

# CHAPTER 4 – LANDSCAPE AND VISUAL IMPACT ASSESSMENT

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## 4 LANDSCAPE AND VISUAL IMPACT ASSESSMENT

### Introduction

- 4.1 This Landscape and Visual Impact Assessment (LVIA) has been prepared by Soltys Brewster Consulting, to assess the likely affects of the proposed development on the landscape and visual resource of the defined 15km and 25km study areas. See paragraph 4.26 for more detail on the parameters used to establish they study areas.
- 4.2 The proposed development is located within the local authority boundary of Carmarthenshire and consists of 2 turbines to a maximum blade tip height of 125m, turbine foundations and hardstand areas, turbine transformers, underground cables, temporary construction compound and substation, internal tracks and a new site access from the B4337.
- 4.3 This LVIA describes and evaluates the existing landscape character and visual amenity and assesses the potential effects of the proposed development, including the effects of the proposed development on the physical landscape and visual amenity within the study area, during the construction, operational and decommissioning phases of the proposed project.
- 4.4 The assessment considers the wind turbines and associated infrastructure and its wider relationship with the surrounding landscape, to enable a thorough understanding of the setting, context and the extent of visibility of the proposed development within the study area. This information provides a baseline of existing conditions against which the impact of the proposed development can be assessed.
- 4.5 When assessing landscape as a potential opportunity or constraint, factors to be considered fall into two broad categories:
- Potential aspects and attributes of the land within the proposed development site; and
  - The wider characteristics of the landscape surrounding the proposed development site.

- 4.6 Both require the consideration of aspects such as topography, land-use, landscape condition, quality, visibility and aesthetics. Together, these aspects help in defining the sensitivity and robustness of the study area, and its capacity to accommodate development of a given scale, form and appearance.
- 4.7 The assessments of landscape and visual effects, although connected, follow separate methodologies. Following the assessment of the landscape to identify potential changes in its character and perceived value, potential visual effects are assessed to identify changes arising from the proposed development on the composition of available views, perception of change and overall effects on visual amenity experienced by potentially sensitive receptors.
- 4.8 The methodology adopted for this assessment has been guided by current 'best practice' guidance published by the Landscape Institute and Institute of Environmental Management Guidelines for Landscape and Visual Impact Assessment, 3<sup>rd</sup> Edition (2013), tailored to the scope of the development, available detail and project constraints. The site assessment was undertaken in January 2021.

## **Legislation and Policy Context**

- 4.9 A review of relevant key statutory and non-statutory landscape planning designations and policies has been carried out as part of this assessment. Please refer to Chapter 2 for the principal planning policy framework relevant to this proposed development.

### **National Planning Policy**

#### ***Planning Policy Wales (PPW) Edition 10, December 2018***

- 4.10 This document contains current land use planning policy for Wales. Of primary relevance to Landscape and Visual Assessment is the hierarchy of statutory and non-statutory designations. PPW also supports the use of the

National Resources Wales (NRW) LANDMAP Information System as an important information resource.

### **Technical Advice Notes**

- Relevant Technical Advice Notes include: Technical Advice Note (TAN) 8: Planning for Renewable Energy (2005). "Since the publication of TAN 8: planning for renewable energy there have been some policy and legislative changes. Annex A of the Chief Planning Officers (CPOs) – publication of planning policy Wales edition 4, February 2011 - letter sets out these changes. It should be read alongside TAN 8<sup>1</sup>."
- TAN8 notes in paragraph 8.4 that Renewable Energy has the objective *"to maintain the integrity and quality of the landscape within the National Parks/AONBs of Wales i.e. no change in landscape character from wind turbine development<sup>2</sup>."*

### **Local Planning Policy**

- 4.11 Landscape planning designations and policies indicate the value that national and local government, as well as statutory parties, attach to various landscapes or landscape features within a geographic area. Figure 4.1 illustrates the location and context of the proposed development site in relation to landscape policy and designations that lie within the 25km study area. The study area encompasses a large part of the county of Carmarthenshire; which the proposed development site lies within and is therefore the relevant Local Planning Authority (LPA), a large part of the southern area of the county of Ceredigion and a small area of the western edge of the Brecon Beacons National Park Authority located along the south-eastern edge of the study area.

### **Carmarthenshire County Council Local Development Plan**

<sup>1</sup> <http://wales.gov.uk/topics/planning/policy/tans/tan8/?lang=en>

<sup>2</sup> Planning Policy Wales, Technical Advice Note 8: Planning for Renewable Energy, July (2005) Page 64, paragraph 8.4  
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- 4.12 A brief review of the key landscape relevant planning policy provisions for CCC has been undertaken. Policy in Carmarthenshire is defined by the Local Development Plan (LDP), as adopted on 10th December 2014.
- 4.13 The key policy within the LDP that is of relevance to landscape related issues can be found below.
- 4.14 Strategic Policy SO4 aims *"To ensure that the natural, built and historic environment is safeguarded and enhanced and that habitats and species are protected."*
- 4.15 SP11 Renewable Energy & Energy Efficiency states that *"Development proposals which incorporate energy efficiency measures and renewable energy production technologies will be supported in areas where the environmental and cumulative impacts can be addressed satisfactorily. Such developments will not cause demonstrable harm to residential amenity and will be acceptable within the landscape. Each proposal will be assessed on a case by case basis. Large scale wind farms will only be permitted within Strategic Search Areas"*.
- 4.16 SP13 Protection and Enhancement of the Built and Historic Environment states: *"Development proposals should preserve or enhance the built and historic environment of the County, its cultural, townscape and landscape assets (outlined below), and, where appropriate, their setting. Proposals relating to the following will be considered in accordance with national guidance and legislation.*
- a) Sites and features of recognised Historical and Cultural Importance;*
  - b) Listed buildings and their setting;*
  - c) Conservation Areas and their setting;*
  - d) Scheduled Ancient Monuments and other sites of recognised archaeological importance.*

*Proposals will be expected to promote high quality design that reinforces local character and respects and enhances the local setting and the cultural and historic qualities of the plan area."*

- 4.17 Policy SP14 - Protection and Enhancement of the Natural Environment states: *"Development should reflect the need to protect, and wherever possible enhance the County's natural environment.*

*All development proposals should be considered in accordance with national guidance/legislation and the policies and proposals of this Plan, with due consideration given to areas of nature conservation value, the countryside, landscapes and coastal areas, including those outlined below:*

*a) Statutory designated sites including Ramsar sites, SPAs, SACs, SSSIs and National Nature Reserves;*

*b) Biodiversity and Nature Conservation Value, including protected species and habitats of acknowledged importance as well as key connectivity corridors and pathways; (Policy EQ4 and EQ5)*

*c) Regional and Locally important sites (and their features) including Local Nature Reserves and RIGS; (see Policy EQ3)*

*d) Areas of identified Landscape and Seascape quality; (including SLAs)*

*e) Features which contribute to local distinctiveness, nature conservation value or the landscape; (see Policy EQ5)*

*f) The Open Countryside; (see Policy GP2)*

*g) The best and most versatile agricultural land; (Grade 2 and 3a)*

*h) Natural assets: including air, soil (including high carbon soils) controlled waters and water resources. (See Policies EP1 and EP2)."*

- 4.18 The following policies within the LDP provide guidance for development that may affect statutory and local or nationally valued landscapes.

- 4.19 Policy EQ3 - Regional and Local Designations states: *"Proposals for development that are likely to cause unacceptable harm to a Local Nature Reserve (LNR), or Regionally Important Geological/Geomorphological Sites (RIGS) will only be permitted where the need to safeguard the substantive nature conservation value of the site or feature is clearly outweighed by the reasons for the development or land use change.*

*The designation of such sites will, where appropriate, be supported."*



4.20 Policy EQ6 Special Landscape Areas states: *"Special Landscape Areas are designated in the following locations and as identified on the Proposals Map:*

*Tywi Valley*

*Carmarthenshire Limestone Ridge*

*Teifi Valley*

*Drefach Velindre*

*Bran Valley (North of Llandovery)*

*Mynydd Mallaen*

*Llanllwni Mountain*

*North Eastern Uplands*

*Mynydd y Betws*

*Gwendraeth Levels*

*Pembrey Mountain*

*Swiss Valley*

*Talley*

*Lwchwr Valley*

*Lower Taf Valley*

*Cwm Cathan*

*Cothi Valley*

*Carmarthen Bay and Estuaries*

*Proposals for development which enhance or improve the Special Landscape Areas through their design, appearance and landscape schemes will be permitted (subject to the policies and proposals of this Plan)."*

4.21 The following LDP policies are in relation to renewable/wind turbine developments.

4.22 Policy RE2 Local, Community and Small Wind Farms states: "Local, Community and Small wind farms or individual turbines will be permitted provided the following criteria can be met in full:

a) The development will not have an unacceptable impact on visual amenity or landscape character through: the number, scale, size, design and siting of turbines and associated infrastructure

b) The development will not have an unacceptable cumulative impact in relation to existing wind turbines and other renewable energy installations and those which have permission;

c) The siting, design, layout and materials used should be sympathetic to the characteristics of the land-form, contours and existing features of the landscape;

d) The development would not cause demonstrable harm to statutorily protected species, and habitats and species identified in the Local Biodiversity Action Plan;

e) Turbines and their associated structures will not be sited in, or impact upon archaeological resources, the setting and integrity of Conservation Areas, Listed Buildings or other areas of historical value;

f) Proposals will not cause an unreasonable risk or nuisance to, and impact upon the amenities of, nearby residents or other members of the public;

g) No loss of public accessibility to the area, and existing bridleways and footpaths will be safeguarded from development with no permanent loss to their length and quality;

h) Turbines and associated infrastructure will, at the end of the operational life of the facility, be removed and an appropriate land restoration and aftercare scheme agreed;

i) The development will not result in significant harm to the safety or amenity of sensitive receptors and will not have an unacceptable impact on roads, rail or aviation safety;

j) The development will not result in unacceptable electromagnetic interference to communications installations; radar or air traffic control

systems; emergency services communications; or other telecommunication systems."

## **Supplementary Planning Guidance: Wind and Solar Energy (adopted June 2019)**

4.23 The main purpose of this SPG is:

- To *"provide further, more detailed guidance for facilitating the development of renewable energy schemes, focusing in particular on wind and solar energy*
- provide a better understanding of how planning applications for wind and solar energy may be assessed by the Council"*

## **Methodology of Assessment Guidance**

4.24 The assessment was undertaken using a methodology developed by Soltys Brewster Consulting that follows an accepted approach derived from the current published 'best practice' guidance encompassed by The Landscape Institute (LI)/ Institute of Environmental Management & Assessment (IEMA) (2013) Guidelines for Landscape and Visual Impact Assessment, Third Edition (known as GLVIA 3)<sup>3</sup>. The guidance is not prescriptive but recognises that every project requires its own set of criteria and thresholds, tailored to suit local conditions, circumstances and the potential scale of impacts. In the case of the Mynydd Pencarreg wind turbines, the approach followed recognises the specific attributes and scale of the project and distinctive characteristics within the study area.

4.25 Details of the criteria and methods used in assessing the effects of the proposed wind turbine on landscape character and visual amenity, both individually and cumulatively are set out in Appendix 4.1. This also provides methods used to establish Zones of Theoretical Visibility (ZTV) and the methods followed to produce computer generated wirelines and photomontages.

<sup>3</sup> Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA 3), The Landscape Institute (LI)/ Institute of Environmental Management & Assessment (IEMA) (2013)  
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## Study Area

4.26 The study area extents, which are in accordance with '*Pembrokeshire and Carmarthenshire: Cumulative Impact of Wind Turbines on Landscape and Visual Amenity guidance*'<sup>4</sup> were established based on the following parameters:

- 25km radius from the proposed development site for the plotting of relevant policy and landscape designations including the Brecon Beacon National Park (BBNP), Special Landscape Areas (SLA), and Landscape of Outstanding Historic Interest (LOHI);(HLA) and the broad search area of potential cumulative schemes;
- 15km radius from the proposed development site for assessment of effects on visual amenity and the LANDMAP Aspect Areas for all five Aspect Layers and the identification of Landscape Character Areas to enable the assessment of effects of development on landscape character. This zone is considered to reflect the limit of potential visual significance in this instance; and
- 15km radius from the proposed development site for detailed assessment of cumulative effects as this distance reflects the limit of potential visual significance of the Mynydd Pencarreg turbines; to include the other existing, consented and proposed wind energy schemes, including Brechfa Forest West and Alltwalis.

4.27 Visual impacts beyond 25km were not considered to be significant, given distance, the size of the proposed turbines and the combining constraints of landform and vegetation cover following an initial reconnaissance survey.

## Appraisal of Cumulative Effects

4.28 Cumulative landscape and visual effects alongside other existing, proposed and consented wind energy schemes have been assessed using available data and information obtained from CCC and Ceredigion County Council. Figure 4.40 illustrates the location and distribution of the potential

<sup>4</sup> Pembrokeshire and Carmarthenshire: Cumulative Impact of Wind Turbines on Landscape and Visual Amenity guidance, Final Report April 2014 (White Consultants).  
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cumulative wind energy schemes found in the 15km search area of the proposed Mynydd Pencarreg turbines.

- 4.29 All schemes within a 15km radius of the proposed development site have been included within this assessment. Schemes were omitted from the assessment that were located beyond 15km of the proposed turbines and had a blade tip height of less than 35m. Due to the small to medium size of these wind energy schemes in addition to their distance to the proposed Mynydd Pencarreg turbines it was considered that it would be unlikely that there would be any cumulative visual effects from these schemes.
- 4.30 The cumulative assessment has been undertaken in parallel with the process of assessing individual effects of the scheme. The 15km radius study area is considered to provide sufficient ZTV context and as being appropriate for the proposed development given the relatively limited potential visual significance of the Mynydd Pencarreg turbines and the surrounding wind energy schemes located within the study area. The most notable potential cumulative wind energy developments, namely Brechfa West and Alltwalis, occur within 15km.
- 4.31 A list of the wind energy developments within 15km of the proposed wind turbines up to and including the 5<sup>th</sup> January 2021, can be found in Appendix 4.2. There are 29 wind energy developments in total, ranging from single turbine projects to wind farms consisting of 28 turbines. There are 15 'operational' wind turbine schemes, 13 'approved' and 1 wind turbine scheme 'in planning', all of which are considered within the cumulative assessment.

## **Baseline Conditions**

- 4.32 This section of the LVIA establishes the baseline landscape and visual character of the proposed development site and study area by drawing together existing desktop information such as maps, planning designations and historic references, verifying and expanding upon this information through site survey.

## ***Description of the Proposed Development Site and Surrounding Area***

- 4.33 The proposed development site is located within the county of Carmarthenshire, approximately 5km south of the county's northern boundary, approximately 6.9km south of Lampeter and 5.5km west-north-west of Llanbydder. The proposed development site is located on the Mynydd Pencarreg ridge which is north-east of Mynydd Llanllwni and Mynydd Llanydyther and south-west of Craig Twrch. These ridge lines make up high ground between the Afon Teifi to the north and the Afon Cothi to the south.
- 4.34 The Site consists of two adjacent fields within which the two turbines (T1 and T2) would be located and a thin, linear 'leg' to the south of these fields which is the route of the access track. Following an appeal, planning permission was granted in February 2018 for the construction of two number turbines, within the same location, to a maximum blade tip height of 100m. Permission is now sought for turbines with a maximum blade tip height of 125m.
- 4.35 The two adjacent grassland fields lie along the western side of the head of a small valley, separated and bound by a post and wire fence. An unnamed, local road just skims the north-western corner of the northern field. See Figure 1.2 for detailed site layout.
- 4.36 T1 is located to the south-east of the southern field at an approximate elevation of 346m AOD. T2 is located in the northern half of the broadly triangular, northern field at an approximate elevation of 346m AOD.
- 4.37 The turbines would be accessed from the south via a track from the B4337, through Esgairliving Farm. This access track would run through a number of small to medium grassland fields; some containing areas of scrub and a block of woodland. These grassland fields are for the most part, bound by a combination of post and wire fences and hedgerows, with a few small clusters of mature trees defining field boundaries close to the block of woodland.

- 4.38 The topography of the Site is varied due to the two main fields where the two turbines would be located being at the head of a small valley. The northern field falls in all directions, from a high point of approximately 354m AOD in the centre of the field to approximately 340m AOD at its lowest point in the south-east corner. The southern field also falls in all directions, from a height point of approximately 350m AOD in the centre of the field to approximately 339m AOD at its lowest point in the south-east corner.
- 4.39 The access track starts off at approximately 346m OAD at T1 and heads north passed T2, it then sweeps around to the east where it then heads south, falling in a southerly direction; along the western side of a small valley, to approximately 255m AOD where it meets the B4337.
- 4.40 Immediately to the north of the two fields lies a small rough grassland field of which the unnamed local road which skims the north-western corner of the site boundary forms its northern boundary, although a small area of additional land is included in the application area extending to the opposite side of the local road where the substation is proposed. Further grassland fields lie immediately to the north, east and south of these two fields. As the access track heads north from the B4337, immediately surrounding it is a mixture of grassland fields, woodland and Esgairliving Farm.
- 4.41 A stream which emerges from the hillside just south of where the access track enters the field in which T2 is located, runs south, parallel to the access track. Here this stream passes under the B4337 and continues to head south until it reaches the Afon-Melinddwr, which in turn heads south-east.
- 4.42 Although the proposed Site is accessed off the B4337, this road is located approximately 683m south-south-west of T1 at its closest point. The unnamed local road that just passes the north-western corner of the most northern field mentioned above, branches off an unnamed local road, the junction of which is located approximately 280m west of T2 at its closest point.
- 4.43 Just beyond this unnamed local road to the west of the site, lies the most north-eastern edge of Brechfa Forest and is a prominent feature to the west of the proposed development site.

- 4.44 The Afon Marlais rises from the hillside approximately 600m north-north-east of the proposed turbines at its closest point and heads south-east. Nant y Wenallt is located approximately 600m east-south-east of the proposed turbines at its closest point and heads south/south-east feeding into the Afon Marlais, approximately 2km south-east. There are a few small water bodies scattered around the proposed turbines; the closest is an old sheep dip, 560m north-east and three small ponds located 920m to the south-east. Two telecommunication mast lie approximately 1.96km and 1.86km north-north-east of the turbines.

### ***Description of the Wider Study Area***

#### *Topography and Drainage*

- 4.45 The majority of the landscape of the study area is gently undulating with small well-wooded valleys formed by the large number of streams feeding into the Afon Aeron, Afon Teifi and Afon Tywi, which run through the study area. To the south-east, ground levels progressively increase, as the landform starts to rise, forming 'The Black Mountain' area of the Brecon Beacons National Park.

#### *River Corridors*

- 4.46 The Afon Aeron is located 15km north of the proposed turbines at its closest point, the Afon Teifi is located approximately 5.2km north-west of the proposed turbines at its closest point, and the Afon Tywi is located approximately 18.5km south-east of the proposed turbines at its closest point.

#### *Water Bodies*

- 4.47 There are numerous small water bodies within the wider study area, a small pond lies 1km north-west of the proposed turbines and the lake of Llyn Pancarreg lies 5.3km north-north-west of the proposed turbines. The largest water body within the study area is that of Llyn Brianne Reservoir, located on the north-east extents of the study area.

#### *Land Use*



- 4.48 Land use is predominantly agricultural with small to large sized fields, bound by a mixture of stone walls, post and wire fences, or hedgerows and trees. The large to medium sized fields, bound by stone walls, post and wire fences and low hedgerows tend to be located on high ground with the smaller fields bound by more mature hedgerows with trees being located along the lower valley sides.

#### *Woodland Cover*

- 4.49 To the north-east of the proposed turbines, the study area is heavily influenced by forest/woodland located on the large ridge line formed between the Afon Teifi and Afon Tywi. Brechfa Forest is the largest area of tree cover within the study area; it covers an area of approximately 6500ha and is a mixture of ancient forest and managed woodlands. Other large areas of woodland tend to be located along high ground to the north-east of the site, such as Caoe Forest, Allt Bryn-teg, Blaen Rhisglog Plantation and Clywedog Plantation located approximately 10.5km to the north-east of the turbines. A smaller block of woodland, covering 118ha is located north-east of the turbines along the ridge of Mynydd Pencareg, 2.1km from T1 at its closest point.

#### *Settlements*

- 4.50 Urban settlements within the study area are predominately scattered small villages, rural dwellings and farmsteads, with only a few principal settlements. The principal settlements within 15km of the turbines are; the towns of Lampeter, located approximately 6.9km to the north, Llanybydder, located approximately 5.5km to the north-west and Llandysul, located approximately 15km west of the proposed turbines. Further afield, the principal settlements are generally located near the extents of the 25km study area. The popular seaside resort and traditional fishing town of New Quay is located at the edge of the study area to the north-west of the turbines. The seaside town of Aberaeron is located approximately 24.4km north-north-west of the proposed turbines and the market town of Tregaron lies on the River Brenig, located 21.5km north-north-east of the proposed turbines. The market town of Llandovery lies on the Afon Tywi, 20.5km east-

south-east and Llandeilo lies on the northern edge of the Afon Tywi and is adjacent to the westernmost point of the Brecon Beacons National Park, 19.5km south-south-east of the proposed turbines. Newcastle Emlyn lies just outside of the 25km study area to the west of the turbines.

4.51 The nearest small village to the turbines is Rhydcymerau, located 2.2km south-south-east of the proposed turbines. Other small villages within approximately 15km of the turbines are;

- |                  |                         |
|------------------|-------------------------|
| ▪ Llansawel;     | ▪ Llanfihangel-ar-arth  |
| ▪ Abergorlech;   | ▪ New Inn;              |
| ▪ Tally;         | ▪ Llanllwni;            |
| ▪ Gwernogle;     | ▪ Maesuctugiau;         |
| ▪ Llanwenog;     | ▪ Betws Bladrws;        |
| ▪ Llanwnnen;     | ▪ Silian;               |
| ▪ Cwrt-newydd;   | ▪ Llanfair Clydogau;    |
| ▪ Pontsian;      | ▪ Cellan, Cwrt-y-cadno; |
| ▪ Ryhdownen;     | ▪ Caio, Pumsaint;       |
| ▪ Castle Howell; | ▪ Abergorlech;          |
| ▪ Cribyn;        | ▪ Brechfa;              |
| ▪ Gorsgoch;      | ▪ Llanfynydd;           |
| ▪ Temple Bar;    | ▪ Pencader; and         |
| ▪ Llangybi;      | ▪ Capel Dewi.           |

4.52 The nearest individual properties/farmsteads to the turbines are Cafnblaenau, 951m north-east of the proposed turbines, Caermalwas Fawr, 793m south-south-west, Tanrhiw, 679m south-west, Esgairliving 714m south, Bwlch Caermalwas Fach, 939.2m south-west, Blaen Wern Farm Centre, 1008m north-west, Caermalwas Fach, 1130m south-west and Ysgubor-fach, 1170m, south-south east of the proposed turbines. Both Tanrhiw and Esgairliving are proposed development site landowners and considered financially involved.

#### *Transport Routes*

- 4.53 A number of primary roads are located within the study area, the nearest being the A485, 5.1km north-west of the proposed turbines at its closest point. This primary route runs through the study area from Carmarthen in the south-west, through Lampeter to Tregaron in the north-east of the study area. The A482, 4.3km north-east of the proposed turbines at its closest point starts in Llanwrda, on the northern edge of the River Towy and heads north-west through the study area, passing through Lampeter and ending in Aberaeron in the north-west. The A475, 6.1km north-north-west of the proposed turbines at its closest point links Newcastle Emlyn, which lies just outside of the study area to the west, to Lampeter.
- 4.54 To the south the A40, which broadly follows the Afon Tywi; 16.7km south-east of the proposed turbines at its closest point, connects Carmarthen, which lies just outside of the study area to the south-west, Llandeilo and Llandovery.
- 4.55 To the south-west the A484 heads broadly north to north-west, 19.4km west of the proposed turbines at its closest point, through the far western part of the study area between Carmarthen and Newcastle Emlyn. The A486, 16.1km to the west of the proposed turbines, heads north from the A484 to New Quay.
- 4.56 There are a number of 'B' roads within the study area, the nearest 'B' road being the B4337, which the site would be accessed from. This road starts at the B4302 near Lalnsawel and heads north-west through Rhydcymerau, past the site, through Llanybydder, Llanwnnen, Cribyn, Temple Bar, Cross Inn and then heads towards Llanrhystud, outside of the study area.
- 4.57 There is also a network of minor roads throughout the study area that connect the numerous scattered villages, farmsteads and associated dwellings. The nearest local road is located along the north-west boundary of the proposed development site.
- 4.58 There is one main train line through the study area, which runs parallel with the Afon Tywi. This train line enters the study area, runs through Llandeilo and Llandovery before it exits the study area.

#### *Public Rights of Way and National Cycle Routes*

- 4.59 There are numerous Public Rights of Way (PRoW), including footpaths and several long distant routes within the study area. These include the Wales Coast Path that follows the coastline to the north-west near New Quay and Aberaeron. At its nearest point the Coast Path is located approximately 23.9km to the north-west of the proposed turbines.
- 4.60 The Beacons Way trail, which is the official trail of the Brecon Beacons is located 19.6km south-east of the proposed turbines. The trail starts at Bethlehem on the north-western edge of the Brecon Beacons National Park and heads broadly south-east, where it exits the study area.
- 4.61 The nearest public footpath is located 1.2km north-west of the proposed turbines at its closest point. This footpath runs across undulating fields; a small section of Brechfa Forest and over the B4337, between Pistyll Gwyn Farm and Pant-y-ffin, in a north-easterly direction. Another footpath runs broadly north-east, 1.9km south-east of the proposed turbines at its closest point. This footpath runs between the local road south of the turbines, across the small valley of the Afon Marlais and undulating fields, until it reaches Esgair-Dawe Farm.
- 4.62 National Cycle Route 82 is 211km long and runs from Bangor to Fishguard. This cycle route passes through the north-western half of the study area, 5.9km north-west of the proposed turbines at its closest point.
- 4.63 National Cycle Route 47 is 195km long and runs between Newport and Fishguard. Only a short section (15km) of this cycle route falls within the study area. It enters the study area to the south-south-west, then heads north to Llanarthne where it turns west towards Carmarthen and exits the study area.

#### **Landscape Designations**

- 4.64 A review of relevant key statutory and non-statutory landscape classifications has been carried out as part of this LVIA. Landscape designations are one of the criteria that are considered when assessing the value of a landscape. All landscapes have some importance, particularly

to those people who live and work in them or use them for leisure activities so the qualitative evaluation of landscape is essentially a subjective matter.

- 4.65 Landscape designations provide an indication of the value that national and local government, plus other agencies, attached to various landscape types. Landscapes can be designated by statute, in order to conserve and enhance their natural beauty and are included in policies within Development Plans. The only Statutory designated landscape within the 25 km study area is the Brecon Beacons National Park.
- 4.66 Within the study area there are a range of national, regional and local designations that have been identified as the key designations relevant to the landscape and visual character of this study area. These are described below and are illustrated in Figure 4.1.

### ***Brecon Beacons National Park***

- 4.67 At its closest point the boundary of the Brecon Beacons National Park is located approximately 19.4 km south-east of the proposed turbines. The National Park was established in 1957 and is a valued and protected area managed mainly for landscape conservation, natural heritage and recreation. The park covers a 1,344 km<sup>2</sup> area. It stretches from Llandeilo in the west to Hay-on-Wye in the northeast and Pontypool in the southeast, encompassing four main regions - the Black Mountain in the west, Fforest Fawr and the Brecon Beacons in the centre and the Black Mountains in the east. The landscape predominantly consists of bare, grassy moorland, with scattered forestry plantations, and pasture in the valleys. It is known for its remote reservoirs, waterfalls and its caves.
- 4.68 The study area covers a small linear section of the far north-western edge of the Black Mountain region of the National Park.

### ***Special Landscape Area's***

- 4.69 Special Landscape Areas (SLAs) are considered to be attractive and locally significant landscapes that are worthy of protection under planning policy. Within the 25km study area there are six SLA's:

- Mynydd Mallaen
- Teifi Valley
- Tywi Valley;
- The North Eastern Uplands;
- Llanllwni Mountain; and
- Cothi Valley.

4.70 Their locations are illustrated in Figure 4.1. Under the current policy framework for Carmarthenshire (LDP), the two turbines currently fall approximately 2.7km east of the Llanllwni Mountain SLA.

4.71 The current SLAs within Carmarthenshire are identified within Appendix 4 of the adopted Local Development Plan.

### ***Landscape of Outstanding Historic Interest***

4.72 The Register of Landscape of Outstanding Historic Interest (LOHI) in Wales and Register of Landscapes of Special Historic Interest (LSHI) in Wales has been established by Cadw/ International Council on Monuments & Sites (ICOMOS) UK to identify those landscapes that can be considered of importance within Wales based upon a clear set of criteria. There are five Registered Landscapes of Outstanding/Special Historic Interest that lie entirely or partly within the study (See Figure 4.1):

- Upland Ceredigion;
- Dolaucothi;
- Towy Valley;
- Tywi Valley, Myddfai and Black Mountain; and
- Drefach and Felindre.

4.73 The closest LOHI is Dolaucothi, located approximately 7.8km east of the proposed turbines at its closest point.

### ***Registered Parks and Gardens of Special Historic Interest***

4.74 The Register of Parks and Gardens of Special Historic Interest in Wales has been established, by Cadw/ICOMOS UK, to identify those sites that can be considered of importance within Wales based upon a clear set of criteria. There are a total of 19 Registered Parks and Gardens within the study area and their locations are shown in Figure 4.1. A considerable number of the gardens are not open to the public and therefore are not assessed further in this assessment. The sites that are open to the public are listed below:

- Llanerchaeron - Grade I, II and II\* buildings within 30 ha of landscaped parkland. Located 20.5km north-west of the proposed turbines. The ZTV indicates that there would be no visibility of the proposed turbines from this location and therefore it has not been considered further within this LVIA.
- Ty Glyn - Kitchen garden. Located 19.9km north-west of the proposed turbines. The ZTV indicates that there would be no visibility of the proposed turbines from this location and therefore it has not been considered further within this LVIA.
- Plas Dinefwr (also known as Dynevor Castle) - Grade I, II and II\* buildings within 200 ha of landscaped parkland. Located 19.1km south-south-east of the proposed turbines. The ZTV indicates that there would be no visibility of the proposed turbines from this location and therefore it has not been considered further within this LVIA.
- Aberglasney - Grade II and II\* buildings within 6 ha of landscaped parkland. Located 19.1km south of the proposed turbines. The ZTV indicates that there would be no visibility of the proposed turbines from this location and therefore it has not been considered further within this LVIA.
- Golden Grove, Dryslwyn (also known as Gelli Aur) - Grade II and II\* buildings within 4 ha of gardens. Located 21.5km south of the proposed turbines. The ZTV indicates that visibility of the proposed turbines would be limited to the far southern extent of the gardens.
- Paxton's Tower - Grade II and II\* buildings within 5 ha of gardens. Located 22.8km south of the proposed turbines. The ZTV indicates that there

would be no visibility of the proposed turbines from this location and therefore it has not been considered further within this LVIA.

- National Botanic Garden of Wales (also known as Middleton Hall) - Grade II and II\* buildings within 243 ha of landscaped parkland. Located 23.5km south-south-west of the proposed turbines. The ZTV indicates that there would be no visibility of the proposed turbines from this location and therefore it has not been considered further within this LVIA.
- Bishop's Palace, Abergwili - Ornamental garden. Located 24km south-south-west of the proposed turbines. The ZTV indicates that there would be no visibility of the proposed turbines from this location and therefore it has not been considered further within this LVIA.

### ***Scheduled Ancient Monuments (SAMs)***

- 4.75 Within the study area there is a significant number of SAMs that contribute to the rich archaeological landscape of the area. The nearest SAM to the proposed turbines, and which falls within the ZTV, is 'Crug Y Bwdran', located approximately 2.1km to the south-west of the site, located on the southern edge of the Banc Melyn area of Brechfa Forest. This is a Bronze Age Religious, Ritual and Funerary round barrow and cairn.

### ***Open Access and Common Land***

- 4.76 Within the study area there are a number of Open Access and Common Land areas of various sizes. The majority of these areas are located on higher ground, along the ridge line formed by the Afon Teifi and Afon Tywi. These areas cover a relatively large part of the study area with the nearest Open Access and Common Land areas located to the west of the site at approximately 1km, which is comprised of areas of Brechfa Forest and the uplands area of Mynydd Llanllwni.



## Baseline Landscape Character

### LANDMAP Character Areas

- 4.77 In line with Natural Resources Wales (NRW) LANDMAP Guidance Note 3 (2017), 6 LCAs within the 15km study area have been identified, based on LANDMAP Aspect Areas and have been used as the landscape character baseline for the assessment below. The proposed development is located within LCA 1: Brechfa Forest, Mynydd Mallaen, Llanllwni and Tre baddau Upland and Plateau.
- 4.78 Existing baseline conditions within the six LCAs identified are described in detail in Appendix 4.3. The LANDMAP value of each identified LCA is summarised in the table below.

**Table 4.1: Summary of Landscape Character Areas**

| Landscape Character Area |                                                                                    | LANDMAP Value    |
|--------------------------|------------------------------------------------------------------------------------|------------------|
| LCA 1                    | <b>Brechfa Forest, Mynydd Mallaen, Llanllwni and Tre baddau Upland and Plateau</b> | High             |
| LCA 2                    | <b>Teifi, Llanwenog and Dyffryn Lowland Valley</b>                                 | Moderate to High |
| LCA 3                    | <b>Llanwenog Farmland and Talgarreg Plateau</b>                                    | Moderate to High |
| LCA 4                    | <b>Caio Hills</b>                                                                  | Moderate to High |
| LCA 5                    | <b>Cothi and Llansawel Lowland Valleys</b>                                         | High             |
| LCA 6                    | <b>Mynydd Figyn, Llansawel and Banc-Beli-Tew Upland</b>                            | High             |

## Baseline Visual Assessment

### Bare Ground ZTV

- 4.79 The ZTV (Figure 4.3) indicates that at least 1no. turbine would theoretically be visible from approximately 33.5% of the 15km study area, and therefore from the remaining 66.5% no wind turbines of the proposed development would be visible. The ZTV shows in map form where all or part of the turbines are potentially visible from based on landform alone, any surface features such as vegetation and buildings are not taken into account.

- 4.80 From locations within the immediate vicinity of the proposed development, the ZTV indicates that the turbines would be visible from the surrounding areas of Mynydd Pencarreg and areas of Brechfa Forest which lies to the west.
- 4.81 From locations between a distance of 1-5km from the proposed development, the turbines would be visible from high ground that face the site, such as Mynydd Llanybyther and from the settlements of Ty Mawr/Llanybydder to the north-west and Rhydcymerau to the south-east. The turbines are also theoretically visible from the majority of the section of the B4337 that passes within 5km of the proposed development.
- 4.82 From distances between 5-15km from the proposed development site, the ZTV indicates that the turbines would be visible from the south-east facing slopes of the surrounding hills to the north-west beyond Llanybydder and north of the A485 and Afon Teifi. Visibility from the south-east is patchy and restricted to high ground facing the site, due to the undulating landform, which is dissected by a number of rivers and streams. The turbines would also be visible from the west and north-west facing upper slopes of Mynydd Figyn, Mynydd Cynros and the Caio Hills to the east and south-east, which lie between the Afon Cothi and Afon Tywi.
- 4.83 Within a radius of 15-25km from the proposed development, the turbines would theoretically be visible from; the more elevated north-west facing slopes of the Brecon Beacons to the south-east, the upper south-west facing slopes surrounding Tregaron, Blaenpennal and Penuwch to the north-east and the upper east facing slopes between Newcastle Emlyn and Llandysul to the west.
- 4.84 The key receptor groups contained within the visual envelope are discussed below, with a view to establishing key locations for detailed field analysis and viewpoint assessment.

## Receptor Groups

- Residents of key settlements: This group is considered to be amongst the high sensitivity groups within the study area because they are static

receptors that would experience views for long periods of time. However, sensitivity is limited in that views would be heavily influenced by man-made, urban elements. Of the key settlements within the study area only Llanybydder and Tregaron fall within the ZTV. A preliminary field investigation has confirmed that potential viewpoint locations within these settlements are limited.

- Residents of small settlements and individual dwellings: This group is judged to be highly sensitive because they are static receptors that would experience views for long periods of time. Individual dwellings within the countryside may be historically located in order to take advantage of high-quality landscapes or views. There are a number of scattered farmsteads and individual dwellings within the landscape surrounding the proposed development site. The vegetation enclosing surrounding properties and within the intervening landscape limits the degree of potential visibility from these dwellings. Esgairliving and Tanrhiw, located approximately 714m south and 679m south-west, respectively of the proposed turbines, are not expected to receive views of the proposed turbines as a result of these screening effects. From Ysgubor-fach, 1170m south, south-west, Blaen Wern Farm Centre, 1008m north west, Cefnblaenau, 951m north-east, Caermalwas Fach, 1130m, Caermalwas Fawr, 793m and Bwlch Caermalwas Fach, 939.2m south-west of the turbines, views toward the turbines would be available, although partially screened by intervening vegetation and landform from windows looking south-west, south-east and north-east.
- People undertaking recreation where the landscape within which the proposed development is located is seen as the primary reason for attraction: This group (such as walkers and hikers), is judged to be highly sensitive because they are static receptors that would experience views for long periods of time on recognised footpaths, open access land and rights of way, ridges and scenic route users. Receptors are more likely to be within a designated landscape and could be attracted to visit more frequently, or stay longer, by virtue of the view. The nearest public footpath which falls within the ZTV is located approximately 1.2km north-

west of the turbines at its closest point. A stretch of approximately 700m of this footpath falls within the ZTV, although intervening forest plantation would partially screen views from this location. The B4337 runs within 1km of the proposed turbines and large stretches of this road fall within the ZTV. Due to intervening and road side vegetation, views would be partially screened. It is therefore considered that such users, within a close proximity to the proposed turbines are likely to be very limited in number.

- Within the wider landscape, recreational users include walkers on the network of surrounding footpaths and walkers along the long distance trails that cut through the study area. Visibility from the network of footpaths is varied, as represented in Viewpoints 8, 9 and 10.
- Visitors undertaking active outdoor recreation activities that are not directly associated with the enjoyment of scenery: This group is judged to have medium sensitivity because they are not always located in designated or highly scenic landscapes and their primary reason for being in the landscape is not the appreciation of its character and appearance. There would be a varied number of these receptors, including for example, users of the National Cycle Networks. Two National Cycle Routes cross within the study area, however they are located at distance and therefore receptors of this nature are considered likely to be limited.
- Outdoor workers: This group of users is considered to be of medium sensitivity because they are mobile and would engage in active work. The quality of landscape and visual character would not influence their presence or length of stay but they are likely to spend prolonged periods of time outdoors and this time may be enhanced by scenic quality. They are most likely to include agricultural and forestry workers who would be located in proximity to the Site and also throughout the study area.
- Users of indoor workplaces and community facilities: This group is judged to be of low sensitivity because they would spend only short periods of time in the landscape for reasons that are not related to or affected by landscape and visual quality. They would experience temporary or

transitory views whilst engaged in other activities. This group of users may include churchgoers, customers at petrol stations and garages, public houses, leisure centres and other community facilities. They are most likely to be located within settlements and on the primary or secondary road networks and would occur in moderate to large numbers across the study area.

## Viewpoint Selection

- 4.85 Ten potential viewpoint locations were selected for review from within the 15km study area. See Figure 4.2. Selection was based on the outcome of the ZTV generation, which also represents various receptor groups. These included receptor locations of varying sensitivities frequented by people and include; settlements, National Trails, Public Rights of Way, Open Access Land and public highways.
- 4.86 Consideration was also given to the Llanllwni Mountain SLA and the Brecon Beacons National Park (BBNP), the latter of which falls outside of the 15km study area.
- 4.87 Of the ten viewpoints used for the final assessment, nine lie within 15km of the proposed turbine and one lies outside of the 15km study area to represent the more distant views. Site photography was carried out in January 2021 in dry weather conditions with reasonable visibility.

**Table 4.2: Final Assessment Viewpoint Locations**

| Viewpoint No. | Location                                     | OS Grid Reference      | Approx. Distance from Site (m) | Reason for Choice                                                                                                  |
|---------------|----------------------------------------------|------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 1             | Local road to the north-west of the turbines | E: 256668<br>N: 241239 | 289                            | <ul style="list-style-type: none"> <li>Represents the closest publicly accessible view of the turbines.</li> </ul> |
| 2             | Local road to the west of Rhydcymerau        | E: 256744<br>N: 239082 | 1,938                          | <ul style="list-style-type: none"> <li>Represents sensitive</li> </ul>                                             |

|   |                                              |                        |        |                                                                                                                                                                |
|---|----------------------------------------------|------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                              |                        |        | <p>residential receptors.</p> <ul style="list-style-type: none"> <li>• A suggested viewpoint by CCC.</li> </ul>                                                |
| 3 | Local road to the north-east of the turbines | E: 259216<br>N: 242038 | 2,398  | <ul style="list-style-type: none"> <li>• Represents elevated views from the north-east.</li> <li>• A suggested viewpoint by CCC.</li> </ul>                    |
| 4 | B4337 at Llanybydder                         | E: 253575<br>N: 243569 | 4,102  | <ul style="list-style-type: none"> <li>• Represents sensitive residential receptors.</li> <li>• A suggested viewpoint by CCC.</li> </ul>                       |
| 5 | Layby along the A482                         | E: 267364<br>N: 237598 | 10,958 | <ul style="list-style-type: none"> <li>• Represent sensitive receptors on a key route leading to Lampeter.</li> <li>• A suggested viewpoint by CCC.</li> </ul> |
| 6 | Footpath/road to the north-west of Lampeter  | E: 254808<br>N: 250088 | 9,102  | <ul style="list-style-type: none"> <li>• Elevated views toward site, from the north.</li> <li>• Within neighbouring county of Ceredigion.</li> </ul>           |
| 7 | Llanwenog                                    | E: 249346<br>N: 245647 | 8,794  | <ul style="list-style-type: none"> <li>• Represents sensitive</li> </ul>                                                                                       |

|    |                                                         |                        |        |                                                                                                                                                                                                                         |
|----|---------------------------------------------------------|------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                         |                        |        | residential receptors.                                                                                                                                                                                                  |
| 8  | Mynydd Cynros                                           | E: 262364<br>N: 232897 | 9,747  | <ul style="list-style-type: none"> <li>• Represents elevated views from sensitive recreational users.</li> </ul>                                                                                                        |
| 9  | Mynydd Llanllwni                                        | E: 250112<br>N: 237008 | 7,983  | <ul style="list-style-type: none"> <li>• Represents views from sensitive recreational users to the west of the turbines.</li> <li>• A suggested viewpoint by CCC.</li> <li>• Located within the CCC LDP SLA.</li> </ul> |
| 10 | Beacons Way National Trail/Brecon Beacons National Park | E: 268299<br>N: 222109 | 21,982 | <ul style="list-style-type: none"> <li>• Represents distant views from sensitive recreational users.</li> </ul>                                                                                                         |

## Mitigation Measures

- 4.88 Mitigation measures are required in order to avoid, reduce, remedy or compensate for any adverse effects of the development. The principal of mitigation commences with the design of the development and is an iterative process, in that measures are taken, wherever possible, to adjust the design to minimise adverse effects. This has already been undertaken by locating the wind turbine on land that is relatively contained by nearby vegetation and in an area with a relatively small ZTV.

## **Assessment of Effects on Landscape Character and Visual Amenity**

- 4.89 This section of the LVIA establishes the potential effects on landscape character and visual amenity, during the construction, operational and decommissioning phases of the proposed project. The effects during the operational phase, have been assessed from each of the identified landscape character areas and agreed viewpoint locations. An assessment of the magnitude of these effects and their significance is made on the basis of the criteria set out in the methodology (Appendix 4.1) and the assessment of the baseline landscape and visual character (paragraphs 4.90 to 4.134)
- 4.90 The assessment of effects takes consideration of the following issues:
- Direct and indirect effects on landscape character and changes to the landscape;
  - Effects on the visual amenity of the study area and from the selected viewpoints including changes to the composition of views and the perception and response by receptor groups to these changes;
  - Potential cumulative visual effects with other existing, approved or proposed (in planning), or relevant projects within the study area;
  - The magnitude, duration and level of permanence of effects; and
  - The effects during the construction, operation and decommissioning phases of the Project.

### **Potential Construction Effects on Landscape Character**

- 4.91 This section looks at the effects on landscape character during the construction phase of the proposed project. The construction of the Site is assumed to include the following activities:
- A small amount of ground excavation works, including topsoil stripping, levelling and cut and fill activities;
  - Movement and storage of plant, equipment and construction materials both within and to the site;
  - Erection of construction infrastructure (e.g. mobile cranes); and
  - Construction of turbine, access track and buildings.



- 4.92 A more detailed description of the construction methods is provided in Chapter 3 Project Description.
- 4.93 Potential impacts arising during the construction phase of the proposed development on landscape are of lower magnitude than those of the operational phase, predominantly due to the shorter timescale and temporary nature of the construction phase of works.
- 4.94 Impacts have been assessed in accordance with the criteria provided in the methodology.
- 4.95 Changes to the landscape character of the site would occur during the site clearance and preparation stage. Direct effects on landscape character during this part of the works would be confined to LCA 1: Brechfa Forest, Mynydd Mallen, Llanllwni and Tre Baddau Upland and Plateau, and would be short term in duration, affecting a small and localised geographical extent of the wider character area only. Effects of this nature are considered to be of low magnitude of effect within LCA 1.
- 4.96 The most significant impacts on landscape character within the construction works would likely occur as a result of activity associated with the construction of the turbines and buildings. The use of cranes is likely to have the greatest magnitude of effect on landscape character as these may be visible from greater distances than other site activities. The impact of cranes is expected to be direct, short term and reversible, within LCA 1. Effects on landscape character of the area immediately surrounding the turbines is assessed as high magnitude, but would reduce significantly in magnitude as distance from the turbines increases and other features become visible alongside existing vertical detractors, such as the mast to the north-east and group of three masts to the south-west on Mynydd Llanybyther.
- 4.97 LCA 1 is considered to have a landscape sensitivity of low and magnitude of landscape effect of the proposed construction activities range from low to high, with high effects being limited to within a close proximity to the proposed development. Therefore, overall effects are considered to be moderate and not significant on the LCA as a whole. Effects are considered

to be slightly adverse, as although the construction of the turbines would affect the site within the framework of retained, characteristic landscape components – including woodland, hedgerow and other prominent landscape elements, such as the masts, the open agricultural landscape of the development site would slightly change in use and therefore, character. The level of this adverse effect is not considered to be significant to the overall character area, which extends across a wider landscape and would largely remain dominated by undulating agricultural qualities.

- 4.98 Direct impacts of the construction phase outside of the Site itself, would be low and restricted to the delivery route of the cranes and turbines. Any vegetation removed along the selected delivery route would either be translocated or reinstated. The impact of any vegetation removal is expected to be direct, short term and reversible. It is assessed as low magnitude of effects.
- 4.99 Construction activity is predicted to have low to moderate magnitude on areas outside of the application site and would be limited to areas that have close uninterrupted views of the site. LCA2 and LCA 5 are the most likely character areas to be affected by views of the construction activities. The impact of the construction activities is expected to be low to moderate, and the dominant agricultural character is likely to remain unchanged. Across the greater extent of these two LCAs, construction activities would not affect the existing character of the LCAs as a whole, therefore effects on LCA 2 and LCA 5 arising from the construction phases of development are predicted to be slight adverse and not significant.
- 4.100 Overall effects on all other LCAs in the 15km study area are considered to be negligible and not significant, as construction activities are not expected to result in any fundamental change to the overall existing landscape character.

## **Potential Operational Effects on Landscape Character**

- 4.101 This section looks at the effects on landscape character during the operational phase of the Project. It is anticipated that the operational life of the wind turbines would last for 25 years.

*LCA 1: Brechfa Forest, Mynydd Mallen, Llanllwni and Tre baddau Upland and Plataeu*

- 4.102 Susceptibility of Landscape Receptors to Change: Approximately a third of this LCA was located within TAN 8 - Brechfa Forest Strategic Search Area G, which was identified by the Welsh Government as an area suitable for major wind farm development. The proposed development also partially lies within a Pre-assessed Area for Wind Energy (no. 8) (see Chapter 2 and Figure 2.1) identified within Future Wales: The National Plan 2040. In addition to these planning documents there are a number of existing single wind turbines and wind farms, including the large-scale wind farms of Attlwalis and Brechfa West already situated within this LCA. Other manmade features include the mast north-east of the Site, also located on Mynydd Pencarreg and the group of three masts located on Mynydd Llanybyther to the south-west. To the east of this LCA lies the Mynydd Mallaen SLA and 2.6km to the west of the turbines at its closest point lies the Llanllwni Mountain SLA. Therefore, it is reasonable to conclude that the landscape of this LCA is capable of absorbing some degree of change as a result of this type of development. Susceptibility is therefore considered to be low.
- 4.103 Landscape Sensitivity: Landscape value is considered to be high and susceptibility of landscape receptors to change is low. Therefore, on balance, landscape sensitivity is considered to be moderate.
- 4.104 Magnitude of Landscape Effects: The two turbines, associated buildings and half of the access track is located within this LCA, where direct effects on landscape character would occur. The main change in character would be the introduction of the two turbines, buildings and access track into the landscape. The extent to which the change in use and addition of two more turbines is likely to be perceived would vary across the LCA.
- 4.105 The proposed development would only directly affect a very small proportion of the overall LCA, restricted to the area within the application site boundary. The change in landscape character would be attributed to the loss of a very small area (approximately 0.95ha) of agricultural land and the change of its use. Magnitude of landscape effects within the part of

the LCA that is within the site boundary is assessed as high, given the likely defining presence of the proposed development within the landscape.

- 4.106 Outside of the application boundary, it is predicted that there would be long-term, indirect effects on landscape character. From some locations within close proximity of the turbines, they are expected to become defining features; however, within the wider LCA potential effects on landscape character are likely to be more limited. The nature and prominence of views toward the development site is expected to be varied with location within the LCA, however given the level of vegetative screening within the surrounding fieldscape and, although the two turbines would be new noticeable, long term features within the LCA, they would be of a similar aesthetic appearance as other existing single turbines/ wind farms within the LCA. Therefore, characteristic views are expected to remain largely unchanged across much of this LCA. Ground level changes have been kept to a minimum, due to a small footprint of the development and the loss of any vegetation has been minimised by utilising existing access tracks and gate ways. The key landscape characteristics, including the undulating irregular fieldscape, upland plateau and sense of exposure and enclosure are likely to remain prevalent.
- 4.107 Magnitude of landscape effect is likely to be varied across this LCA; however, the development may result in alteration to characteristic landscape elements across parts of the LCA. Factors which limit magnitude of effect include the screening effects of existing retained landscape elements, existing characteristics, including rolling landform and mix of exposure and enclosure. On balance, overall magnitude of landscape effect within this LCA is considered to be moderate.
- 4.108 Significance of Landscape Effects: The landscape is considered to be of moderate sensitivity and the magnitude of effects moderate. There would be direct effects within the confines of the development site boundary, however effects within the wider landscape are likely to be perceived as more limited.

- 4.109 Where effects occur, the proposed development would contrast with the rural setting in which it would be seen from and may influence key attributes to the extent that changes to the character of the landscape are easily noticeable. However, effects of this nature are likely to be restricted to a limited area and from many locations the character of the LCA is predicted to remain largely intact. Overall changes are not expected to become defining of the overall landscape character of this LCA. Overall effects are considered moderate, due to the lower sensitivity of the landscape. Where direct, higher magnitude effects occur, effects are not considered to be significant. This is as opposed to lesser magnitude effects within the wider LCA, where landscape sensitivity is slightly higher in light of LDP planning policies and designations.
- 4.110 The potential extent of development impacts on the character of this LCA are mitigated in part by the dominant landscape characteristics of the retained landscape components of the site, including woodland, hedgerow, trees and landform features. Although the proposed development is considered to make good use of existing landscape features and attributes such as access points, structural vegetation, landforms, and other site elements assisting with the positive integration of the proposed scheme within the LCA, there would be some adverse effects largely limited to the immediate context of the site. Significance of effect is considered to be moderate adverse and not significant.

*LCA 2: Teifi and Dyffryn Lowland Valley*

- 4.111 Susceptibility of Landscape Receptors to Change: By virtue of the lowland valley and surface elements, this LCA receives limited views towards the proposed development site, therefore limiting susceptibility to change. Although there are no existing turbine developments within the LCA, there are views of existing wind turbine schemes located in neighbouring LCAs, further limiting susceptibility to change. Tolerance to change is heightened by visual enclosure, the scattered groups of receptors and the fact that the majority of attractive views are towards Ceredigion, which is in the opposite direction to the proposed development site. Susceptibility to change is therefore considered low as the proposed development may be

accommodated within the landscape without undue consequences for the baseline landscape character.

- 4.112 Landscape Sensitivity: Landscape value is considered to be moderate to high and susceptibility of landscape receptors to change is low. Therefore, on balance, landscape sensitivity is considered to be low to moderate.
- 4.113 Magnitude of Landscape Effects: There would be no direct effects on landscape character within this LCA. Indirect effects would be limited to parts of the LCA where views towards the proposed development are available. These are likely to be contained to a very limited geographical area of this LCA, including the central part of this LCA, as indicated on Figure 4.15. Elsewhere within the LCA, the steep valley landform and vegetative enclosure limit the degree to which the proposed development would be perceived within the landscape. Existing landscape character elements across much of this LCA are therefore expected to remain unaffected by the proposed development. Where the proposed development site is discernible within the adjoining landscape to the south-east, only part of the development may be visible and is likely to be perceived in partially screened views only. On balance, magnitude of effect is considered to be low.
- 4.114 Significance of Landscape Effects: The landscape is considered to be moderate landscape sensitivity and the magnitude of effects low. The proposed development would result in minor loss or alteration to elements of landscape character within parts of the LCA to the extent that the project would be visible as an additional element within views from limited geographical areas of the LCA. The development would not be discernible from much of the LCA, and would be visually integrated within the existing landscape without the loss of essential landscape features. Therefore, effects are considered to be minor adverse and not significant.

#### *LCA 3: Llanwenog Farmland and Talgarreg Plateau*

- 4.115 Susceptibility of Landscape Receptors to Change: By virtue of the undulating landform and surface elements, this LCA receives limited views

towards the proposed development site, therefore limiting susceptibility to change. Tolerance to change is heightened by visual enclosure, the scattered groups of receptors and the fact that the majority of attractive views are medium range towards the Afon Teifi valley and Cambrian Hills, the latter being to the north, which is in the opposite direction to the proposed development site. Susceptibility to change is therefore considered low as the proposed development may be accommodated within the landscape without undue consequences for the baseline landscape character.

4.116 Landscape Sensitivity: Landscape value is considered to be moderate to high and susceptibility of landscape receptors to change is low. Therefore, on balance, landscape sensitivity is considered to be low to moderate.

4.117 Magnitude of Landscape Effects: There would be no direct effects on landscape character within this LCA. Indirect effects would be limited to parts of the LCA where views towards the proposed development are available. These are likely to be contained to a very limited geographical area of this LCA, including the central part of this LCA, as indicated on Figure 4.15. Elsewhere within the LCA, the undulating landform and vegetative enclosure limit the degree to which the proposed development would be perceived within the landscape. Existing landscape character elements across much of this LCA are therefore expected to remain unaffected by the proposed development. Where the proposed development site is discernible within the adjoining landscape to the south-east, only part of the development may be visible and is likely to be perceived in distant, partially screened views only. On balance, magnitude of effect is considered to be negligible to low.

4.118 Significance of Landscape Effects: The landscape is considered to be moderate landscape sensitivity and the magnitude of effects negligible to low. The proposed development would result in no to minor loss or alteration to elements of landscape character within parts of the LCA to the extent that's the proposed development would be visible as an additional element within views from limited geographical areas of the LCA. The development would not be discernible from much of the LCA, and would be visually



integrated within the existing landscape without the loss of essential landscape features. Therefore, effects are considered to be negligible to minor adverse and not significant.

*LCA4: Caio Hills*

- 4.119 Susceptibility of Landscape Receptors to Change: By virtue of the undulating landform and surface elements in the intervening landform of this LCA and the proposed development site, this LCA receives limited views towards the proposed development site, limiting susceptibility to change. Although this LCA is open and exposed, its distance from the proposed turbines heightens its tolerance to change and the fact that the majority of attractive views are towards Mynydd Mallaen to the north-east, which is away from the proposed development site. Susceptibility to change is therefore considered low as the proposed development may be accommodated within the landscape without undue consequences for the baseline landscape character.
- 4.120 Landscape Sensitivity: Landscape value is considered to be moderate to high and susceptibility of landscape receptors to change is low. Therefore, on balance, landscape sensitivity is considered to be low to moderate.
- 4.121 Magnitude of Landscape Effects: There would be no direct effects on landscape character within this LCA. Indirect effects would be limited to parts of the LCA where views towards the proposed development are available. These are likely to be contained to a very limited geographical area of this LCA, including the central part of this LCA, as indicated on Figure 4.15. Elsewhere within the LCA, the undulating landform and vegetative enclosure limit the degree to which the proposed development would be perceived within the landscape. Existing landscape character elements across much of this LCA are therefore expected to remain unaffected by the proposed development. Where the proposed development site is discernible within the adjoining landscape to the south-east, only part of the development may be visible and is likely to be perceived in distant, partially screened views only. On balance, magnitude of effect is considered to be negligible to low.



4.122 Significance of Landscape Effects: The landscape is considered to be moderate landscape sensitivity and the magnitude of effects negligible to low. The proposed development would result in no to minor loss or alteration to elements of landscape character within parts of the LCA to the extent that the proposed development would be visible as an additional element within views from limited geographical areas of the LCA. The development would not be discernible from much of the LCA, and would be visually integrated within the existing landscape without the loss of essential landscape features. Therefore, effects are considered to be negligible to minor adverse and not significant.

*LCA5: Cothi and Llansawel Lowland Valleys*

4.123 Susceptibility of Landscape Receptors to Change: By virtue of the lowland valley and surface elements, this LCA receives limited views towards the proposed development site, therefore limiting susceptibility to change. Tolerance to change is heightened by visual enclosure, the scattered groups of receptors and the fact that the majority of attractive views are towards the Brecon Beacons to the south-east, which is in the opposite direction to the proposed development site. Although there are no existing turbine developments within the LCA, where there are views to the landscape outside of the LCA there are views of existing wind turbine schemes located in neighbouring LCAs, further limiting susceptibility to change. Susceptibility to change is therefore considered low as the proposed development may be accommodated within the landscape without undue consequences for the baseline landscape character.

4.124 Landscape Sensitivity: Landscape value is considered to be high and susceptibility of landscape receptors to change is low. Therefore, on balance, landscape sensitivity is considered to be moderate.

4.125 Magnitude of Landscape Effects: Part of the access track, including the site entrance is located within this LCA, where direct effects on landscape character would occur. As the access track would be utilising an existing track there would be no change.

- 4.126 The proposed development would only directly affect a very small proportion of the overall LCA, restricted to the area within the application site boundary. As there would be no change in use, there would be no change in landscape character. Magnitude of landscape effects within the part of the LCA that is within the site boundary is assessed as low to negligible.
- 4.127 Due to the close proximity to the turbines and LCA 1, it is predicted that outside of the application boundary, there would be long-term, indirect effects on landscape character. From some locations within close proximity of the turbines, they are expected to become defining features; however, within the wider LCA potential effects on landscape character are likely to be more limited. The nature and prominence of views toward the development site is expected to be varied with location within the LCA, however given the level of vegetative screening within the surrounding fieldscape, and although the two turbines would be a new feature and they would become a noticeable, long term feature within the LCA, they would be of a similar size and aesthetic appearance as other existing single turbines/ wind farms within the surrounding LCAs. Therefore, characteristic views are expected to remain largely unchanged across much of this LCA.
- 4.128 Ground level changes have been kept to a minimum, due to a small footprint of the development and the loss of any vegetation has been minimised by utilising existing access tracks and gate ways. The key landscape characteristics, including the lowland valley, sense of enclosure and woodland cover are likely to remain prevalent.
- 4.129 Magnitude of landscape effect is likely to be varied across this LCA; however, the development may result in alteration to characteristic landscape elements across parts of the LCA. Factors which limit magnitude of effect include the screening effects of existing retained landscape elements, existing characteristics, including the lowland valley, sense of enclosure and woodland cover. On balance, overall magnitude of landscape effect within this LCA is considered to be low to moderate.

4.130 Significance of Landscape Effects: The landscape is considered to be low landscape sensitivity and the magnitude of effects low to moderate. The proposed development would result in minor to moderate loss or alteration to elements of landscape character within parts of the LCA to the extent that the proposed development would be visible as an additional element within views from limited geographical areas of the LCA. The development would not be discernible from much of the LCA, and would be visually integrated within the existing landscape without the loss of essential landscape features. Therefore, effects are considered to be minor to moderate adverse and not significant.

*LCA 6: Mynydd Figyn, Llansawel and Banc-Beli-Tew Upland*

4.131 Susceptibility of Landscape Receptors to Change: By virtue of the undulating landform and surface elements, this LCA receives limited views towards the proposed development site, therefore limiting susceptibility to change. Tolerance to change is slightly lessened by the availability of 360-degree views to the surrounding landscape, but within these views there are existing detractors such as the existing wind turbine schemes and masts in the neighbouring LCAs. Susceptibility to change is therefore considered low as the proposed development may be accommodated within the landscape without undue consequences for the baseline landscape character.

4.132 Landscape Sensitivity: Landscape value is considered to be high and susceptibility of landscape receptors to change is low. Therefore, on balance, landscape sensitivity is considered to be low to moderate.

4.133 Magnitude of Landscape Effects: There would be no direct effects on landscape character within this LCA. Indirect effects would be limited to parts of the LCA where views towards the proposed development are available. These are likely to be contained to a very limited geographical area of this LCA which face the site, as indicated on Figure 4.15. Elsewhere within the LCA, the undulating landform and intervening vegetative cover limit the degree to which the proposed development would be perceived within the landscape. Existing landscape character elements across much

of this LCA are therefore predicted to remain unaffected by the proposed development. Where the proposed development site is discernible within the adjoining landscape to the north-west, only part of the development may be visible and is likely to be perceived in distant, partially screened views only. On balance, magnitude of effect is considered to be negligible to low.

- 4.134 Significance of Landscape Effects: The landscape is considered to be of moderate sensitivity and the magnitude of effects negligible to low. The proposed development would result in no to minor loss or alteration to elements of landscape character within parts of the LCA to the extent that the proposed development would be visible as an additional element within views from limited geographical areas of the LCA. The development would not be discernible from much of the LCA, and would be visually integrated within the existing landscape without the loss of essential landscape features. Therefore, effects are considered to be negligible to minor adverse and not significant.

## Summary of Potential Effects on Landscape Character

**Table 4.3: Summary of Potential Effects of Landscape Character**

| Receptor                                                                           | LANDMAP Value    | Sensitivity     | Impact              | Magnitude         | Significance                                        |
|------------------------------------------------------------------------------------|------------------|-----------------|---------------------|-------------------|-----------------------------------------------------|
| LCA 1: Brechfa Forest, Mynydd Mallaen, Llanllwni and Tre Baddau Upland and Plateau | High             | Moderate        | Direct and Indirect | Moderate          | Moderate, not significant and adverse               |
| LCA 2: Teifi, Llanwenog and Dyffryn Lowland Plateau                                | Moderate to High | Low to moderate | Indirect            | Low               | Minor, not significant and adverse                  |
| LCA 3: Llanwenog Farmland and Talgarreg Plateau                                    | Moderate to High | Low to moderate | Indirect            | Negligible to Low | Negligible to minor, not significant and adverse    |
| LCA 4: Caio Hills                                                                  | High             | Low to moderate | Indirect            | Negligible to Low | Negligible to minor, not significant and adverse    |
| LCA 5: Cothi and Llansawel Lowland Valleys                                         | High             | Moderate        | Direct and Indirect | Moderate          | Negligible to Moderate, not significant and adverse |

|                                                             |      |                 |          |                   |                                                  |
|-------------------------------------------------------------|------|-----------------|----------|-------------------|--------------------------------------------------|
| LCA 6: Mynydd Figyn,<br>Llansawell and Banc-Beli-Tew Upland | High | Low to moderate | Indirect | Negligible to Low | Negligible to minor, not significant and adverse |
|-------------------------------------------------------------|------|-----------------|----------|-------------------|--------------------------------------------------|

## Potential Construction Effects on Visual Amenity

- 4.135 The main visual effects during the construction period (other than the appearance of the turbine, which is considered in the operational phase assessment) are likely to be caused by the erection and operation of the cranes, as these are likely to be visible from longer distances than other activities such as the construction of the turbine foundations and access tracks.
- 4.136 The cranes would be most prominent from areas immediately surrounding the Site, where the turbines may be theoretically visible from, and only for a short period during the construction period.
- 4.137 Within the immediate setting of the proposed development Site, Viewpoint 1 would be subject to dominant visual change. However, these effects are indirect, short-term in duration and temporary. Construction activities would typically be viewed within the context of retained landscape framework elements, including the undulating landform, Mynydd Pencarreg plateau, Brechfa Forest to the west/south-west and the mature trees and mast to the north-east. As such, construction activities are considered to be of moderate to high visual magnitude. Subsequent significance of visual effect is considered to be moderate to high, significant and adverse as a result of the partial loss of open visual character within the middle ground of the view.
- 4.138 Viewpoint 2 would be subject to minimal visual change. These effects would be indirect, short-term in duration and temporary. Construction activities would be limited to the erection and operation of the cranes and typically viewed within the context of the retained landscape framework elements,

such as the close road side hedgerow and trees; heavily screening the view towards the proposed development site and the wooded undulating intervening landform. As such, construction activities are considered to be of negligible visual magnitude. Subsequent significance of visual effect is considered to be negligible, not significant and slightly adverse as a result of the insignificant loss of visual character within the background of the view.

4.139 Viewpoint 3 would also be subject to visual change, with effects being indirect, short-term in duration and temporary. Construction activities would be viewed along the skyline, within the context of the existing and the retained open landscape framework elements, including a number of Brechfa Forest West and Alltwalis turbines that are visible within the distance. As such, construction activities are considered to be of moderate visual magnitude. Subsequent significance of visual effect is considered to be moderate, not significant and adverse as a result of the partial loss of open visual character within the background of the open and wide view.

4.140 Visual change on Viewpoint 4 would be indirect, short-term and temporary. Construction activities would be limited to the erection and operation of the cranes and would be viewed along the skyline, within the context of the retained landscape framework elements, such as the settlement of Llanybydder, the B4337 and intervening Brechfa Forest. As such, construction activities are considered to be of moderate to low visual magnitude. Subsequent significance of visual effect is considered to be moderate to minor, not significant and adverse as a result of the partial loss of visual character.

4.141 Within the wider landscape, as assessed in Viewpoints 5 to 9, the visual effects of construction activities are typically likely to be more limited. In Viewpoint 5 to 7, construction activities would be viewed above the skyline, although within the context of the retained landscape framework elements, such as the A482, local roads, urban settlements, undulating landform and vegetated skyline. As such, construction activities are considered to be of low visual magnitude. Subsequent significance of visual effect is considered to be minor, not significant and slightly adverse as a result of the small loss

of visual character. Construction activities in Viewpoint 8 and 9 would also be limited to the erection and operation of the cranes and seen above the skyline. Although, these visual effects would be viewed within the context of the retained landscape framework elements, such as the open, exposed undulating landform, skyline vegetation, residential dwellings and other vertical elements along the skyline, including the turbines to the Brechfa Forest West and Alltwalis turbines from viewpoint 9. As such, construction activities are considered to be of low visual magnitude. Subsequent significance of visual effect is considered to be minor, not significant and slightly adverse as a result of the small loss of visual character.

- 4.142 At distances over 15km, assessed in Viewpoint 10, the visual effects of construction activities are likely to be particularly limited. Construction activities would typically be viewed within the context of the retained open and panoramic landscape framework elements. As such, construction activities are considered to be of negligible visual magnitude. Subsequent significance of visual effect is considered to be negligible, not significant and slight adverse as a result of the imperceptible, loss of visual character within the far background of the open and wide view.

### **Potential Operational Effects on Visual Amenity**

- 4.143 The significance of visual effects as a result of the proposed development during the operational phase, from each of the selected viewpoints, has been assessed against the significance criteria defined in Appendix 4.1. Effects during the operational phase of the project are considered to be indirect, long term and permanent in duration.
- 4.144 Photographs, wireframes and Photomontages of the proposed development from the selected viewpoints have been used to aid this assessment and are provided in Figures 4.16 – 4.30. It should be noted that the wirelines include all cumulative developments within the 15km study area. They also include the consented turbines (100m to blade tip height) to illustrate the difference in height between these turbines and the proposed turbines (125m to blade tip height).



Viewpoint 1 - Local road to the north-west of the turbines

4.145 Approximate distance to nearest turbine: 289m.

*Value of Visual Receptors*

4.146 Located along the local road to the north-west of the site and therefore it is considered to be a moderate valued view.

*Susceptibility of visual receptors to change*

4.147 The predominant receptor type is predicted to be road users. Field investigation has indicated that the main road users are residents of the nearby dwellings. Therefore, susceptibility to change of visual receptors is assessed as moderate.

*Sensitivity of visual receptors*

4.148 Receptors are able to accommodate a degree of change to the view, due to the presence of existing overhead phone lines and communication masts that form prominent features in existing views. Therefore, visual sensitivity is considered to be moderate.

*Existing View*

4.149 This relatively short, close distance view is dominated by the wide, undulating Mynydd Pencarreg plateau and local road, forking to the left of the view. The plateau is characterised by agricultural fields that are divided by a mix of stone walls, defunct hedgerows and post and wire fences. What appears to be a block of mature trees sits on the crest of hill to the left of the view, contrasting with the exposed fields in the centre of the view. Overhead phone lines and steel lattice communication masts are a prominent vertical feature to the left, with more distant views towards Brechfa Forest to the right, where the Mynydd Pencarreg plateau starts to drop in level. The Site is located in the middle of the view, along the skyline.

*Predicted View*

4.150 Due to the close proximity of the viewpoint to the site, the proposed turbines would be immediately apparent within the view. The turbines would be located just beyond the horizon in the centre of the view. The nacelle and

blades of the turbines would break the skyline of the Mynydd Pencarreg plateau. Views of the turbines would be open with no screening, and therefore the blade rotation would be clearly evident from this location. The access track would be clearly seen, running along the horizon of Mynydd Pencarreg. The substation building would be visible in front of the block of mature tree to the left of the view.

#### *Magnitude of Change*

- 4.151 The proposed turbines would form a prominent feature within the view due to the close proximity to the site. The nacelle and blades of the turbine would break the skyline with the blade rotation being viewed. Telegraph poles along the roadside and communications mast would help mitigate the man-made vertical element of the turbine within a landscape that is largely free of vertical constructed elements. Although the substation would be visible, it would not be a prominent feature. The magnitude of change is considered to be high.

#### *Significance of Effects*

- 4.152 The receptors are considered to be of moderate sensitivity and the magnitude of change would be high. The blade rotation would be viewed above the skyline. This would add a prominent moving element to the view that would interrupt the simple static horizon line. The significance of effects on visual amenity is therefore considered to be high adverse and significant.

#### *Cumulative Effects*

- 4.153 From this viewpoint the existing turbine at Ffrwd Farm is the only additional development that is potentially visible. Only the nacelle and blade would potentially be visible, although in reality intervening vegetation is predicted to screen views of the turbine and at a distance of approximately 10km away it would be a barely perceptible feature within the landscape. Therefore, the cumulative effects are considered to be negligible

#### *Viewpoint 2 - Local road to the west of Rhydcymerau*

- 4.154 Approximate distance to nearest turbine: 1.938km.

#### *Value of Visual Receptors*

- 4.155 Located along a local road near the settlement of Rhydcymerau, this is a location that is adjacent to local residents, therefore it is considered to be a high valued view.

*Susceptibility of visual receptors to change*

- 4.156 The predominant receptor types are predicted to be road users and local residents. Therefore, susceptibility to change of visual receptors is assessed as moderate to high.

*Sensitivity of visual receptors*

- 4.157 Receptors are not located in any statutory or non statutory designations. Receptors are further more able to accommodate a degree of change to the view, due to intervening landform and vegetation heavily screening the existing views towards the site. Therefore, visual sensitivity is considered to be low.

*Existing View*

- 4.158 This heavily screened view is dominated by the foreground vegetation and the undulating landform in the middle ground and background. The landform is characterised by agricultural fields that are divided by mature hedgerows and trees with blocks of dense woodland planting. A farm building to Dolau Uchaf farm is visible in the foreground and buildings to Gelly Farm and overhead phone lines are present in the middle ground of the view, but are not particularly prominent vertical features. The site is located in the centre of the view, beyond the horizon, which is heavily screened by road-side vegetation in the foreground.

*Predicted View*

- 4.159 Due to the heavily present intervening vegetation and landform, the proposed turbines would be almost completely screened from view. Glimpsed views of the blades of one of the turbines as they rotate would be seen above the skyline, through a gap in skyline and roadside vegetation. In theory the blade tip to turbine T2 would also be visible, however any views would be restricted to the tip of the blade and is likely to be screened from view by vegetation.

#### *Magnitude of Change*

- 4.160 The proposed turbines would be heavily screened by existing intervening landform and the blade tips of the turbines would be seen, therefore the magnitude of change is considered to be low to negligible.

#### *Significance of Effects*

- 4.161 The receptors are considered to be of low sensitivity and the magnitude of change would be low to negligible. Blade rotation would be viewed above the skyline, although this would not be prominent moving element in the view. The significance of effects on visual amenity is therefore considered to be minor adverse and not significant.

#### *Cumulative Effects*

- 4.162 From this viewpoint it is predicted that there would be filtered views through existing vegetation of the single turbine on the Land at Pant y Celyn and also to the turbine on the Land south west of Bryn Dafydd, which is currently in planning. The combination of existing vegetation filtering views and proportion of the turbines visible would not result in existing wind energy development becoming the defining feature of the view. Therefore, the cumulative effects are considered to be minor.

#### *Viewpoint 3 - Local road to the north-east of the turbines*

- 4.163 Approximate distance to nearest turbine: 2.398 km.

#### *Value of Visual Receptors*

- 4.164 Located along a local road, therefore it is considered to be a low valued view.

#### *Susceptibility of visual receptors to change*

- 4.165 The predominant receptor type is predicted to be road users. Its susceptibility to change of visual receptors is assessed as low.

#### *Sensitivity of visual receptors*

- 4.166 Receptors are not located in a designated landscape and receptors are further more able to accommodate a degree of change to the view, due

to the presence of existing overhead phone lines and communication masts that form prominent features in existing views. Therefore, visual sensitivity is considered to be moderate.

#### *Existing View*

- 4.167 This relatively close distance view is dominated by the wide, undulating landform of Brechfa Forest to the south-west and the Mynydd Pencarreg plateau to the west. The Mynydd Pencarreg plateau is characterised by agricultural fields that are divided by a mix of stone walls, defunct hedgerows and post and wire fences. Brechfa Forest is dominated by dense conifer tree planting, above which the turbines to the existing Brechfa Forest West and Alltwalis wind farms are visible. What appears to be a block of mature trees sits in a small valley in the near middle ground to the left of the view, defining a change in land cover. To the left there is a more dark, wooded and complex landscape, and to the right the landscape is more exposed and simple, except for the scattered blocks of mature trees and small areas of woodland. Steel lattice communication masts are a prominent vertical feature to the right. The site is located in the middle of the view, along the skyline of Mynydd Pencarreg.

#### *Predicted View*

- 4.168 The proposed turbines would be clearly apparent within the view. The turbines would be located just beyond the horizon in the centre of the view. The nacelle and blades of the turbines would clearly break the skyline of the Mynydd Pencarreg plateau. Views of the turbines would be open with no screening; therefore, the blade rotation would be clearly evident from this location. The access track and substation would be completely screened from view by intervening landform.

#### *Magnitude of Change*

- 4.169 The proposed turbines would form a prominent feature within the view due to the proximity to the site. The nacelle and blades of the turbine would break the skyline with the blade rotation being viewed. Communication

masts would help mitigate the man-made vertical element of the turbine within a landscape that is open and largely free of vertical constructed elements. The magnitude of change is considered to be moderate

#### *Significance of Effects*

- 4.170 The receptors are considered to be of moderate sensitivity and the magnitude of change would be moderate. The blade rotation would be viewed above the skyline. This would add a prominent moving element to the view that would interrupt the simple static horizon line. The significance of effect on visual amenity is therefore considered to be moderate adverse and not significant.

#### *Cumulative Effects*

- 4.171 From this viewpoint the nacelles and blades to the existing Brechfa Forest West wind farm are visible above the forestry that can be seen along the ridgeline. In addition, the wireline indicates that existing turbine at Rhydygwydd Farm and Rhosfach would also be visible, plus the turbine that is currently in planning to the land south west of Bryn Dafydd. However due to a combination of topography restricting views to the blade tips or distance these two existing single developments would be minor components of the view and would not contribute to cumulative effects. The turbine to the land south west of Bryn Dafydd, would be visible, although not a prominent feature and not seen in the same arc of view as the proposed Mynydd Pencarreg turbines and the existing Brechfa Forest West wind farm. Due to the number and proportion of the view covered by the visible turbines of the Brechfa Forest West wind farm in the distance, and the addition of the close proposed Mynydd Pencarreg turbines, the view would have a visual presence of wind farm development. Although; the distance between the two wind turbine schemes, intervening vegetation and landform and the main existing visual element of the existing view, which is the undulating landform and the Mynydd Pencarreg plateau, would be retained and would continue to be the dominating factor in this view. Therefore, the cumulative effects are considered to be moderate.

Viewpoint 4 - B4337 at Llanybydder

4.172 Approximate distance to nearest turbine: 4.102 km.

*Value of Visual Receptors*

4.173 Located within the settlement of Llanybydder, this is a location adjacent to local residents and therefore this results in a high valued view.

*Susceptibility of visual receptors to change*

4.174 The predominant receptor types are predicted to be local residents and road users. However, field investigation has indicated that local residents' main views are towards the north-east and south-west, away from the proposed turbines. Susceptibility to change of visual receptors is assessed as moderate.

*Sensitivity of visual receptors*

4.175 Receptors are not located within a designated landscape and receptors are further more able to accommodate a degree of change to the view, due to the main residential views being away from the proposed turbines and the presence of existing overhead phone lines and the B4337, that form prominent features in existing views. Therefore, visual sensitivity is considered to be moderate to low.

*Existing View*

4.176 This view is dominated by and is channelled along the B4337 by its linear presence in the landscape, highlighted by the adjacent overhead phone cables and edged by residential properties. Undulating hills and Brechfa Forest, which is dominated by dense conifer tree planting, form the background to this view. The site is located in the middle of the view, beyond the horizon formed by part of Brechfa Forest.

*Predicted View*

4.177 Both turbines would be visible from this location, however they would be partly screened by intervening vegetation and landform. The turbines would be located just beyond the horizon in the centre of the view. The nacelle

and blades of turbine T2 would clearly break the skyline formed by part of Brechfa Forest. Blade rotation of this visible turbine would be evident from this location. Visibility of turbine T1 would be restricted to upper part of the blade only due to the screening from the intervening vegetation and forestry. Blade movement would be noticeable, but not prominent. The access track and substation would be completely screened from view by intervening landform.

#### *Magnitude of Change*

- 4.178 The proposed turbines would form another vertical feature within the view. The nacelle to turbine T2 and blades of both turbines would break the skyline with the blade rotation being viewed, although existing telephone poles would help mitigate the man-made vertical element of the turbine within a landscape that already contains vertical constructed elements and is dominated by manmade elements. The magnitude of change is considered to be low.

#### *Significance of Effects*

- 4.179 The receptors are considered to be of moderate to low sensitivity and the magnitude of change would be moderate to low. The rotation of the blades would be viewed above the skyline. This would add an additional moving element to the view that would interrupt the horizon line, although this movement would be seen alongside the movement created by the high level of traffic along the B4337. The significance of effects on visual amenity is therefore considered to be moderate to minor adverse and not significant.

#### *Cumulative Effects*

- 4.180 The wireline indicates that in addition to the Mynydd Pencarreg turbines the existing turbine at Caeronnen Farm, plus the consented turbines at Llygad-enwyn Farm, Maesnwydd and Maesgarn would all be visible within views to the north west from this viewpoint. In reality however, these developments would be screened from view by the adjacent housing and therefore only the proposed Mynydd Pencarreg turbines would be visible. Therefore, the cumulative effects are considered to be negligible.



Viewpoint 5 - Layby along the A482

4.181 Approximate distance to nearest turbine: 10.958 km.

*Value of Visual Receptors*

4.182 Located along the A482 and within the CCC LDP SLA, this is a location potentially used by tourists due to it being located within an area of scenic quality. Therefore, it is considered to be a high to moderate valued view.

*Susceptibility of visual receptors to change*

4.183 The predominant receptor types are predicted to be road users and the visitors of the CCC LDP SLA. its susceptibility to change of visual receptors is assessed as Moderate.

*Sensitivity of visual receptors*

4.184 Although the receptors are located within a non statutory designated landscape, they are able to accommodate a degree of change to the view as the main focus of attention for the road users is generally the road and not out towards the landscape. The road itself is the prominent feature in existing views, with the undulating landform as a backdrop. Therefore, visual sensitivity is considered to be moderate to low.

*Existing View*

4.185 This view is dominated by the A482 and its roadside vegetation in the foreground and middle ground. Undulating hills dominated by a field network form the open background to this view. The site is located in the middle of the view, beyond the horizon.

*Predicted View*

4.186 The turbines would be visible from this more distant location, although the lower part of the turbines would be partly screened by intervening vegetation and landform along the horizon. The upper parts of the tower, nacelle and blades of the turbines would clearly break the skylines. Blade rotation would be evident from this location. The access track and substation would be completely screened from view by intervening landform.

#### *Magnitude of Change*

- 4.187 The proposed turbines would form a vertical feature within the background of the view. The upper parts of the tower, nacelle and blades of the turbines would break the skyline with the blade rotation being viewed, although existing telephone poles would help mitigate the man-made vertical element of the turbine within a landscape that already contains vertical constructed elements and is dominated by manmade elements. The magnitude of change is considered to be low.

#### *Significance of Effects*

- 4.188 The receptors are considered to be of moderate to low sensitivity and the magnitude of change would be low. The blade rotation would be viewed above the skyline. This would add an additional moving element to the view that would interrupt the horizon line, although this movement would be seen alongside the movement created by the high level of traffic along the A482. The significance of effects on visual amenity is therefore considered to be moderate to minor adverse and not significant.

#### *Cumulative Effects*

- 4.189 From this viewpoint the wireline indicates that the existing developments of Brechfa Forest West wind farm, Alltwalis wind farm and the single turbine of Maes y Haul would all be visible as cluster of turbines to the south of the proposed Mynydd Pencarreg turbines. However, in reality these schemes would be screened by intervening vegetation. The turbine on the land south west of Bryn Dafydd and which is currently in planning would in theory be visible between the existing developments noted above and the proposed Mynydd Pencarreg turbines and likely to be a noticeable, although not prominent feature on the ridgeline. To the north west the existing single turbines located on the land at Pant y Ceyln and Fron, plus the consented turbine on the land near Esagirwen Isaf would be visible as a small cluster or turbines. In reality however, roadside vegetation is predicted to screen all views of these turbines. Therefore, the turbine on the land south west of Bryn Dafydd is predicted to be the only cumulative development visible from this location and therefore only a small proportion of the view would be

affected and would not result in wind energy development defining the view. Therefore, the cumulative effects are considered to be minor.

*Viewpoint 6 - Footpath/road to the north-west of Lampeter*

4.190 Approximate distance to nearest turbine: 9.102 km.

*Value of Visual Receptors*

4.191 Located along a local road which connects Lampeter with Cribyn, this is a location used mainly by road users, therefore it is considered to be a low valued view.

*Susceptibility of visual receptors to change*

4.192 The predominant receptor type is predicted to be road users. Its susceptibility to change of visual receptors is assessed as low.

*Sensitivity of visual receptors*

4.193 Receptors are able to accommodate a degree of change to the view, due to the main focus of attention for road users generally being the road and not out towards the landscape. The road itself is the prominent feature in existing view, with the distant undulating landform forming the backdrop. Therefore, visual sensitivity is considered to be low.

*Existing View*

4.194 This view is dominated by the local road and its roadside vegetation in the foreground and middle ground. Views of agricultural fields can be seen above and between roadside vegetation to the right of the view. Undulating hills dominated by a field network form the open background to this view, with Brechfa Forest forming the horizon to the right of the view, where the existing turbines to Brechfa Forest West Wind Farm and Alltwalis wind Farm are visible along the ridgeline. The site is located in the middle of the view, beyond the horizon formed by the Mynydd Pencarreg plateau.

*Predicted View*

4.195 The turbines would be visible from this more distant location, although the turbines would be partly screened by intervening vegetation and landform along the horizon. The nacelle, blades and the upper sections of the towers

to the turbines would clearly break the skylines. Blade rotation would be evident from this location. The access track and substation would be completely screened from view by intervening landform.

#### *Magnitude of Change*

- 4.196 The proposed turbines would form another vertical feature within the background of the view. The nacelle, blades and upper section of the tower to the turbines would break the skyline with the blade rotation being viewed, although existing telephone poles would help mitigate the man-made vertical element of the turbines within a landscape that already contains vertical constructed elements and is already dominated by manmade elements. The magnitude of change is considered to be moderate to low.

#### *Significance of Effects*

- 4.197 The receptors are considered to be of low sensitivity and the magnitude of change would be moderate to low. The blade rotation would be viewed above the skyline. This would add an additional moving element to the view that would interrupt the horizon line, although this movement would be seen alongside the movement created by the traffic along the local road. The significance of effects on visual amenity is therefore considered to be moderate to minor adverse and not significant.

#### *Cumulative Effects*

- 4.198 From this viewpoint the wireline indicates, that in addition to the existing wind turbines of Brechfa Forest West and Alltwalis, the single turbine developments of Fron, Esgairwen Uchaf, land at Pant y Celyn, Pant y Ffin, Pencoed Farm, land at Wern, Caeronnen Farm, Tanrhos, Ffrwd Farm and land at Coedeiddig Fach. Although due to intervening vegetation and topography all would be very minor elements within the view. In addition to the existing developments, the approved single turbine developments on the land adjacent to Tanyresgair Cnwcsych, land near Esgairwen Isaf, Llygad Enwyn Farm, Maesnewydd, Cathal and Maesgarn. Of these developments, the turbine located on the land at Llygad-enwyn Farm is predicted to be the most visible, although not a prominent feature within a

broad and open landscape. The cumulative developments when viewed with the proposed Mynydd Pencarreg turbines is not predicted to result in the view becoming defined by wind energy developments and therefore, the cumulative effects are considered to be medium to minor.

- 4.199 It was noted during the site assessment work, undertaken on the 9<sup>th</sup> January 2021, that a single turbine currently under construction is visible in views to the south west and therefore not in the same direction as the proposed Mynydd Pencarreg turbines. Following a search of the Ceredigion County Council planning application map<sup>5</sup> it was not possible to determine which development this was. Notwithstanding this, although the turbine would be prominent in views, due to the distance that it would be viewed, it is not seen in the same arc of view as the proposed Mynydd Pencarreg turbines and therefore the conclusions reached in paragraph 4.198 above remain unaltered.

#### Viewpoint 7 - Llanwenog

- 4.200 Approximate distance to nearest turbine: 8.794 km.

#### *Value of Visual Receptors*

- 4.201 Located along a local road within the settlement of Llanwenog, this is a location adjacent to local residents. Therefore, it is considered to be a high valued view.

#### *Susceptibility of visual receptors to change*

- 4.202 The predominant receptor types are predicted to be local residents and road users. Its susceptibility to change of visual receptors is assessed as high.

#### *Sensitivity of visual receptors*

- 4.203 Receptors are able to accommodate a degree of change to the view, due to the large number of existing manmade elements in the landscape, vertical elements being the masts on Mynydd Pencarreg and Mynydd Llanybyther. Therefore, visual sensitivity is considered to be moderate.

<sup>5</sup> <https://www.ceredigion.gov.uk/resident/planning-building-control-and-sustainable-drainage-body-sab/planning-building-control/planning-applications/planning-archive/planning-application-maps/>  
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#### *Existing View*

- 4.204 This view is dominated by the vast open expanse of undulating hills and agricultural fieldscape. The horizon is a mix of smooth open upland and blocks of vegetation, such as the Brechfa Forest, forming the horizon to the right of the view. The site is located in the middle of the view, beyond the horizon formed by the Mynydd Pencarreg plateau.

#### *Predicted View*

- 4.205 The turbines would be visible from this more distant location, although the lower part of the turbines would be partly screened by intervening vegetation and landform along the horizon. The nacelle and blades of the turbines would clearly break the skylines. Blade rotation would be evident from this location. The access track and substation would be completely screened from view by intervening landform.

#### *Magnitude of Change*

- 4.206 The proposed turbines would form another vertical feature within the background of the view. The nacelle and blades of the turbines would break the skyline with the blade rotation being viewed, although existing telephone poles in the foreground and masts in the background would help mitigate the man-made vertical element of the turbines within a landscape that already contains vertical constructed elements and is already dominated by manmade elements. The magnitude of change is considered to be Moderate to low.

#### *Significance of Effects*

- 4.207 The receptors are considered to be of high sensitivity and the magnitude of change would be moderate to low. The blade rotation would be viewed above the skyline. This would add a moving element to the view that would interrupt the horizon line. The significance of effects on visual amenity is therefore considered to be moderate to minor adverse and not significant.

#### *Cumulative Effects*

- 4.208 From this viewpoint the wireline indicates that the turbines to the existing Brechfa Forest West wind farm would be visible in views south, although in reality existing vegetation would screen views to this development. The

existing single turbine of Pant y Ffin is also potentially visible in views to the to the south east. However, views would be restricted to the blade tips and therefore would be a barely perceptible feature within the view. The single of turbine of land at Coedeiddig Fach would also be visible, but is a very minor element within the view, due to intervening vegetation. In addition, the existing turbines, the consented single turbines located near Esgairwen Isaf, plus at Llygad-enwyn Farm are also potentially visible, as would the turbine to the land south west of Bryn Dafydd, which currently is at the planning stage. Of these developments, only the turbine at Llygad-enwyn Farm is predicted to be a noticeable feature. However, this turbine in conjunction with the proposed Mynydd Pencarreg turbines would be viewed within a broad and open landscape that would only affect a small proportion of the view and not result in wind energy development becoming a defining element of the view. Therefore, the cumulative effects are considered to be minor.

#### *Viewpoint 8 - Mynydd Cynros*

4.209 Approximate distance to nearest turbine: 9.747 km.

#### *Value of Visual Receptors*

4.210 Located at the picnic areas on top of Mynydd Cynros this is a location that attracts walkers due to its scenic quality and the availability of panoramic views to the north. Therefore, it is considered to be a high valued view.

#### *Susceptibility of visual receptors to change*

The predominant receptor type is predicted to be walkers, and susceptibility to change of visual receptors is assessed as high.

#### *Sensitivity of visual receptors*

4.211 Receptors are not located within any designated landscapes and receptors are further more able to accommodate a degree of change to the view, due to the wide open and panoramic nature of the view and the presence of existing man-made elements such as the communication masts that form vertical features in existing views. Therefore, visual sensitivity is considered to be moderate.

#### *Existing View*

- 4.212 This distant view is dominated by the wide, undulating landform of the study area. The Brechfa Forest can be seen along the horizon to the left of the view. The landscape is characterised by scattered woodland blocks and agricultural fields. Areas of rough exposed upland and the lower more formal fields of the lower lying land contrast with each other, creating a textured and interesting view. The existing turbine of Pant y Celyn can be seen within views to the north as can communication masts, which are a vertical feature to the north west. The site is located in the middle of the view, along the skyline, just east right of Brechfa Forest.

#### *Predicted View*

- 4.213 The proposed turbines would be clearly apparent within the view. The turbines would be located just beyond the horizon in the centre of the view. The nacelle and blades of the turbines would break the skyline of the Mynydd Pencarreg plateau. Views of the turbines would be open with no screening, therefore the blade rotation would be clearly evident from this location. The access track and sub-station building would be completely screened by the intervening landform.

#### *Magnitude of Change*

- 4.214 The proposed turbines would form a prominent distant feature within the view due to the lack of intervening screening. The nacelle and blades of the turbine would break the skyline with the blade rotation being viewed. The existing single turbine that is visible and the communication masts would help mitigate the man-made vertical element of the turbine within a landscape that is largely free of large vertical constructed elements. The magnitude of change is considered to be moderate.

#### *Significance of Effects*

- 4.215 The receptors are considered to be of moderate sensitivity and the magnitude of change would be moderate. The blade rotation would be viewed above the skyline. This would add a prominent moving element to the view that would interrupt the simple static horizon line. The significance



of effects on visual amenity is therefore considered to be moderate adverse and not significant.

#### *Cumulative Effects*

- 4.216 From this viewpoint the existing turbine at Pant y Celyn is clearly visible. The wireline indicates that in addition, the existing turbines at Maes y Haul, Fron, the approved turbine located on the land near Esgairwen Isaf and the turbine on the land south west of Bryn Dafydd, which is currently in planning would all be potentially visible from this location. Due to the intervening topography and distance from the view, all turbines except for the turbine south west of Bryn Dafydd are predicted to be imperceptible elements within the view. This turbine would be viewed in the same portion of the view as the proposed Mynydd Pencarreg turbines and together would result in a small increase in the perception of wind energy developments within the view. However, the main existing visual element of the existing view, which is the undulating landform and the Mynydd Pencarreg plateau, would be retained and would continue to be a dominating factor in this view. Therefore, the cumulative effects are considered to be moderate to minor

#### *Viewpoint 9 - Mynydd Llanllwni*

- 4.217 Approximate distance to nearest turbine: 7.983 km.

#### *Value of Visual Receptors*

- 4.218 Located on Mynydd Llanllwni, the majority of which is an area of 'open access land' and within the Llanllwni Mountain SLA. This is a location potentially used by tourists due to it being located within an area of scenic quality. It is considered to be a high valued view.

#### *Susceptibility of visual receptors to change*

- 4.219 The predominant receptor type is predicted to be walkers, therefore its susceptibility to change of visual receptors is assessed as high.

#### *Sensitivity of visual receptors*

- 4.220 Although receptors are located within a non statutory designated landscape. Receptors are able to accommodate a degree of change to

the view, due to the presence of the existing turbines to the Brechfa Forest West and Alltwalis wind farms which are visible to the south and the communication masts that form existing vertical features in the view and other manmade features being visible to the right of the view. Therefore, visual sensitivity is considered to be moderate to high.

#### *Existing View*

- 4.221 This view is dominated by the wide, undulating landform of Mynydd Llanllwni and the Brechfa Forest which spreads across the majority of the view, forming the central skyline and part of the right middle ground. The landscape is characterised by exposed bare heath land, with views of the undulating agricultural fieldscapes and woodland beyond to the right. The turbines to the wind farms of Brechfa Forest West and Alltwalis are prominent features in view to the south (note that this is the opposite direction to the proposed Mynydd Pencarreg turbines), while the communication mast is an obvious vertical feature in the centre of the view. The site is located in the middle of the view. The site is located in the centre of the view, behind the vegetation along the skyline.

#### *Predicted View*

- 4.222 Glimpsed views of the blades to the proposed turbines would be perceptible within this view, resulting in blade rotation being viewed just above the skyline. The turbines would be heavily screened by intervening landform and a section of coniferous plantation which forms part of the Brechfa Forest. Although, as a consequence of the felling regime followed by the Forestry Commission Wales, which looks after Brechfa Forest; an increase in the proportion of both of the turbine blades may become available if or when the section of is felled. The tower and nacelle of both turbines would be completely screened from view by the intervening landform.

#### *Magnitude of Change*

- 4.223 The proposed turbines would be heavily screened by existing intervening landform and forestry planation and therefore only the blade tips to the

turbines would be seen, therefore the magnitude of change is considered to be low to negligible.

#### *Significance of Effects*

- 4.224 The receptors are considered to be of high to moderate sensitivity and the magnitude of change would be low to negligible. The significance of effects on visual amenity is therefore considered to be minor adverse to negligible and not significant.

#### *Cumulative Effects*

- 4.225 From this viewpoint the wireline indicates that the existing wind farms of Brechfa West Forest and Alltwalis, plus the single turbine developments of Rhosfach and Rhydygwydd Farm would be visible in views south. To the north, the single turbine of Tanrhos is theoretically visible, as are, the approved developments of Cathal, Maesgwyn, Hendre and Maesnewydd and in conjunction with the Tanrhos turbine would be viewed as a tight cluster of turbines. However, due to distance and proportion of the turbines that would be visible, they would form very minor elements within the view and would be barely perceptible. South east of the proposed Mynydd Pencarreg turbines the turbine located on the land south west of Bryn Dafydd and which is in planning would be visible. This is a broad, open view within a large scale landscape and in reality on the blade tips of the proposed Mynydd Pencarreg turbines would be seen above the skyline and therefore there would be a very small cumulative effect. Cumulative effects are considered to be minor.

#### *Viewpoint 10 - Beacons Way National Trail/Brecon Beacons*

- 4.226 Approximate distance to nearest turbine: 21.982 km.

#### *Value of Visual Receptors*

- 4.227 Located approximately 2.5km inside of the western edge of the Brecon Beacons National Park and along The Beacons Way long-distance footpath, which is the official trail of the Brecon Beacons National Park Authority, this is a location that attracts a number of tourists due to its scenic quality. Therefore, it is considered to be a high valued view.

#### *Susceptibility of visual receptors to change*

- 4.228 The receptor type is predicted to be walkers. The primary reason for the visit to this location would be for the scenic views available. Susceptibility to change of visual receptors is assessed as high.

#### *Sensitivity of visual receptors*

- 4.229 Receptors are located within a designated landscape and along a recognised official trail of this designated area. Receptors are able to accommodate a small degree of change to the view, due to the presence of existing man-made features that form prominent features in existing views, such as large urban settlements, a network of roads and a number of communications masts. Therefore, visual sensitivity is considered to be high to moderate.

#### *Existing View*

- 4.230 This long distance view is dominated by the wide, undulating landscape. The landscape is characterised by a complex agricultural fieldscape and scattered settlements ranging from large towns to small hamlets and solitary farms. A variety of field boundaries add a mixture of large to small blocks of woodland/forestry planting providing texture and a complexity to the view. Communication masts are a vertical feature along the distant skyline, with distant views towards Brechfa Forest to views with the north west, where the existing turbines of Brechfa Forest West and Alltwalis wind farms can be seen. The single turbine of Rhydygwydd Farm is also visible within the mid to far distance. The site is located in the middle of the view, along the distant skyline.

#### *Predicted View*

- 4.231 Due to the distant nature of the view the proposed turbines are almost imperceptible within the view. The turbines would be located along the horizon in the centre of the view. Views of the turbines would be open with no screening, therefore the blade rotation would be just about evident from this distant location.

#### *Magnitude of Change*

4.232 The proposed turbines would form another distant vertical feature within the view. The nacelle and blades of the turbines would break the skyline with the blade rotation being viewed. Although, the communication masts and existing wind farms/single turbines would help mitigate the man-made vertical element of the turbines within the landscape and the long distant open and panoramic view enables the turbines to be observed but fully absorbed into the landscape and form another man-made feature. The panoramic undulating landform would remain the dominant feature and main visual component within the view. The magnitude of change is considered to be negligible.

#### *Significance of Effects*

4.233 The receptors are considered to be of high sensitivity and the magnitude of change would be negligible. The blade rotation would be perceptible just above the skyline. This would add moving element to the view that would interrupt the static horizon line, but the distant panoramic nature of the view enables the movement to be fully absorbed into the view. The significance of effects on visual amenity is therefore considered to be low to negligible adverse and not significant.

#### *Cumulative Effects*

4.234 From this viewpoint the existing Brechfa Forest West and Alltwalis wind farms are just perceptible to the left of the proposed turbines, while the existing turbine located on the land at Rhyddygydd Farm is visible within the centre of the view. The wireline indicates that in addition to these developments, the existing single turbine of Rhosfach, Fron and Pant y Celyn are perceptible to the left and right of the view. Although in reality these are likely to be screened from view by intervening vegetation. The wireline also indicates that the approved Land Nr Esgairwen Isaf wind turbine would be visible to the north-east, of the proposed Mynydd Pencarreg turbines, as would the turbine located south west of Bryn Dafydd, which currently is in planning. Due to the number and proportion of the view covered by the turbines of the existing Brechfa Forest West and Alltwalis wind farms, plus the other existing, approved and proposed single turbines, when viewed with the proposed Mynydd Pencarreg turbine, the view would have a distinct

visual presence of wind farm development. Although; the distance between the wind turbine schemes and the receptors and the open panoramic nature of the view would result in the main existing visual element of the existing view, which is the undulating landform. This element would be retained and would continue to be the dominating factor in this view. Therefore, the cumulative effects are considered to be moderate to minor.

## Summary of Potential Effects on Visual Amenity

4.235 Table 4.4 below summarises the viewpoint assessment:

**Table 4.4: Summary of Potential Effects on Visual Amenity**

| VP No. | Location                                     | Receptor Sensitivity | Magnitude of Change | Significance of Effect              | Significance of Cumulative Effects  |
|--------|----------------------------------------------|----------------------|---------------------|-------------------------------------|-------------------------------------|
| 1      | Local road to the north-west of the turbines | Moderate             | High                | High - Significant                  | Negligible - Not Significant        |
| 2      | Local road to the west of Rhydcymerau        | Low                  | Low to Negligible   | Minor - Not Significant             | Minor - Not Significant             |
| 3      | Local road to the north-east of the turbines | Moderate             | Moderate            | Moderate - Not Significant          | Moderate - Not Significant          |
| 4      | B4337 at Llanybydder                         | Moderate to Low      | Low                 | Minor - Not Significant             | Negligible - Not Significant        |
| 5      | Layby along the A482                         | Moderate to Low      | Low                 | Minor - Not Significant             | Minor Not Significant               |
| 6      | Footpath/road to the north-west of Lampeter  | Low                  | Moderate to Low     | Moderate to Minor - Not Significant | Moderate to Minor - Not Significant |
| 7      | Llanwenog                                    | Moderate             | Moderate to Low     | Moderate to Minor - Not Significant | Minor - Not Significant             |
| 8      | Mynydd Cynros                                | Moderate             | Moderate            | Moderate - Not Significant          | Moderate - Minor                    |

|           |                                           |                  |                   |                                       |                                     |
|-----------|-------------------------------------------|------------------|-------------------|---------------------------------------|-------------------------------------|
|           |                                           |                  |                   |                                       | Not Significant                     |
| <b>9</b>  | Mynydd Llanllwni                          | Moderate to High | Low to Negligible | Minor to Negligible - Not Significant | Minor Not Significant               |
| <b>10</b> | Beacons Way National Trail/Brecon Beacons | High to Moderate | Negligible        | Negligible - Not Significant          | Moderate to Minor - Not Significant |

## Potential Effects on Residential Visual Amenity

4.236 The assessment was undertaken using a methodology developed by Soltys Brewster Consulting that follows an accepted approach derived from the current published 'best practice' guidance encompassed by the Landscape Institute (LI)/ Institute of Environmental Management & Assessment (IEMA) (2013) Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA 3)<sup>6</sup> and the Landscape Institute TGN2/19 Residential Visual Amenity Assessment. The guidance is not prescriptive and is not specific to residential visual amenity, but recognises that every project would require its own set of criteria and thresholds, tailored to suit local conditions, circumstances and the potential scale of impacts. In the case of the Mynydd Pencarreg wind turbines, the approach followed recognises the specific attributes and scale of the project.

4.237 When considering the visual effects on views from private residential properties it is worth noting that in planning law, individuals (i.e. visual receptors at a single residential property) have no 'right to a view' and that the outlook or view from a private property is a private interest and not therefore protected by the UK planning system. However, the planning system also recognises situations where the effects on residential visual amenity are considered as a matter of public interest. This matter has been examined at a number of public inquiries in both Scotland and England where the key determining issue was whether the proposed turbines would have an overbearing effect and/or result in unsatisfactory living conditions,

<sup>6</sup> Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA 3), The Landscape Institute (LI)/ Institute of Environmental Management & Assessment (IEMA) (2013)  
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leading to a property being regarded, objectively, as an unattractive (as opposed to a less attractive) place in which to live. The experience of a significant view of the proposed wind farm is not the same as an unacceptable effect in the public interest.

4.238 Details of the criteria and methods used in assessing the effects of the proposed wind turbines on residential visual amenity are set out in Appendix 4.1.

4.239 Table 4.5 indicates all properties that fall within the 1.25km study area and are therefore included as part of the Residential Assessment. Wirelines from each property have been prepared (refer to figures 4.32 – 4.39). These include the consented turbines (100m to blade tip height) and also the proposed turbines (125m to blade tip height) in order to illustrate the height difference between them.

**Table 4.5: Assessed Properties**

| Property Name                                               | Coordinates (E,N)      | Distance from nearest Turbine (m) |
|-------------------------------------------------------------|------------------------|-----------------------------------|
| Cefnblaenau                                                 | E: 257678<br>N: 241860 | 951                               |
| Caermalwas Fawr                                             | E: 256463<br>N: 240383 | 793                               |
| Esgairliving<br>(proposed<br>development site<br>landowner) | E: 257096<br>N: 240300 | 714                               |
| Tanrhiw<br>(proposed<br>development site<br>landowner)      | E: 256617<br>N: 240415 | 679                               |



|                           |                        |      |
|---------------------------|------------------------|------|
| Bwlch Caermalwas<br>Fach  | E: 256158<br>N: 240512 | 939  |
| Blaen Wern Farm<br>Centre | E: 256227<br>N: 242028 | 1006 |
| Caermalwas Fach           | E: 256073<br>N: 240281 | 1130 |
| Ysgubor-fach              | E: 257284<br>N: 239872 | 1170 |

4.240 The detailed assessment of each property can be found in Appendix 4.4. – Residential Visual Amenity Property Assessment

### Summary of Potential Effects on Residential Visual Amenity

4.241 The experience of a significant view of the proposed development is not the same as an unacceptable effect in the public interest as described above. All of the 8 properties listed above include some mitigating circumstances such as topography, the partial screening or separating effects of garden vegetation, outbuildings and intervening mature trees which may otherwise reduce the visual effects likely to be experienced from these properties. In a number of cases the main visual effects would be experienced from either the access or egress of these properties, rather than views from the main living areas of the properties. Considering all of the factors noted in the residential assessment it is considered that there would be no effect on the living standards of individual properties such that any of these properties would become an unattractive place to live when judged objectively and in the public interest as a result of the addition of the proposed development.

4.242 The distance between the 8 properties listed above and the proposed turbines is an important factor when assessing the potential visual effects likely to be experienced from these properties. It is considered that as the distance between a property and the proposed turbines increases, the visual dominance of the proposed turbines would decrease. In this

particular instance, the proposed turbines would not be considered overbearing on properties such as Cefnblaenau, Blwch Caemalwas Fach, Blaen Wern Farm Centre and Ysgubor-fach due to their distance from the proposed turbines, combined with the intervening screening effects of topography, vegetation, outbuildings and mature trees.

4.243 The following table summarises the conclusions of the assessment of residential visual amenity undertaken for the proposed turbines.

**Table 4.6: Residential Visual Amenity Assessment Summary**

| Property Name   | Distance from Turbines (m) | Receptor Sensitivity                                                             | Magnitude of Change | Significance of Effect |
|-----------------|----------------------------|----------------------------------------------------------------------------------|---------------------|------------------------|
| Cefnblaenau     | 951                        | High                                                                             | Low                 | Not significant        |
| Esgairliving    | 714                        | Medium (due to indirect views - main view is away from the proposed development) | Negligible          | Not Significant        |
| Caermalwas Fawr | 793                        | Medium (due to indirect views - main view is away from the proposed development) | Medium to Low       | Not Significant        |
| Tanrhiw         | 679                        | Medium (due to indirect views - main view is away from the                       | Negligible          | Not Significant        |

|                           |       | proposed<br>development)                                                                           |            |                    |
|---------------------------|-------|----------------------------------------------------------------------------------------------------|------------|--------------------|
| Bwlch Caemalwas<br>Fach   | 939.2 | High                                                                                               | Low        | Not<br>Significant |
| Blaen Wern Farm<br>Centre | 1008  | High                                                                                               | Low        | Not<br>Significant |
| Caermalwas Fach           | 1130  | High                                                                                               | High       | Significant        |
| Ysgubor-fach              | 1170  | Medium (due<br>to indirect<br>views - main<br>view is away<br>from the<br>proposed<br>development) | Negligible | Not<br>Significant |

## Potential Effects on Statutory and Non Statutory Landscape Designations

4.244 This section looks at both the effects on the statutory and non statutory designations that have been identified within paragraphs 4.64 to 4.76 of the LVIA. As landscape character and visual amenity are closely linked, both have been assessed alongside each other in this section.

### *Brecon Beacons National Park*

4.245 The ZTV indicates that views of the proposed turbines from within the BBNP would be restricted to scattered elevated areas of land within the western parts of the designation. Viewpoint 10 (See Figure 4.27) was assessed as representative of views from these areas, which concludes that the effects on visual amenity are not significant due to the proposed turbines being perceptible in the far distance of the panoramic view but the undulating landform would remain the dominant feature and main visual component within the view. As such, effects are not predicted to be significant on the BBNPs landscape character either, as such the defining undulating landscape characteristics of this landscape would not be affected.

#### *Special Landscape Area's (SLA'S)*

4.246 Of the six SLAs which fall within the 25km study area, only four of them fall within 15km of the proposed turbines and the ZTV.

- Teifi Valley- The majority of this SLA lies outside of the ZTV of the proposed development. Intervening surface features are expected to restrict potential effects on this landscape within the ZTV. As a result, landscape and visual effects are not predicted to be significant. Within parts of the SLA which fall within the ZTV, Assessment of landscape effects within LCA 2 (Appendix 4.3) discusses the likely effects within this area. The defining landscape qualities of the SLA are not likely to be eroded as a result of the proposed development. This is a conclusion that was also shared by the Planning Inspectorate in their Appeal Decision report (App/M6825/A/17/3172347). Paragraph 18 of the report states that *"Whilst the increased scale of the turbines would be discernible from the SLA the difference would be modest and their visual extent would be broadly similar to the two turbines already permitted. In landscape terms the effect of the proposal on the SLA, including the cumulative effects of other existing or planned turbines, would therefore not be harmful"*.
- Mynydd Mallaen - The majority of this SLA lies outside of the ZTV of the proposed development. Intervening surface features are expected to restrict potential effects on this landscape within the ZTV. As a result, landscape and visual effects are not predicted to be significant. Within parts of the SLA which fall within the ZTV, Viewpoint 5 (Figure 4.20) has been selected to represent key receptors and illustrate potential visual effects. Assessment of landscape effects within LCA 1, 4 and 5 (Appendix 4.3) discusses the likely effects within this area. The defining landscape qualities of the SLA are not likely to be eroded as a result of the proposed development.
- The Cothi Valley - The majority of this SLA lies outside of the ZTV of the proposed development. Intervening surface features are expected to restrict potential effects on this landscape within the ZTV. As a result, landscape and visual effects are not predicted to be significant. Within parts of the SLA which fall within the ZTV, Viewpoint 6 (Figure 4.21) has

been selected to represent key receptors and illustrate potential visual effects. Assessment of landscape effects within LCA 1 and 5 (Appendix 4.3) discusses the likely effects within this area. The defining landscape qualities of the SLA are not likely to be eroded as a result of the proposed development.

- Llanllwni Mountain - Much of this SLA lies outside of the ZTV of the proposed development. Intervening surface features, including tree cover within Brechfa Forest, is expected to restrict potential effects on this landscape within the ZTV. As a result, landscape and visual effects are not predicted to be significant. Within parts of the SLA which fall within the ZTV, Viewpoint 9 (Figure 4.24) has been selected to represent key receptors and illustrate potential visual effects. Assessment of landscape effects within LCA 1 (Appendix 4.3) discusses the likely effects within this area. The defining landscape qualities of the SLA are not likely to be eroded as a result of the proposed development.

#### *Landscape of Outstanding Historic Interest*

4.247 Of the five LOHI's which fall within the 25km study area, only one of them falls within 15km of the proposed turbines and the ZTV.

- Dolaucothi - much of this LOHI lies outside of the ZTV of the proposed development. Intervening surface features are expected to restrict potential effects on this landscape within the ZTV. As a result, landscape and visual effects are not predicted to be significant. Assessment of effects within LCA 4 and 5 (Appendix 4.3) discusses the likely effects within this area. The defining landscape qualities of the LOHI are not likely to be effected as a result of the proposed development.

#### *Registered Parks and Gardens of Special Historic Interest*

4.248 The ZTV indicates that of the sites that are open to the public, the turbines would only be theoretically visible from Golden Grove (Gelli Aur). However, through the combination of distance, the turbines are over 20km from the park, and the screening effects of vegetation, the turbines are predicted to be very minor elements in the view and therefore there would be no effects on visual amenity within the park.

#### *Open Access and Common Land*

- 4.249 Mynydd Llanllwni - much of this open access land lies outside of the ZTV of the proposed development. Intervening surface features, including tree cover within Brechfa Forest, is expected to restrict potential effects on this landscape within the ZTV. As a result, landscape and visual effects are not predicted to be significant. Within parts of the open access land which fall within the ZTV, Viewpoint 9 (Figure 4.24) has been selected to represent key receptors and illustrate potential visual effects. Assessment of landscape effects within LCA 1 (Appendix 4.3) discusses the likely effects within this area. The defining landscape qualities of the open access land are not likely to be effected as a result of the proposed development.
- 4.250 Other areas of open access land to the north-east of the proposed turbines. Much of these areas of open access land lie outside of the ZTV of the proposed development. Intervening surface features are expected to restrict potential effects on this landscape within the open access land. As a result, landscape and visual effects are not predicted to be significant. Assessment of landscape effects within LCA 1 and 4 (Appendix 4.3) discusses the likely effects within these areas. The defining landscape qualities of these open access land are not likely to be affected as a result of the proposed development.

#### **Potential Effects after Decommissioning**

- 4.251 This section looks at both the effects on landscape character and the visual effects during the decommissioning phase of the proposed turbines. It is anticipated that decommissioning work would have a shorter timescale to that of the construction works.
- 4.252 Potential impacts arising during the decommissioning phase of the proposed turbines on landscape and visual amenity are also predicted to be of lower magnitude than those of the operational phase, predominantly due to the shorter timescale and temporary nature of the decommissioning phase of works. As with the construction phase, the main visual effects during the construction period are likely to be caused by the erection and operation of cranes and plant on site.

- 4.253 Decommissioning activity would be relatively localised within the landscape, short term and temporary. Given these factors, and the limited visibility from sensitive receptors, the level of magnitude of effect on landscape character and visual amenity during the decommissioning phase is considered to be medium/low. Although magnitude overall is relatively low, from those close locations (within around 2km) where a view is possible, decommissioning activity over the short duration of works would be a significant, albeit local feature in the landscape.
- 4.254 Significance of effects on both landscape character and visual amenity arising within approximately 2km of the development would be significant for a short duration of time. It is likely that the magnitude of the effect would be slightly reduced from that of the construction phase due to a shorter duration of works and retention of some underground features in situ.
- 4.255 Once decommissioning activities have been completed, the landscape is expected to return to a state comparable to the conditions that currently exist on the proposal site. Therefore, impacts on landscape character and visual amenity as a result of the decommissioning work are predicted to be not significant.

## CONCLUSIONS

4.256 This Landscape and Visual Impact Assessment has examined the likely effects of the proposed Mynydd Pencarreg wind turbines on landscape character and visual amenity within a 15km radius study area. The application of an acknowledged methodology for landscape and visual assessment, has established an appropriate scope for the landscape and visual assessment undertaken which has also been applied cumulatively to other wind energy schemes, whether operational or consented within the study area.

### *Landscape Character*

4.257 The site is located within LCA 1 and effects of the proposed turbines on landscape character within this LVIA concluded that from within this character area effects would not be significant as the proposed turbines would form a small component within the landscape as a whole. The ZTV indicates that from the majority of this character area there would be no views of the proposed turbines. The turbines are located within close proximity to the B4337 that transects the character area and influences it with its movement and associated noise and the communication masts on Mynydd Pencarreg and Mynydd Llanybyther, which are obvious vertical man made features within the landscape. The remaining character areas within the study area that are indicated to have views of the proposed turbines by the ZTV (see Figure 4.3) were also assessed as experiencing no significant change to landscape character as a result of the proposed turbines.

### *Visual Amenity*

4.258 The ZTV indicates that at least 1no. turbine would theoretically be visible from approximately 33.5% of the 15km study area, and therefore from the remaining 66.5% no wind turbines of the proposed development would be visible. The majority of the views would be limited to areas of high ground, facing the proposed turbines. As the distance increases away from the proposed turbines, the ZTV indicates that views would reduce to smaller



scattered areas of land. In reality, the coniferous plantation of the Brechfa Forest, located to the west and south-west of the site would offer a large degree of screening in views from the west, south-west and south.

4.259 Ten viewpoints were also assessed within the study area, which ranged from locations within close proximity to the site and more distant views. They also encompassed the Brecon Beacons National Park, the Special Landscape Area, the Landscape of Outstanding Historic Interest, and some of the surrounding distinctive uplands areas. Conclusions from these assessments were that the visual impacts of the proposed turbines on visual amenity are likely to be greater within close proximity to the site. From viewpoints 1 the effects resulting from the proposed turbines was concluded to be significant. This was due to the proposed turbines being in close proximity to the viewpoint and views being open where the turbines would become immediately apparent within the view. From more distant viewpoints from the site, the visual impact of the proposed turbines reduces as surrounding vegetation screens views and the turbines themselves become less readily discernible within the diverse and accommodating landscape. From within the study area the surrounding undulating landform that form an impressive skyline, would continue to form the focal points of the views.

#### *Cumulative Visual Assessment*

4.260 A cumulative visual assessment was also carried out, which assessed a number of existing, approved and submitted schemes within a 15km study area. It concluded that from the majority of the viewpoints assessed cumulative impacts would be not significant. This is due to either cumulative schemes not being within view, the proposed turbines likely to be imperceptible, or cumulative schemes within the view being visible but not dominating the view. Of the ten viewpoints assessed, none were deemed to have significant cumulative effects. It should also be noted that the Planning Inspectorate in their Appeal Decision report, also confirmed (refer to paragraph 23) that the two proposed turbines would not result in unacceptable cumulative impacts.

4.261 Overall, the profile, context and character of the site and the surrounding landscape lend itself to a two turbine scheme of the form and scale specified. This is a conclusion that is also supported by the Planning Inspectorate, who states in paragraph 22 that there would be no unacceptable harmful effects on landscape character as a result of the 125m turbines. With regards to effects on visual amenity, in paragraph 32 of the report, the Inspector states that *“the increase in height proposed would not result in a significant adverse visual effect on local residents or users of publically accessible areas”*. Taking the Inspector comments and the current landscape and visual impact assessment into consideration, the site clearly represents an opportunity to accommodate the Mynydd Pencarreg wind turbines without unacceptable change to landscape character and visual amenity experienced within the surrounding landscape and associated communities, whether in isolation or cumulatively with other wind energy schemes in the study area.

#### *Residential Visual Amenity*

4.262 Of the eight residential properties that lie within the 1.25km study area, only one property, Caermalwas Fach is assessed as having significant effects on visual amenity. From this property, which is located 1.13km from the nearest turbine, the proposed turbines would be a considerable influence on views, but not to the extent that would make it an unattractive place to live. The remaining seven properties are all assessed as not experiencing changes in visual amenity considered to be unacceptable or adversely affecting living conditions. Of these five considered to experience a level of effect (Cefnblaenau, Caermalwas Fawr, Blwch Caermalwas Fach, Blaen Wern Farm Centre and Ysgubor-fach), two properties (Caermalwas Fawr and Ysgubor-fach) have their main dwelling orientated away from the proposed turbines where views would remain unaltered. From Caermalwas Fawr, their access and bedroom window to the rear of the property is orientated towards the proposed turbines and from Ysgubor-fach, views would be from the rear of the property, but partially screened by vegetation. From the remaining three properties that have their main dwelling orientated towards the proposed turbines, intervening vegetation

would heavily screen any potential views. Consequently, magnitude of change in all cases was registered as no more than 'medium to low', not significant.

- 4.263 The undulating, small valleys and dense vegetation within in the vicinity of the proposed turbines and properties is a significant mitigating element of the local landscape in limiting the effect on residential property, partially screening views of the proposed turbines, mitigating the visual amenity effects on living conditions.
- 4.264 Specific locational characteristics, in particular the orientation of dwellings away from the proposed turbine, along with the local mitigating effects of local landform and vegetation in ensuring that the proposed turbines are at least partially screened from view from all properties, except from Caermalwas Fach. Overall, the visual amenity effects on living conditions, is considered an acceptable balance.

#### *Statutory and Non Statutory Designations*

- 4.265 At its nearest point the BBNP is located approximately 19.5km south-south-east of the proposed turbines. The ZTV and viewpoint assessments from within the BBNP conclude that effects on visual amenity would be limited as the proposed turbines would not be obviously discernible within the panoramic landscape comprised of undulating hills, plateaus and river valleys. This is a view shared by NRW and the Planning Inspectorate in their Appeal Decision report (refer to paragraph 13).
- 4.266 The nearest SLA would be Llanllwni Mountain, 2.6km west of the turbines at its closest point. Intervening surface features, including tree cover within Brechfa Forest, is expected to restrict potential effects on this landscape within the ZTV. The defining landscape qualities of the SLA are not likely to be eroded as a result of the proposed development. As a result, landscape and visual effects are not predicted to be significant.
- 4.267 Views of the proposed turbines are limited to areas of high ground facing the site in the Dolaucothi LOHI. Due to intervening surface features potential effects are not predicted to be significant.

- 4.268 There are no Registered Park and Gardens open to the public within 15km of the proposed turbines.
- 4.269 Within the study area there are a number of SAMs with 2 being located within 2km of the proposed turbines. However, a large proportion of the SAMs within the study area fall outside of the ZTV. SAMs that fall within the ZTV tend to be located at a distance that enables the proposed turbines to be viewed in context with the nearby communication masts and surrounding open and undulating landform. Viewpoint 9 was assessed from Crugiau Giar, (see Figures 4.24) which concluded that the impact on visual amenity resulting from the proposed turbines would not be significant. For further information on the effects of the proposed turbines, please see the Historic Environment chapter (05) of this report.

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