251, apparently on the same site, and in the same location, as its predecessor but retaining nothing from the earlier fabric. See churchyard PRN 49320 for description of site, discussion and ma
Community: Trelech **Site Status:**

PRN: 13833 **Type:** Findspot **Period:** Unknown **NGR:** SN3125
Site Name: PENRHIW BEILI
Summary Text:
Community: Trelech **Site Status:**

PRN: 15135 **Type:** Quarry **Period:** Post-medieval **NGR:** SN2792127019
Site Name: PEN-QUARRY
Summary Text:
Community: Trelech **Site Status:**

PRN: 15140 **Type:** Gravel pit **Period:** Post-medieval **NGR:** SN29432650
Site Name:
Summary Text:
Community: Trelech **Site Status:**

PRN: 15642 **Type:** School **Period:** Post-medieval **NGR:** SN30032488
Site Name: ALMA
Summary Text:
Community: Trelech **Site Status:**

PRN: 15643 **Type:** Well **Period:** Post-medieval **NGR:** SN307882468
Site Name: FFYNNON-LWYD

Summary Text:

Community: Trelech **Site Status:**

PRN: 15645 **Type:** Chapel **Period:** Post-medieval **NGR:** SN30192409
Site Name: CAPEL TY-HEN

Summary Text:

Community: Trelech **Site Status:**

PRN: 15800 **Type:** Mill,Corn mill **Period:** Post-medieval **NGR:** SN3061227387
Site Name: FELIN PEN-Y-BONT

Summary Text: Site of a corn mill located beside the Dewi Fawr, just to the north of Pen-y-bont. Recorded on the historical Ordnance Survey maps but shown on modern mapping to now be ruinous (M.Ings, 2012)

Community: Trelech **Site Status:**

PRN: 15802 **Type:** Chapel **Period:** Post-medieval **NGR:** SN30612707
Site Name: PENYBONT CHAPEL

Summary Text:

Community: Trelech **Site Status:**

PRN: 15803 **Type:** Blacksmiths workshop **Period:** Post-medieval **NGR:** SN30602704
Site Name:

Summary Text:

Community: Trelech **Site Status:**

PRN: 15804 **Type:** Bridge **Period:** Post-medieval **NGR:** SN30632704
Site Name: PONT TRELECH

Summary Text:

Community: Trelech **Site Status:**

PRN: 15805 **Type:** Quarry **Period:** Post-medieval **NGR:** SN3072027078
Site Name:

Summary Text:

Community: Trelech **Site Status:**

PRN: 15806 **Type:** School **Period:** Post-medieval **NGR:** SN30682703
Site Name:

Summary Text:

Community: Trelech **Site Status:**

PRN: 15813 **Type:** Bridge **Period:** Post-medieval **NGR:** SN30822644
Site Name: PONT YR EGLWYS

Summary Text:

Community: Trelech **Site Status:**

PRN: 15814 **Type:** Mill **Period:** Post-medieval **NGR:** SN3082526288
Site Name: HEN FELIN

Summary Text: Hen-felin - 'Old Mill' -is recorded as a two-celled building on the 1889 1st edition Ordnance Survey map, within the steeply sided Dewi Fawr stream valley, south of Pen-y-bont in Carmarthenshire. It is still depicted as roofed on the 1906 2nd edition O.

Community: Trelech **Site Status:**

PRN: 15815 **Type:** Vicarage **Period:** Post-medieval **NGR:** SN30992650
Site Name:

Summary Text:

Community: Trelech **Site Status:**

PRN: 15820 **Type:** Quarry **Period:** Post-medieval **NGR:** SN3013525709
Site Name:

Summary Text:

Community: Trelech **Site Status:**

PRN: 15822 **Type:** Quarry **Period:** Post-medieval **NGR:** SN30222546
Site Name:

Summary Text:

Community: Trelech **Site Status:**

PRN: 15824 **Type:** Mill **Period:** Post-medieval **NGR:** SN31122515
Site Name: CWM FELIN

Summary Text: Cwm-felin is recorded on the historic Ordnance Survey maps, located on the steep slope of a stream valley. The name indicates a mill site but no system of water-management is evident from the mapping. The mill is no longer shown on the modern map and a r

Community: Trelech **Site Status:**

PRN: 17224 **Type:** Mansion **Period:** Post-medieval **NGR:** SN27602590
Site Name: PLAS-PANT-HOEL;PLAS PANTHOWELL;PANTHOWELL

Summary Text:

Community: Trelech **Site Status:**

PRN: 20506 **Type:** Findspot **Period:** Post-medieval **NGR:** SN307256
Site Name: CASTELL-GORWYN FARM

Summary Text:

Community: Trelech **Site Status:**

PRN: 22476 **Type:** Cottage **Period:** Post-medieval **NGR:** SN31152526
Site Name: PANT YR EITHIN

Summary Text: Cottage shown on 1907 6" OS map, present condition unknown. RPS August 2001

Community: Trelech **Site Status:**

PRN: 22477 **Type:** Cottage **Period:** Post-medieval **NGR:** SN30652533
Site Name: TRE-FACH

Summary Text: Cottage shown on 1907 6" OS map, present condition unknown. RPS August 2001

Community: Trelech **Site Status:**

PRN: 22478 **Type:** Cottage **Period:** Post-medieval **NGR:** SN30072479
Site Name: PEN-YR-ALLT
Summary Text: Cottage shown on 1907 6" OS map, present condition unknown. RPS August 2001
Community: Trelech **Site Status:**

PRN: 22877 **Type:** Cottage **Period:** Post-medieval **NGR:** SN28922645
Site Name: FONTES
Summary Text: Cottage shown on 1907 OS 6" map. Present condition unknown. RPS September 2001
Community: Trelech **Site Status:**

PRN: 22878 **Type:** Cottage **Period:** Post-medieval **NGR:** SN29362556
Site Name: LLWYN CELYN
Summary Text: Cottage shown on 1907 OS 6" map. Present condition unknown. RPS September 2001
Community: Trelech **Site Status:**

PRN: 22879 **Type:** Cottage **Period:** Post-medieval **NGR:** SN2811125251
Site Name: RHIW GAM
Summary Text: Cottage shown on 1907 OS 6" map. Present condition unknown. RPS September 2001
Community: Trelech **Site Status:**

PRN: 22881 **Type:** Cottage **Period:** Post-medieval **NGR:** SN28912477
Site Name: PEN CNWC
Summary Text: Cottage shown on 1907 OS 6" map. Present condition unknown. RPS September 2001
Community: Trelech **Site Status:**

PRN: 42525 **Type:** Round barrow **Period:** Bronze Age **NGR:** SN28252725
Site Name: TREPARCAU
Summary Text:
Community: Trelech **Site Status:**

PRN: 46310 **Type:** Electricity generating site **Period:** Modern **NGR:** SN30102408
Site Name: NEWCASTLE EMLYN HYDRO ELECTIRIC POWER STATION
Summary Text: Hydro electric power station set up in a disused corn mill in 1909 by John Roger Parkington. The turbines used the water from the weir below the castle. The machinery was still in working condition in 1999.
Community: Newcastle Emlyn **Site Status:**

PRN: 49320 **Type:** Churchyard **Period:** Medieval,Early Medieval **NGR:** SN30922668
Site Name: TRELECH A'R BETWS PARISH CHURCH;ST TEILO'S
Summary Text: Early medieval D site, ie. possible early medieval origins. Churchyard occupied by the medieval Trelech a'r Betws parish church PRN 12651, which was entirely (re)built in 1834-5 as PRN 5251.
Community: Trelech **Site Status:**

PRN: 61486 **Type:** Bridge **Period:** Post-medieval **NGR:** SN3063827054
Site Name: PONT TRELECH

Summary Text: Grade II listed bridge

Community: Trelech

Site Status: listed building

PRN: 103982 **Type:** Cottage
Site Name: PLAS-YR-ONEN

Period: POST-MEDIEVAL

NGR: SN29512788

Summary Text: 'Plas-yr-onen' cottage recorded on the historic Ordnance Survey maps but not shown on mastermap.

Community: Trelech

Site Status:

PRN: 103983 **Type:** Cottage
Site Name: GLAN-RHYD-FACH

Period: POST-MEDIEVAL **NGR:** SN28732707

Summary Text: 'Glan-rhyd-fach' cottage recorded on the historic Ordnance Survey maps but shown only in outline on mastermap, presumed abandoned.

Community: Trelech

Site Status:

PRN: 104112 **Type:** Cottage
Site Name: FFYNNON-LWYD

Period: POST-MEDIEVAL **NGR:** SN30802462

Summary Text: 'Flynnon-lwyd' cottage recorded on the historic Ordnance Survey maps but shown only in outline on mastermap.

Community: Trelech

Site Status:

PRN: 104117 **Type:** Cottage
Site Name: DDOL-WEN

Period: POST-MEDIEVAL **NGR:** SN31002503

Summary Text: 'Ddol-wen' cottage recorded on the historic Ordnance Survey maps but shown only in outline on mastermap, presumed abandoned.

Community: Trelech

Site Status:

PRN: 104118 **Type:** Building
Site Name:

Period: POST-MEDIEVAL **NGR:** SN31082578

Summary Text: Building, of uncertain function, recorded on the historic Ordnance Survey maps but shown only in outline on master map, presumed abandoned.

Community: Trelech

Site Status:

B) Scheduled Ancient Monuments (SAMs) and Listed Buildings (LBs) within 5km radius

i) Scheduled Ancient Monuments (SAMs)

SAM No. CM125 **SAM Name:** Capel Bettws **Site Type:** Chapel **Period:** Medieval
NGR: SN278281

SAM No. CM127 **SAM Name:** Crug y Deyrn Burial Chamber **Site Type:** Round barrow **Period:** Prehistoric
NGR: SN293250

SAM No. CM126 **SAM Name:** Castell Mawr **Site Type:** Enclosure **Period:** Prehistoric
NGR: SN271275

SAM No. CM295 **SAM Name:** Pencastell Hillfort **Site Type:** Hillfort **Period:** Prehistoric

NGR: SN257289

ii) Listed Buildings (LBs)

LB Ref: 19091	Site Name: Dan-y-Graig		Community: Meidrim
Eastings: 229816	Northings: 221613	Listing Grade: II	
LB Ref: 19092	Site Name: Outbuilding on N side of yard at Dan-y-graig		Community: Meidrim
Eastings: 229819	Northings: 221659	Listing Grade: II	
LB Ref: 19093	Site Name: Outbuilding on S side of yard at Dan-y-graig		Community: Meidrim
Eastings: 229834	Northings: 221630	Listing Grade: II	
LB Ref: 19094	Site Name: Outside toilet at Dan-y-graig		Community: Meidrim
Eastings: 229810	Northings: 221593	Listing Grade: II	
LB Ref: 23886	Site Name: Rhyd-y-garreg-ddu		Community: Abernant
Eastings: 232518	Northings: 226041	Listing Grade: II	
LB Ref: 23887	Site Name: Coach-house at Rhyd-y-garreg-ddu		Community: Abernant
Eastings: 232510	Northings: 226068	Listing Grade: II	
LB Ref: 23888	Site Name: Ystafell		Community: Abernant
Eastings: 233888	Northings: 223084	Listing Grade: II	
LB Ref: 25465	Site Name: Capel y Graig and attached railings and gates		Community: Llanwinio
Eastings: 225375	Northings: 225878	Listing Grade: II	
LB Ref: 25466	Site Name: Cwmbach County Primary School		Community: Llanwinio
Eastings: 225385	Northings: 225890	Listing Grade: II	
LB Ref: 25467	Site Name: Cilsant		Community: Llanwinio
Eastings: 226577	Northings: 223911	Listing Grade: II	
LB Ref: 25468	Site Name: Range of outbuildings at Cilsant		Community: Llanwinio
Eastings: 226490	Northings: 223889	Listing Grade: II	
LB Ref: 25470	Site Name: Pentairrhiw		Community: Llanwinio
Eastings: 227196	Northings: 224120	Listing Grade: II	
LB Ref: 26745	Site Name: Church of St David		Community: Meidrim
Eastings: 228910	Northings: 220864	Listing Grade: II	
LB Ref: 26746	Site Name: Bethel Calvinistic Methodist Chapel		Community: Meidrim
Eastings: 228905	Northings: 220970	Listing Grade: II	
LB Ref: 26747	Site Name: The Close		Community: Meidrim
Eastings: 228913	Northings: 220999	Listing Grade: II	
LB Ref: 26748	Site Name: L-plan outbuilding to E of The Close		Community: Meidrim
Eastings: 228934	Northings: 221008	Listing Grade: II	
LB Ref: 26749	Site Name: Lofted outbuilding to N of The Close		Community: Meidrim
Eastings: 228912	Northings: 221027	Listing Grade: II	

LB Ref: 26750	Site Name: Smithy at Danyrhiw		Community: Meidrim
Eastings: 229197	Northings: 220884	Listing Grade: II	
LB Ref: 26752	Site Name: Maenllwyd		Community: Meidrim
Eastings: 227697	Northings: 221156	Listing Grade: II	
LB Ref: 26754	Site Name: Cwm		Community: Meidrim
Eastings: 232790	Northings: 222105	Listing Grade: II	
LB Ref: 26756	Site Name: Pont Trelech		Community: Trelech
Eastings: 230638	Northings: 227054	Listing Grade: II	
LB Ref: 9758	Site Name: Capel Y Graig including attached schoolroom and railings		Community: Trelech
Eastings: 228178	Northings: 230337	Listing Grade: II*	

APPENDIX IV:
Archive Cover Sheet

ARCHIVE COVER SHEET

Neuadd Farm Wind Turbines
Meidrim, Carmarthenshire

ARCHIVE DESTINATION – RCHAMW

Site Name:	Neuadd Farm, Meidrim, Carmarthenshire
Site Code:	NF/2013/IA
PRN:	
NPRN :	N/A
SAM:	N/A
Other Ref No:	HRSW Report No. 137
NGR:	SN 2969 2580
Site Type:	Post Medieval landscape
Project Type:	Archaeological Impact Assessment
Project Manager:	Richard Scott Jones
Project Dates:	August 2013
Categories Present:	N/A
Location of Original Archive:	HRS Wales
Location of duplicate Archives:	Dyfed Archaeological Trust
Number of Finds Boxes:	
Location of Finds:	
Museum Reference:	
Copyright:	HRS Wales
Restrictions to access:	None

