

5. Landscape and Visual Impact

5.1 Introduction

- 5.1.1 An assessment will be undertaken of the likely significant effects of the Proposed Development on the environment with respect to landscape character and visual amenity.
- 5.1.2 This Landscape and Visual Impact Assessment (LVIA) scoping request is being made to the Welsh Ministers in respect of an Infrastructure Consent Order under the Significant Infrastructure Projects (SIP) regime (Senedd Cymru, 2024). The LVIA is intended to form a topic chapter of the Environmental Impact Assessment (EIA) accompanying the Infrastructure Consent application (Infrastructure (Wales) Act 2024, s.19) for Fferm Wynt Nant y Maen Wind Farm.
- 5.1.3 The LVIA will be carried out by Chartered Landscape Architects at Tir Collective with extensive experience in writing LVIAs for large renewable energy projects in Wales and England. The team of landscape architects involved in the production of this LVIA scoping chapter are:
- Prepared by: Emma Llewelyn CMLI and Emma Hayes CMLI
 - Checked by: Emma Hayes CMLI
 - Approved by: Lee Morris CMLI
- 5.1.4 The LVIA will provide an assessment of the effects of the Proposed Development on the landscape of the Site and its context. The design of the Proposed Development and the identification of mitigation measures incorporated within the design to minimise adverse effects, will be informed by the findings of the assessment process as it is progressed. In the LVIA, effects on features identified as important to the scenic quality, or effects on the landscape character of the Site and surrounding area will be assessed. Effects on peoples' views of the Site and surrounding area, or visual amenity, will also be assessed. The LVIA will be carried out using the defined maximum parameters to capture the 'worst-case scenario'. This maximum design scenario assumes the following:
- Number of turbines: 27
 - Hub height: 149m
 - Rotor diameter: 163m
 - Blade tip height: 230m
 - Allowance will be made for turbine micro-siting flexibility of up to 100m within the site.
 - The locations of proposed tracks, crane pad(s), BESS units, substation, and other associated infrastructure will be provided on the site layout plan.

- 5.1.5 The LVIA will be presented with separate sections dealing with effects on landscape and effects on visual amenity. This LVIA Scoping Chapter is accompanied by the plans in Appendix 5.1 as follows:

Figure list

Figures	01	Site location
Figures	02	Designations
Figures	03	Public access
Figures	04	LANDMAP
Figures	05	Topography
Figures	06	Zone of Theoretical Visibility plans

5.2 Study Area

- 5.2.1 For the landscape and visual impact assessments of the Proposed Development, study areas are suggested as follows:

- The Site extends to the Order Limits, currently illustrated as the Developable Area on the accompanying figures.
- The “landscape context” extends to a radius of about 5km from the Site, to include the major landform and vegetation features surrounding the Site, where there are likely to be direct landscape and visual changes from the Proposed Development.
- The wider landscape study area extends to 20km from the Site. As recommended in NRW Guidance Note 46, as a guide to using LANDMAP information in LVIA, the extent of the landscape Study Area for the LANDMAP aspects is “based on the extent of landscape aspect or character areas likely to be significantly affected, either directly or indirectly. It may also be based on the extent of area from which the development is visible, defined as the Zone of Theoretical Visibility (ZTV), or a combination of the two.” See Figures 05.4-3 and 05.4-4 (Natural Resources Wales, 2021).
- The visual Study Area extends 45km from the Site, as shown on Figure 05.06-1.
- The cumulative Study Area, a longlist of existing, consented and submitted renewable energy developments (including onshore wind, solar PV, energy storage and associated grid infrastructure) within a 35 km radius of the Site, will be compiled and then screened to a shortlist based on potential for cumulative interaction (ZTV overlap, proximity, scale/height and receptor sensitivity). Chapter 19 of the Scoping report sets out the scope of the cumulative assessment.

- 5.2.2 We will seek to agree on the extent of the LVIA study areas with the Council and Statutory consultees. For this Scoping Chapter, an initial 45km visual study area has been considered,

but we will seek to agree on a visual study area of up to 35km to ensure the LVIA focuses on where significant effects are likely to occur as a result of the Proposed Development.

5.3 Assessment Methodology

5.3.1 The methodology used for assessing the landscape character and visual amenity of the Site and surrounding area is based on the recommendations in Guidelines for Landscape and Visual Impact Assessment 3rd Edition, published by The Landscape Institute and the Institute of Environmental Management & Assessment in 2013 (GLVIA3).

5.3.2 The assessment process will comprise a combination of desk studies and field surveys, with subsequent analyses, and will involve:

- A review of landscape designations and planning policies for the landscape, and of other landscape studies relevant to the area, including national and local landscape character assessments and LANDMAP.
- A survey of the Site and landscape context, and inspection of views of the Site from publicly accessible viewpoints, including a photographic survey.
- Evaluation of the features and elements of the landscape and their contribution to the landscape character, context and setting, based on these studies.
- Analysis of the development proposals and consideration of potential landscape and visual effects of the Proposed Development.
- Assessment of the value, susceptibility and sensitivity of the landscape to the changes likely to arise from the Proposed Development.
- Identification of the extent of theoretical visibility of the Proposed Development and viewers, their value, susceptibility and sensitivity, and view locations, supported by a viewpoint analysis.
- Consideration of the proposals and mitigation measures to avoid, reduce or offset adverse effects.
- Assessment of magnitude of change arising from the proposal, the degree and nature of effects on the landscape and on visual amenity and the significance, with the mitigation proposals in place.
- A cumulative landscape and visual assessments considering the Proposed Development in conjunction with other renewable energy developments in the cumulative Study Area.

Guidance

5.3.3 In addition to GLVIA3, the following sources of guidance will be referred to:

- Landscape Institute's Technical Guidance Note 2024-01 Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3) (Landscape Institute, 2024).

- Landscape Institute's Technical Guidance Note 02/21 Assessing landscape value outside national designations (Landscape Institute, 2021).
- Landscape Institute Technical Guidance Note Residential Visual Amenity Assessment (15 March 2019) (Landscape Institute, 2019).
- NRW LANDMAP assessment information and Guidance Note 46: Using LANDMAP in Landscape and Visual Assessments (Natural Resources Wales, 2021).
- NRW Guidance Note 17: Landscape Sensitivity Assessment Guidance for Wales (Natural Resource Wales , 2022).
- NatureScot Visual Representation of Wind Farms Guidance, Version 2.2 (February 2017) (NatureScot, 2017).
- Ceredigion LDP Renewable Energy SPG, Adopted January 2015 (Ceredigion County Council , 2015).
- Ceredigion LDP Built Environment and Design SPG, Adopted January 2015 (Ceredigion County Council, 2015).
- Local landscape character assessments and other contextual information sources will also be referred to.

Assessment and Mitigation

- 5.3.4 The effects of the Proposed Development, whether beneficial or adverse, may vary in nature and degree through its lifecycle and, where feasible, mitigation measures are proposed to be incorporated in the design of the development. Where design measures cannot address identified likely adverse effects, measures such as management of the construction and operational processes or of the use of public rights of way may be proposed. The purpose of mitigation measures is first to prevent or avoid the potentially adverse effects identified, and if that is not possible, to reduce the potential adverse effects.
- 5.3.5 Details of the criteria for assessing landscape effects, visual effects, and cumulative effects are set out in the assessment methodology.

Weather

- 5.3.6 The weather of Mid-Wales is a factor affecting the assessment of, especially, visual impacts. The Met Office (Met Office, 2026) publish average statistics for weather patterns for the region, monthly and annual, for maximum and minimum temperatures, days of air frost, hours of sunshine, amount of rainfall, both generally and the number of days when rainfall is above 1mm. For Sennybridge No 2, the nearest Climate Station to the Site:
- Rainfall above 1mm per day, which limits visibility, occurs on an average of 185 days in the year, about 51% of the year

- There are, on average, 64 days when air frost occurs, which can produce hazy conditions limiting visibility, about 17.5% of the year
- There is an average of 1531 hours of sunshine per annum for the England SW and Wales S district

Photography

5.3.7 Photographs have a special role in describing landscape character and illustrating key views. In order for photographs to be representative and to create an image that is as similar as possible to that which is seen with the human eye, the Landscape Institute (LI) advises using a lens with a focal length equivalent to 50mm for a 35mm Single Lens Reflex (SLR) camera, and a horizontal field of view of a little under 40 degrees. The equipment used for the appraisal photography will include:

- A Canon EOS 5D Mark iv digital SLR camera with a full frame sensor;
- Canon 50mm EF 1:1.8 II lens; and
- Manfrotto tripod and panoramic head.
- Photographs will be taken with a focal length of 50mm.

5.3.8 Landscape photography includes wide-angle or panoramic views requiring a sequence of photographs to be taken across the view. Where this approach is taken, a series of overlapping photographs is digitally spliced together in PTGui using a cylindrical projection to provide a panorama approximating the normal field of view in a landscape context. Where necessary, the contrast and brightness of individual photographs are slightly manipulated in order to create a consistent panorama without visible joins.

5.3.9 The viewpoint locations will be established using a camera-mounted GPS device and verified against Ordnance Survey grid reference and height above Ordnance Datum.

Visualisations

5.3.10 Whilst visualisations can never show exactly what the Proposed Development will look like in reality due to factors such as different lighting, weather and seasonal conditions which vary through time and the resolution of the image, the visualisation images to be provided will give a reasonable impression of the scale of the Proposed Development and its turbines, and distance to the Proposed Development. A static image cannot convey turbine movement, or flicker or reflected from the sun on turbine blades. To form the best impression of the impacts of the Proposed Development, visualisations are best viewed at the viewpoint location shown (NatureScot, 2017).

5.3.11 Viewpoint locations will be recorded using an on-camera GPS unit. The GPS readings will be plotted in GIS and fine-tuned with reference to aerial photography and OS Terrain 5 data to match each photograph location accurately.

5.3.12 A 3d model of the Site topography and surrounding terrain will be created in Resoft Windfarm software, and turbines modelled for the Proposed Development and the

surrounding renewable energy developments included in the cumulative assessment. The viewpoint locations will be set up in this model, and wireline and/or photomontage views will be generated for each viewpoint. Wirelines will be presented in 90° cylindrical and 53.5° planar projections, and photomontages in 53.5° planar projection as per the latest Nature Scot guidance. Images will be presented as per the latest Landscape Institute guidance.

5.4 Baseline Context

Designations

- 5.4.1 Designations provide an indication of landscape value. They are areas that have been recognised for the scenic beauty and recreational potential of the landscape. Designations are shown on Figures 05.02.

National Parks and National Landscapes

- 5.4.2 The Site itself does not lie within a National Park or National Landscape.
- 5.4.3 The **Bannau Brycheiniog National Park** lies approximately 19km southeast of the Site at its closest point (refer to Figures 05.02-1 and 02-2). The ZTV for the 45km visual study area (Figures 05.06-1) indicates fragmented areas of visibility on elevated slopes within the Bannau Brycheiniog National Park at distances of circa 20-35km.
- 5.4.4 The **Eryri National Park** is located approximately 38km northwest of the Site at its closest point and is scoped out of further consideration within this LVIA because of distance and visual separation.
- 5.4.5 There are no National Landscapes within 45km of the Site.

Ancient Woodland

- 5.4.6 The nearest Ancient Woodland blocks are a series of tiny pockets that form part of the much larger Tywi Forest. The closest block is an area of **Plantation on Ancient Woodland**, located approximately 1.8km northwest of the Site, see Figure 05.2-3.
- 5.4.7 Beyond Tywi Forest, there are further areas of Ancient Woodland, often associated with watercourses.

Special Landscape Areas

- 5.4.8 Special Landscape Areas (SLAs) are non-statutory designations applied by Local Authorities to define areas of high landscape importance within their administrative boundary. SLAs within 20km of the Site are shown on Figure 05.02-2.
- 5.4.9 The Site is located within the **Ceredigion Southern Uplands Special Landscape Area SLA** (Ceredigion County Council, 2014). The key characteristics of the SLA are: “Expansive upland landscape, softer form and character than Northern Uplands; Effectively surrounded by conifer plantations; Subject to agricultural improvement in places; Partially lies within the Cadw Register of Landscapes of Outstanding Historic Importance”.

5.4.10 Large parts of the south and west of the study area also fall within SLAs. This includes:

- Carmarthenshire North Eastern Uplands SLA, circa 3.8km south
- Carmarthenshire Tywi Valley SLA, circa 5.2km south
- Carmarthenshire Mynydd Mallaen SLA, circa 7.5km south
- Carmarthenshire Bran Valley SLA, circa 11.5km southeast
- Carmarthenshire Cothi Valley SLA, circa 7.8km southwest
- Carmarthenshire Teifi Valley SLA, circa 17km southwest
- Ceredigion Teifi Valley SLA, circa 3.5km west
- Ceredigion Northern Uplands SLA, circa 2.3km northeast
- Ceredigion Aeron Valley SLA, circa 10km west
- Ceredigion Afon Wyre SLA, circa 14km northwest
- Ceredigion Ystwyth Valley SLA, circa 14.5km northwest

Historic and cultural landscape designations

- 5.4.11 The setting of historic and cultural designations is a consideration during the preparation of this assessment because these features inform the overall landscape character, quality and value of the area. This assessment does not address the effects on heritage assets; however, it considers the contribution these features make to landscape value and scenic quality.
- 5.4.12 Relevant historic and cultural designations are shown on Figures 05.02-1 to 05.02-3.

Conservation areas and listed buildings

- 5.4.13 There are no conservation areas within the Site or within 5km. There are only two conservation areas within 10km of the Site; one at Tregaron, circa 6.8km west and the other at Llanddewi Brefi, circa 7.7km west. The ZTV (refer to Figures 05.06) indicates that there would be no intervisibility with the Llanddewi Brefi conservation area or its setting and the proposed wind farm; it is therefore scoped out of further consideration in this LVIA.
- 5.4.14 There are no listed buildings within the Site. The nearest listed building to the Site is located at the property Nant Ystalwyn, circa 2.2km east of the Site, which is Grade II listed. There is a further listed building at Capel Soar and an attached house, circa 3km southeast of the Site, which is Grade II* listed.
- 5.4.15 There are no further listed buildings within 5km of the Site. In the wider landscape, listed buildings are mainly located in settlements and scattered along local routes.

Scheduled Ancient Monuments

- 5.4.16 Cefncerrig round cairn Scheduled Monument (Welsh Government , 2026) is located at the north boundary of the Site. The Stone Circle and Associated Structures on Bryn y Gorlan Scheduled Monument (Welsh Government , 2026) is located inside the southern part of the Site.
- 5.4.17 Nantymaen Standing Stone is located circa 350m north of the Site, and there is a further Round Cairn at Blaen Camddwr, circa 240m north of the Site. Further to the northwest of the Site, there is a clustering of Scheduled Monuments on the slopes around Esgair Ambor, circa 1-3km northwest of the Site, comprising cairns, settlement and burial remains and a hillfort.
- 5.4.18 To the south, Llethr Bryn Gorlan Platform is located circa 250m southwest of the application site. There is a further clustering of Scheduled Monuments that are cairns and settlement remains circa 750m-2km south of the Site.
- 5.4.19 The wider landscape contains a concentration of Scheduled Monuments, generally in uplands and settlement areas spread throughout the 20km study area.

Registered Parks and Gardens

- 5.4.20 There are no registered parks and gardens within the Site or within 10km. The closest registered park and garden is at Hafod, circa 13km north. There are several other registered parks and gardens in the west part of the study area; however, they generally lie all or partly outside of the initial 'worst case scenario' ZTV and as a result of distance and visual separation, registered parks and gardens will be scoped out from further consideration in the LVIA.

Registered Historic Landscapes

- 5.4.21 Cadw has compiled a register of landscapes of historic interest in Wales. The register identifies 58 Landscapes Outstanding or Special Historic Interest that are considered to be the best examples of different types of historic landscapes (Cadw, 2026).
- 5.4.22 The north part of the Site lies within the Upland Ceredigion Landscape of Outstanding Historic Interest. This extensive area "is rich in diverse and often visually dramatic evidence of land use and the exploitation of natural resources, from the prehistoric period to the present, and it also includes several sites with important historic artistic associations" (Welsh Government, 2026). The Upland Ceredigion Landscape of Outstanding Historic Interest extends northwards, covering the northern part of the Study Area within circa 30km of the Site.
- 5.4.23 There are two further Landscapes of Outstanding Historic Interest in the southern part the Study Area. The Tywi Valley Landscape of Outstanding Historic Interest (Welsh Government, 2026) is located circa 5.2km southeast of the Site at its closest point, and the

Dolaucothi Landscape of Outstanding Historic Interest (Welsh Government, 2026) is located circa 7.1km southwest.

- 5.4.24 The Elan Valley Landscape of Special Historic Interest (Welsh Government, 2026) is located circa 5.6km northeast of the Site at its closest point.

Ecology Designations

- 5.4.25 Ecological designations, although not specifically related to landscape amenity and not assessed within this report, are an indication of landscape value. Relevant ecological designations are shown on Figure 05.02-4.

Special Areas of Conservation

- 5.4.26 There are no Special Areas of Conservation (SACs) inside the Site. The closest SAC is at Cwm Doethie – Mynydd Mallaen, circa 2.7km south at its closest point.
- 5.4.27 There are several other SACs within 20km of the Site, generally associated with upland habitats and watercourses. The Afon Teifi / River Teifi SAC is located approximately 2.85km to the west at its closest point, Cors Caron SAC is located circa 6.3km to the northwest at its closest point, and Elenydd SAC is located circa 4.1km northeast at its closest point.

Special Protection Areas

- 5.4.28 The Elenydd – Mallaen Special Protection Area (SPA) is located in the southeast of the Site, extending over the southern part of the study area to a distance of circa 13.3km from the Site and also over an extensive part of the northeast of the 20km Study Area.

Sites of Special Scientific Interest

- 5.4.29 The Elenydd – Mallaen SPA that is within the southeast of the Order Limits is also overlapped by a Site of Special Scientific Interest (SSSI) designation.
- 5.4.30 There is a further SSSI circa 2.2km west of the Site at Figyn Blaen-Brefi. Within the wider landscape beyond 5km, there are a number of other SSSIs.

Public Rights of Way and Access

- 5.4.31 Public Rights of Way (PRoW) and access land within the Study Area are shown on Figures 05.03.

Public Rights of Way

- 5.4.32 There is a sparse network of PRoW within 1-5km of the Order Limits, including several bridleways meeting at the northern boundary of the Order Limits near Nant y Maen before running broadly northeast over uplands. Several bridleways and a Road Used as Public Path (RUPP) cross Llethyr Llwyd/ Bryn Mawr/ Hafod Las to the south of the Site, running broadly south.

- 5.4.33 Beyond 5km of the Site, the PRow network is more concentrated in the northwest, south and southwest parts of the study area.

Long Distance Footpaths and National Trails

- 5.4.34 The Cambrian Way LDFP runs north-south through the Study Area and crosses within the west of the Site. The route enters the north part of the Site near the road junction at Nant y Maen and broadly follows the edge of Cwm Berwyn Plantation before exiting at the southwest corner of the Site.
- 5.4.35 Other LDFPs in the wider Study Area comprise:
- Tywi Valley Trail, circa 2.1km east
 - Borth to Devil's Bridge to Pontrhydfendigaid Trail, circa 6.9km to the northwest
 - Ystwyth Trail, circa 7km west
 - Heart of Wales Line Trail, circa 12.3km southeast
 - Epynt Way, circa 17.1km southeast
 - Wye Valley Walk, circa 19.7km northeast
 - Teifi Valley Trail, circa 4.5km to the north

Open Access Land

- 5.4.36 Large parts of the landscape are designated as Open Country and Registered Common Land under the CROW Act, including all but a small part of the Site and the majority of the central and northeastern parts of the 20km study area (Countryside and Rights of Way Act, 2000)).

National Cycle Routes

- 5.4.37 National Cycle Routes (NCRs) within 20km of the Site comprise:
- NCR 82, circa 7.2km west at its closest point, running broadly north-south through the west part of the study area
 - NCR 820, circa 8.3km north, a subsidiary route linking NCR 82 and NCR 81 in the north part of the study area
 - NCR 82, circa 13km north, running broadly west-east through the north part of the study area.

Landscape Baseline

- 5.4.38 The landscape baseline is a description and analysis of the existing landscape, against which the effects of the Proposed Development are assessed, first, by reference to landscape character assessments for the area in which the Site is located, at national and local levels and then, from site-specific surveys and analysis carried out for the purposes of this assessment.

LANDMAP

- 5.4.39 Landscape Assessment, following the LANDMAP methodology (Natural Resources Wales, 2024), has been undertaken for Ceredigion. The assessment uses the Natural Resources Wales (NRW) / Wales Landscape Partnership Group approach, which separates the defining aspects of the landscape into five categories, or aspect layers: Geological Landscape, Landscape Habitats, Historic Landscape, Cultural Landscape Services, and Visual & Sensory. It considers the relationship that exists between people and places; how people have given meaning to places through time, and how the physical landscape has shaped their actions, or how their actions have shaped the landscape.
- 5.4.40 Summarised descriptions for the most relevant aspect areas to the Site and its context are outlined below for all five aspect layers. The findings of the LANDMAP studies have formed the basis of the landscape and visual baseline within this appraisal. Table 5-1 below defines the criteria that LANDMAP uses for evaluating each aspect area.

Table 5.1 – Criteria for evaluating LANDMAP Aspect Areaⁱ

LANDMAP Evaluation	Definition
Outstanding	of international or national importance
High	of regional or county importance
Moderate	of local importance
Low	of little or no importance
Unassessed	insufficient information exists to evaluate

- 5.4.41 Characteristics of particular relevance to the Site and its context are highlighted in bold. LANDMAP aspect areas for each of the aspect layers are illustrated on Figures 05.04.

Geological Landscape (GL)

- 5.4.42 The north part of the Site lies mostly within **Bron-yr-Helm – Tywi Fechan** (CRDGNGGL184) (Natural Resources Wales, 2026), which extends over the surrounding landscape to the northeast and east, with a small part of the north part of the Site falling within **Llyn Du – Llyn Gorast** (CRDGNGGL185) (Natural Resources Wales, 2026).
- 5.4.43 The majority of the western part of the Site lies within **Banc-y-Gwyngloed – Y Drum** (CRDGNGGL161) (Natural Resources Wales, 2026), which extends westward. A small part of the western part of the Site lies within **Cwm Twrch – Llyn Berwyn** (CRDGNGGL159) (Natural Resources Wales, 2026), which also covers some of the central and southern fringes of the Site.

- 5.4.44 The majority of the central and south parts of the Site lie within **Blaen nant-y-rhiw** (CRDGNG154) (Natural Resources Wales, 2026), which extends over the surrounding landscape to the southeast.
- 5.4.45 **Bron-yr-Helm – Tywi Fechan** (CRDGNG184) is classified as **Upland Plateau** (Level 3) and described as being marked by the Towy valley, Camddwr valley and a southwest to northeast escarpment feature to the northwest. The rarity/ uniqueness (Q31) is **high**, and its overall evaluation (Q33) is also **high** as it is a “major upland area with varied geology, natural crags, peat formation etc”.
- 5.4.46 **Banc-y-Gwyngod – Y Drum** (CRDGNG161) is classified as **Undulating upland terrain** (Level 3) and described as part of the lower escarpment of the Cambrian Mountains. The rarity/ uniqueness (Q31) is **moderate**, and its overall evaluation (Q33) is also **moderate** as there are “no regionally significant sites/ landforms noted during present survey and geology/ geomorphology considered to be typical of feature/ process and is either widespread, better exposed elsewhere or not currently known to be exceptional”.
- 5.4.47 **Cwm Twrch – Llyn Berwyn** (CRDGNG159) is classified as **Other** (Level 3) and includes “connected depressions and valley fills to the NW and several peat-filled basins and also lakes (e.g. Llyn Berwyn)”. The rarity/ uniqueness (Q31) is **high**, and its overall evaluation (Q33) is also **high** as the area “includes RIGS features of at least regional importance”.
- 5.4.48 **Blaen nant-y-rhiw** (CRDGNG154) is classified as **Upland Plateau** (Level 3) and is described as “segment of major upland dissected plateau”. The rarity/ uniqueness (Q31) is **high**, and its overall evaluation (Q33) is also **high**, as the area “includes RIGS features of at least regional importance”.

Landscape Habitats

- 5.4.49 The Site falls entirely within **Cwm Doethie upland mosaic** (CRDGNLH077) (Natural Resources Wales, 2026), which is classified as **Marsh/ Marshy Grassland** (Level 3). The biodiversity character is summarised as “This upland area is dominated by marshy grassland with smaller areas of other upland habitats, including herb-rich grasslands and alder-fringed rivers in the valley bottoms, remnants of sessile oakwood and heath on the steep rocky valley sides. Upland grassland, moorland and blanket bog on the unenclosed sheepwalk on the plateau areas, and crag and cliff plant communities are also frequent. These habitats host a range of significant species, including breeding raptors”. It is also noted as “an extensive area of upland habitats which support many significant species of birds”. The overall evaluation (Q45) is **outstanding** as the area “contains good percentage of important upland habitat types which, in turn, support a range of upland plants and animals”.

Historic Landscape (HL)

- 5.4.50 The Site falls entirely within **Bryngwyn Bach** (CRDGNHL099) (Natural Resources Wales, 2026), which is classified as **marginal land** (Level 3), described as “a very large tract of unenclosed upland with an uneven and widely dispersed settlement pattern of upland farms [...]” that is a “very well defined area; to the east and west lie very extensive forestry plantations. To the north and northwest there is mainly lower lying enclosed and settled land”. The overall evaluation (Q40) for the area is **outstanding** because “this area is a very good example of a Ceredigion upland landscape and is a major contributor to the overall historic landscape. It contains elements of national importance. This is a good example of an upland moorland landscape characteristic of much of Ceredigion”.

Cultural Landscape Services (CLS)

- 5.4.51 Cultural Landscape Services (CLS) now supersedes the Cultural Landscape aspect layer, which was updated in 2020. CLS responds to “Recent environment and well-being legislation and developments in current thinking relating to culture suggest the dataset would benefit from a different approach to mapping if revisited...” (Natural Resources Wales, n.d) The data for CLS uses data from the other four aspect layers and provides no overall evaluations for each aspect area.
- 5.4.52 Refer to the Visual and Sensory aspect areas below.

Visual and Sensory

- 5.4.53 **Cambrian Mountains (south)** (CRDGNVS313) covers the entire Site and the surrounding landscape to the northwest, southeast and includes a separate area further north. It is classified as **Upland Moorland** (Level 3) and includes “**Exposed upland plateaux** comprising **shallow rolling slopes and valleys**, with interest added through **wet flushes, boggy depressions and small pools and lakes**. Vegetation is **mixed moorland**, with a mosaic of dark heather contrasting with lighter grassland. In places, **large commercial coniferous plantations** dominate the landscape with their strong, regular edges and dark, consistent colour contrasting with adjacent grassland. Although these provide some **variety** and **enclosure**, they are **visually abrupt** in the **open, simple landscape**. Along the western fringes, **scarp slopes** are common, although scree and rock exposures are rare. **Views west from these areas are spectacular** and take in much of the lower-lying land, and valleys such as the Teifi and farmland further west. Note that the aspect area is fragmented into a number of separate units by plantations, but should be viewed in combination and overall forms one area”.
- 5.4.54 The scenic quality (Q46) of the area is **outstanding**, the character (Q48) of the area is **outstanding**, and the overall evaluation (Q50) of the area is **high** as a “distinctive open expansive landscape covering wide areas along the east of the county” The justification of overall evaluation notes “Area scores outstanding for scenic quality and character. Integrity is high and rarity moderate and overall area scores high”.

LANDMAP Summary

5.4.55 Table 5.2 below summarises the evaluations for each Aspect Area that the Site is located in.

Table 5.2 – Summary of LANDMAP

Aspect Layer	Aspect Area name and Unique ID (UID)	Classifications (Level 3)	Overall Evaluations
Geological Landscape	Bron-yr-Helm – Tywi Fecham (CRDGNG184)	Upland plateau	High
	Banc-y-Gwynggoed – Y Drum (CRDGNG161)	Undulating upland terrain	Moderate
	Cwm Twrch – Llyn Berwyn (CRDGNG159)	Other	High
	Blaen nant-y-rhiw (CRDGNG154)	Upland Plateau	High
Landscape Habitats	Cwm Doethie upland mosaic (CRDGNLH077)	Marsh/ Marshy Grassland	Outstanding
Historic Landscape	Bryngwyn Bach (CRDGNHL099)	Marginal land	Outstanding
Visual and Sensory	Cambrian Mountains (south) CRDGNVS313	Upland moorland	High

LANDMAP Aspect Areas beyond the Site: Filtering process

5.4.56 Aspect layers, Geological Landscape and Landscape Habitats are only considered above for Aspects Areas that contain the Site, in accordance with NRW Guidance Note 46.

5.4.57 Historic Landscape and the Visual and Sensory aspect layers are considered further below for all aspect areas within the 20km wider landscape study area that have a High or Outstanding evaluation and are also indicated by the Zone of Theoretical Visibility plans (Figures 05.06) to have potential visibility of the proposed wind farm. Aspect areas for Historic Landscape and Visual and Sensory, with overall evaluations of Moderate or Low, will not be considered further in the LVIA as they are considered to have potentially lower landscape or visual sensitivity.

LANDMAP Historic Landscape

5.4.58 Historic Landscape Aspect Areas that will be considered further include the following Aspect Areas that have high or outstanding overall evaluations within the 20km study area. Those that do not overlap with the ZTV will be scoped out: CRDGNHL101, CRDGNHL239, CRDGNHL240, CRDGNHL242, CRDGNHL243, CRDGNHL246, CRDGNHL247, CRDGNHL011, CRDGNHL012, CRDGNHL013, CRDGNHL016, CRDGNHL017, CRDGNHL019, CRDGNHL021,

CRDGNHL022, CRDGNHL023, CRDGNHL040, CRDGNHL042, CRDGNHL025, CRDGNHL053, CRDGNHL054, CRDGNHL055, CRDGNHL057, CRDGNHL058, CRDGNHL059, CRDGNHL063, CRDGNHL064, CRDGNHL065, CRDGNHL066, CRDGNHL067, CRDGNHL068, CRDGNHL069, CRDGNHL079, CRDGNHL086, CRDGNHL087, CRDGNHL099, CRDGNHL100, CRDGNHL102, CRDGNHL103, CRDGNHL104, CRDGNHL109, CRDGNHL110, CRDGNHL111, CRDGNHL112, CRDGNHL113, CRDGNHL114, CRDGNHL115, CRDGNHL116, CRDGNHL117, CRDGNHL119, CRDGNHL120, CRDGNHL121, CRDGNHL122, CRDGNHL123, CRDGNHL124, CRDGNHL125, CRDGNHL126, CRDGNHL127, CRDGNHL129, CRDGNHL130, CRDGNHL131, CRDGNHL132, CRDGNHL133, CRDGNHL134, CRDGNHL136, CRDGNHL137, CRDGNHL138, CRDGNHL139, CRDGNHL140, CRDGNHL124, CRDGNHL143, CRDGNHL144, CRDGNHL145, CRDGNHL154, CRDGNHL155, CRDGNHL162, CRDGNHL163, CRDGNHL168, CRDGNHL172, CRDGNHL173, CRDGNHL175, CRDGNHL176, CRDGNHL178, CRDGNHL179, CRDGNHL180, CRDGNHL181, CRDGNHL182, CRDGNHL184, CRDGNHL189, CRDGNHL190, CRDGNHL191, CRDGNHL193, CRDGNHL194, CRDGNHL196, CRDGNHL195, CRDGNHL198, CRDGNHL199, CRDGNHL200, CRDGNHL201, CRDGNHL202, CRDGNHL203, CRDGNHL204, CRDGNHL205, CRDGNHL206, CRDGNHL207, CRDGNHL208, CRDGNHL209, CRDGNHL210, CRDGNHL211, CRDGNHL212, CRDGNHL213, CRDGNHL214, CRDGNHL215, CRDGNHL216, CRDGNHL217, CRDGNHL228, CRDGNHL241, CRDGNHL252, CRDGNHL245, CRDGNHL244, BRCKNHL147, BRCKNHL204, BRCKNHL316, BRCKNHL400, BRCKNHL494, BRCKNHL520, BRCKNHL600, BRCKNHL847, BRCKNHL225, MNTGMHL225, CRMRTHL40240, CRMRTHL40244, CRMRTHL40246, CRMRTHL40247, CRMRTHL40248, CRMRTHL40250, CRMRTHL40251, CRMRTHL40252, CRMRTHL40253, CRMRTHL40255, CRMRTHL40259, CRMRTHL40260, CRMRTHL40295, CRMRTHL40296, CRMRTHL40297, CRMRTHL40298, CRMRTHL40300, CRMRTHL40301, CRMRTHL40302, CRMRTHL40304, CRMRTHL40305, CRMRTHL40307, CRMRTHL40311, CRMRTHL42395, CRMRTHL42396, CRMRTHL42398, CRMRTHL42400, CRMRTHL42402, CRMRTHL42403, CRMRTHL42404, CRMRTHL42405, CRMRTHL42406, CRMRTHL42409, CRMRTHL42412, CRMRTHL42413, CRMRTHL42414, CRMRTHL42414, CRMRTHL42415, CRMRTHL42416, CRMRTHL42417, CRMRTHL42419, CRMRTHL424120, CRMRTHL42427, CRMRTHL42428, CRMRTHL42429, CRMRTHL42431, CRMRTHL42435, CRMRTHL42436, CRMRTHL42437, CRMRTHL42440, CRMRTHL42443, CRMRTHL42444, CRMRTHL42445, CRMRTHL42457, RDNRHL264, RDNRHL412, RDNRHL426, RDNRHL532, RDNRHL656, RDNRHL874.

- 5.4.59 Scoped out areas include: BRKNHL006, BRKNHL007, BRKNHL125, BRKNHL151, BRKNHL274, BRKNHL300, BRKNHL445, BRKNHL451, BRKNHL467, BRKNHL565, BRKNHL597, BRKNHL640, BRKNHL782, BRKNHL813, BRKNHL868, BRKNHL957, BRKNHL969, CRGNHL014, CRGNHL015, CRGNHL018, CRGNHL020, CRGNHL073, CRGNHL088, CRGNHL089, CRGNHL090, CRGNHL091, CRGNHL092, CRGNHL093, CRGNHL118, CRGNHL135, CRGNHL165, CRGNHL248, CRGNHL253, CRGNHL254, CRGNHL40249, CRGNHL40291, CRGNHL40299, CRGNHL40303, CRGNHL40306, CRGNHL42386, CRGNHL42391, CRGNHL42397, CRGNHL42399, CRGNHL42401, CRGNHL40407, CRGNHL42411,

CRGNHL42418, CRGNHL42475, MNTGMHL361, RDNRL577, RDNRL974 as they have low or moderate overall evaluation.

- 5.4.60 It was noted during an NRW presentation: introduction/refresher on LANDMAP, the Welsh landscape baseline on 29th April 2026, that the Historic Landscape Aspect Layer is due to be updated in May 2026. The updated layer will integrate the Register of Historic Landscapes and historic landscape character areas into LANDMAP, creating a unified resource for historic landscape information. Once the updated data is available, the LANDMAP Historic Landscape figures and Aspect Areas to be considered beyond the Site will be updated.

LANDMAP Visual and Sensory

- 5.4.61 Visual and Sensory Aspect Areas that will be considered further include the following Aspect Areas that have high or outstanding overall evaluations within the 20km study area. Those that do not overlap with the ZTV will be scoped out: BRCKNVS114, BRCKNVS160, BRCKNVS196, BRCKNVS238, BRCKNVS320, BRCKNVS618, BRCKNVS726, BRCKNVS824, BRCKNVS871, BRCKNVS889, BRCKNVS920, BRCKNVS954, BRCKNVS987, BRCKNVS999, CRDGNVS134, CRDGNVS313, CRDGNVS331, CRDGNVS376, CRDGNVS425, CRDGNVS436, CRDGNVS441, CRDGNVS472, CRDGNVS500, CRDGNVS508, CRDGNVS513, CRDGNVS588, CRDGNVS688, CRDGNVS759, CRDGNVS806, CRDGNVS810, CRDGNVS813, CRDGNVS829, CRDGNVS878, CRDGNVS911, CRMRTVS017, CRMRTVS183, CRMRTVS195, CRMRTVS196, CRMRTVS197, CRMRTVS223, CRMRTVS274, CRMRTVS311, CRMRTVS335, CRMRTVS472, CRMRTVS539, CRMRTVS551, CRMRTVS592, CRMRTVS607, CRMRTVS689, CRMRTVS713, CRMRTVS749, CRMRTVS839, CRMRTVS843, CRMRTVS872, CRMRTVS881, CRMRTVS883, CRMRTVS910, CRMRTVS970, MNTGMVS910, RDNRV5100, RDNRV5101, RDNRV5103, RDNRV5104, RDNRV5105, RDNRV5113, RDNRV5139, RDNRV5140, RDNRV5141, RDNRV5167
- 5.4.62 Scoped out Aspect Areas include: BRCKNVS001, BRCKNVS002, BRCKNVS008, BRCKNVS304, BRCKNVS470, BRCKNVS503, BRCKNVS589, BRCKNVS709, BRCKNVS842, BRCKNVS847, CRDGNVS001, CRDGNVS125, CRDGNVS182, CRDGNVS218, CRDGNVS297, CRDGNVS333, CRDGNVS421, CRDGNVS471, CRDGNVS501, CRDGNVS558, CRDGNVS684, CRDGNVS691, CRDGNVS704, CRDGNVS728, CRDGNVS735, CRDGNVS795, CRDGNVS827, CRDGNVS828, CRDGNVS983, CRMRTVS437, CRMRTVS449, CRMRTVS483, CRMRTVS725, MNTGMVS200, MNTGMVS232, MNTGMVS907, RDNRV5147 as they have low or moderate overall evaluation.
- 5.4.63 It was noted during an NRW presentation: introduction/refresher on LANDMAP, the Welsh landscape baseline on 29th April 2026, that the Visual and Sensory Aspect Layer is due to be updated in May 2026. The updated layer will include the reorganisation of management recommendations and the addition of new evidence, such as tranquillity and dark skies data. These updates will not affect the Aspect Areas.

5.4.64 LANDMAP Aspect Areas beyond the Site: Filtering process – Output

- 5.4.65 Following the filtering process of the Historic Landscape and Visual and Sensory Aspect Areas, overlaid with the ZTV plans, new landscape areas for the landscape character assessment will be created. The starting point will be designated landscapes/ historic landscapes, with the remaining parts of the study area, beyond the designated landscapes/ historic landscapes, being defined by amalgamating relevant LANDMAP Historic Landscapes and Visual and Sensory Aspect Areas. The amalgamation will be defined by the Level 3 classifications, where it is anticipated that similar landscape characteristics will be evident.

Visual baseline

Zone of Theoretical Visibility (ZTV)

- 5.4.66 Initial Zone of Theoretical Visibility plans have been generated by computer to identify the geographic extents within which views may be available of the proposed wind farm. Figures 05.06 show the predicted extent of the ZTV for the proposed wind farm, based on the 'worse case scenario'. The ZTVs have been produced for the 27no. turbine scheme, each with a blade tip of 230m and 149m hub height. The viewer's eye-height for each ZTV has been calculated at 2m above ground level.
- 5.4.67 The initial ZTVs are based upon a "bare earth" scenario, i.e. no allowance has been made for the potential screening by minor variations in topography, existing vegetation, buildings within settlements, etc. The ZTVs are based on a digital terrain model generated from 5m grid interval OS Terrain 5 data. Minor undulations in the terrain may not be reflected in the 5m grid interval of the data.
- 5.4.68 The initial ZTV mapping is provided at the following scales:
- 1:340,000 scale to enable an overview of the theoretical visibility of the proposed wind farm to blade tip height within a 45km Study Area, see Figure 05.06-1.
 - 1:165,000 scale to show theoretical visibility to blade tip and hub heights within a 20km Study Area, see Figures 05.06-2 and 05.06-3.
- 5.4.69 The pattern of visibility represented on the ZTVs is a reflection of both the local and the wider area topography, shaped by the defining Tywi, Teifi and Ifron Rivers: theoretical visibility is spread over the upland plateau that contains the Site and extends eastward to further elevated ground on the west-facing flanks of the Tywi valley and Bryn Glas uplands. In the west of the Study Area, visibility is restricted in the lower lying Teifi valley floor, extending over the more elevated east-facing Teifi valley sides and uplands.
- 5.4.70 Following a site visit, screening ZTVs may be prepared, which will consider the screening effects of buildings and woodland.

Viewpoint study

- 5.4.71 A photographic survey will be undertaken to identify the potential extent of the visibility of the Proposed Development by locating viewpoints available to sensitive receptors. To inform the viewpoint selection, a visual study area from the Site was mapped showing the surrounding landscape designations, public access, landscape character, and the predicted ZTV for the proposed wind farm. Potentially sensitive visual receptors within the visual study area include residents, users of public rights of way and areas of open access land, users of the Long Distance footpaths, areas or sites of historic interest, visitor attractions, and road users.
- 5.4.72 Based on the collated data, initial representative viewpoint locations have been selected that relate to the “receptors”, that is, residents and users of the landscape, and locations from which they may have views towards or of the Site.
- 5.4.73 For each of the viewpoints, the precise location will be chosen during the field studies, where local features such as vegetation, buildings or localised topographic variation. From some locations, the ground level of the Site may not be visible. However, due to the height of the proposed wind turbines, which may be taller than surrounding features, viewpoint locations include areas where the Proposed Development may potentially be viewed above existing features.
- 5.4.74 A total of 16 views will be photographed to illustrate the Proposed Development and its appearance from publicly accessible locations. The locations of the initial viewpoints are shown on Figures 05.06-2 and Figure 05.06-3. Table 5.3 below lists the viewpoint, the location details, receptors represented, and the reasons for selection.

Table 5.3 – Viewpoint details

	Location	Distance and direction to the Site (KM)	Receptors and reasons for selection
01	Local road, central to the Site near Nant y Maen phone box	0m, within the central area of the Site	Road users, users of the Cambrian Way LDFP. ● Close distance views from the road junction close to the Site boundaries. ● To assist with sequential view assessments. ● Located adjacent to local landmark Nant y Maen phone box, at edge of Landscape of Outstanding Historic Interest and within Special Landscape Area.

	Location	Distance and direction to the Site (KM)	Receptors and reasons for selection
			The ZTV indicates that 26-27no. wind turbines will be potentially visible.
02	Cambrian Way, inside the Site	0m, within the west of the Site	Users of the Cambrian Way LDFP. - Close distance view from inside the Site, on higher ground. - To assist with sequential view assessments. - Located within a Special Landscape Area. - The ZTV indicates that 26-27no. wind turbines will be potentially visible.
03	Cambrian Way, north of the Site	0m, within the northwest of the Site	Users of the Cambrian Way LDFP - Close-medium distance views towards the Site from the northwest. - Located adjacent to a designated Scheduled Monument, within a Landscape of Outstanding Historic Interest, and within a Special Landscape Area. - To help with sequential view assessments. - The ZTV indicates that 26-27no. wind turbines will be potentially visible.
04	Public Right of Way near Cairn, south of the Site	1.4km southwest of the Site	Users of Public Right of Way. - Medium distance view from higher ground to the south. - Located adjacent to a designated Scheduled Monument and within a Special Landscape Area. - The ZTV indicates that 26-27 wind turbines will be potentially visible.
05	Cambrian Way, south of the site	750m south of the Site	Users of the Cambrian Way LDFP - Medium distance views towards the Site from the south. - Located adjacent to a designated Scheduled Monument, within a Special Landscape Area.

	Location	Distance and direction to the Site (KM)	Receptors and reasons for selection
			- To help with sequential view assessments. - The ZTV indicates that 1-5 wind turbines will be potentially visible.
06	Llyn Brianne viewpoint, southwest of the Site	6km southeast of the Site	Road users, recreational users - Medium-long distance view from the southwest. - Located at a recognised viewpoint, overlooking a reservoir. - The ZTV indicates that 26-27 wind turbines will be potentially visible.
07	Tregaron, northwest of the Site	7km west of the Site	Local residents, road users, users of the National Cycle Network - Medium-long distance view from the west. - Represents a number of receptors, including sensitive local residents - Located at edge of Landscape of Outstanding Historic Interest, Special Landscape Area and Conservation Area. - The ZTV indicates that 1-5 wind turbines will be potentially visible.
08	B4343, NCR, north of Pontrhydfendigaid	6.4km west of the Site	Road users, local residents, users of the National Cycle Network. - Long-distance view from the north - Represents a number of receptors, including residents - Located within a Landscape of Outstanding Historic Interest and at the edge of a Special Landscape Area - The ZTV indicates that 6-10 wind turbines will be potentially visible.
09	Public Right of Way east of Abergwesyn	8.9km southeast of the Site	Users of Public Right of Way - Long-distance view from the east - Located within an area with outstanding LANDMAP Visual and Sensory aspect layer evaluation. - The ZTV indicates that 26-27 wind turbines will be potentially visible.
10	Cambrian Way, Waun Claerddu	9.2km northeast of	Users of the Cambrian Way LDFP

	Location	Distance and direction to the Site (KM)	Receptors and reasons for selection
		the Site	● Long-distance view from elevated ground to the north. ● Located within a Landscape of Outstanding Historic Interest and at the edge of a Special Landscape Area. ● To help with sequential view assessments. ● The ZTV indicates that 26-27 wind turbines will be potentially visible.
11	Public Right of Way, Mynydd Mallaen	9.3km southwest of the Site	Users of Public Right of Way ● Long-distance view from elevated ground to the south. ● Located within a Landscape of Outstanding Historic Interest, a Special Landscape Area, and a Special Area of Conservation. ● Located within an area with outstanding LANDMAP Visual and Sensory aspect layer evaluation. ● The ZTV indicates that 26-27 wind turbines will be potentially visible
12	B4577, Penuwch	15km west of the Site	Residents and road users ● Long-distance view from the west. ● Represents a number of receptors, including residents. ● The ZTV indicates that 26-27 wind turbines will be potentially visible
13	Public Right of Way, Esgair Perfedd	17.2km northeast of the Site	Users of Public Right of Way ● Long-distance view from elevated ground to the northeast ● Located adjacent to a designated Scheduled Monument, within a Landscape of Special Historic Interest ● The ZTV indicates that 26-27 wind turbines will be potentially visible
14	Epynt Way and Heart of Wales Line Trail, Garth viewpoint	20km southeast of the Site	Users of Epynt Way and Heart of Wales Line Trail LDFPs, and road users ● Long-distance view from the southeast. ● Located at a recognised viewpoint.

	Location	Distance and direction to the Site (KM)	Receptors and reasons for selection
			The ZTV indicates that 26-27 wind turbines will be potentially visible
15	Borth to Devil's Bridge to Pontrhydfendigiad Trail near Rheidol Wind Farm	19.2km north of the Site	Users of Borth to Devil's Bridge to Pontrhydfendigiad Trail, road users - Long-distance view from the north. - Located adjacent to a designated Scheduled Monument, within a Landscape of Special Historic Interest - The ZTV indicates that 26-27 wind turbines will be potentially visible
16	Black Mountain Viewpoint, Bannau Brycheiniog National Park	34.6km south of the Site	Road users, recreational users - Long-distance view from the southwest. - Located at a recognised viewpoint within the National Park - The ZTV indicates that 26-27 wind turbines will be potentially visible.

5.5 Embedded mitigation and design assumptions

5.5.1 For the purposes of scoping, the following design assumptions have been made:

- Turbine micro-siting flexibility of up to 50 metres;
- Access tracks are to be designed to follow natural contours where practicable;
- A precautionary approach to peat and ground conditions;
- Layout evolution informed by landscape character and known environmental constraints;
- Commitment to recognised good practice during construction and operation.

5.6 Potential Effects

Table 5.4 - Summary of Likely Significant Effects

Summary of Likely Significant Effects		
Receptor	Potential Effects	Scoped In
Construction Phase		
Landscape receptors within 20km study area	Short-term changes to landscape character resulting from construction activity. The landscape receptors are to be confirmed following the filtering process of LANDMAP Historic Landscape and Visual and Sensory Aspect Layers. The starting point will be to include designated landscapes/ historic	✓

Summary of Likely Significant Effects		
Receptor	Potential Effects	Scoped In
	landscapes with areas beyond these amalgamated for the LVIA assessment.	
Visual receptors within 20km study area	Short-term changes to visual amenity resulting from construction activity.	✓
Nearby residents	The viewpoint locations consider residential receptors. A separate Residential Visual Amenity Assessment (RVAA) is also to be carried out. The scope of the RVAA is to be agreed.	✓
Operational Phase		
Landscape receptors within 20km study area	Long-term but reversible changes to landscape character resulting from the proposed wind farm. The landscape receptors are to be confirmed following the filtering process of LANDMAP Historic Landscape and Visual and Sensory Aspect Layers. The starting point will be to include designated landscapes/ historic landscapes with areas beyond these amalgamated for the LVIA assessment. Potential for cumulative landscape effects.	✓
Visual receptors within 35km study area	Long-term but reversible changes to visual amenity resulting from the proposed wind farm. Potential for cumulative visual effects with other surrounding renewable energy developments.	✓
Nearby residents	The viewpoint locations consider residential receptors. A separate Residential Visual Amenity Assessment (RVAA) is also to be carried out. The scope of the RVAA is to be agreed.	✓
Nighttime aviation	Aviation lighting is expected to be required in the form of nacelle-mounted red lights. Where feasible and agreed with the relevant stakeholders, the Applicant will seek to utilise an Aircraft Detection Lighting System (ADLS) such that aviation lighting is activated only when required. Aviation lighting will be assessed on a clearly defined, realistic worst case basis.	X
Decommissioning Phase		
Landscape receptors within 20km study area	Short-term changes to landscape character resulting from decommissioning activity. The landscape receptors are to be confirmed following the filtering process of LANDMAP Historic Landscape and Visual and Sensory Aspect Layers. The starting point will be to include designated landscapes/ historic landscapes with areas beyond these amalgamated for the LVIA assessment.	✓

Summary of Likely Significant Effects		
Receptor	Potential Effects	Scoped In
Visual receptors within 35km study area	Short-term changes to visual amenity resulting from decommissioning activity.	✓
Nearby residents	The viewpoint locations consider residential receptors. A separate Residential Visual Amenity Assessment (RVAA) is also to be carried out. The scope of the RVAA is to be agreed.	✓

5.7 Scoping Assessment

5.7.1 Further to the above, Table 5.5 below provides details on the matters to be scoped out of further assessment within the LVIA.

Table 5.5 - Matters to be scoped out of the assessment

Matters to be scoped out of the assessment	
Matter	Rationale
Landscape receptors beyond a distance of 20km	The Study Area is proportionate to the scale and nature of the Proposed Development. 20km captures where the Proposed Development may have significant landscape influence.
Visual receptors beyond a distance of 35km	It is suggested that the 45km visual study area could be reduced to 35km. 35km captures the principal Zone of Theoretical Visibility where the Proposed Development may have visual influence.
Nighttime photography	Nighttime photography is excluded as the development lies outside of the Dark Sky Reserve. Nighttime photography is not proposed at scoping stage because the requirement for such material will be kept under review in light of the agreed approach to aviation lighting assessment. Aviation lighting is expected to be required in the form of nacelle-mounted red lights. Where feasible and agreed with the relevant stakeholders, the Applicant will seek to utilise an Aircraft Detection Lighting System (ADLS) such that aviation lighting is activated only when required.

Table 5.6 - Matters to be agreed

Matters to be agreed	
Matter	Rationale
Guidance	The relevant sources of guidance that will be referred to are listed in paragraph 5.2.5, based on current industry best practice.
Photography and visualisations	The methodology for photography and visualisation work is described in paragraphs 5.3.7 – 5.3.12, based on current industry best practice.

Matters to be agreed	
Matter	Rationale
Visualisations	Visualisations will be generated from a model of the proposed turbines only. Visualisations of site features such as access infrastructure, Order Limits treatments, and associated grid connection infrastructure will be excluded.
Policy	National and local planning policy and Supplementary Planning Guidance that will be referred to are listed in paragraphs 5.3.3, based on a search of the local authority planning resources.
Designations	The landscape, heritage, and ecological designations that are relevant to the LVIA are described in paragraphs 5.4.1 – 5.4.54. The Eryri National Park, Llanddewi Brefi conservation area and registered parks and gardens are scoped out for the reasons explained in the relevant paragraphs above. Public rights of way and access are described in paragraphs 5.4.38-5.4.45.
LANDMAP Aspect Areas	The LANDMAP Aspect Areas that will be considered are described in paragraphs 5.4.55 – 5.4.65, based on current industry best practice.
Zone of Theoretical Visibility generation	The methodology for generating the ZTVs and the Figures and scales to be provided is described in paragraphs 5.4.66-5.4.70 above, based on current industry best practice
Viewpoint locations	The proposed viewpoint locations for assessment and reasons for selection are listed in Table 5.3, based on baseline data gathering and analysis.
Assessment methodology	The methodology, including the criteria to be used in the assessment, is included in Section 5.8, based on current industry best practice.
Cumulative Landscape and Visual Impact Assessment	Cumulative wind farms included in the assessment will include operational developments, consented developments and proposed developments with submitted planning applications. Potential developments at earlier stages are scoped out. Cumulative developments beyond 45km will be scoped out. Smaller wind turbine developments with a lower blade tip height will be scoped out. Cumulative developments will be scoped out where ZTVs demonstrate limited or no potential intervisibility with any part of the Proposed Development. The cumulative assessment will consider additive, sequential and temporal cumulative landscape and visual effects. Cumulative developments will be illustrated on

Matters to be agreed	
Matter	Rationale
	wireline visualisations using the known 'worst-case' project parameters.
Residential Visual Amenity Assessment	The methodology to be used will be in accordance with GLVIA3 principles and based on the Landscape Institute's Technical Guidance Note (TGN), Residential Visual Amenity Assessment (RVAA), 15 March 2019. The scope of the RVAA is to be agreed with the Council.

5.8 Proposed Assessment Methodology

- 5.8.1 The methodology used in this assessment has been based upon the recommendations in Guidelines for Landscape and Visual Impact Assessment 3rd Edition published by The Landscape Institute and the Institute of Environmental Management & Assessment in April 2013 (GLVIA3).
- 5.8.2 The assessment process will comprise a combination of desk studies and field surveys, with subsequent analysis, and involve:
- A survey of the Site and inspection of views of the study area from publicly accessible viewpoints, including a photographic survey
 - A review of landscape designations and planning policies for the landscape, and of other landscape studies relevant to the area, including published characterisations.
 - Evaluation of the features and elements of the landscape and their contribution to the landscape character, context and setting, based on these studies.
 - Assessment of the sensitivity of the landscape and visual amenity, and the ability to accommodate the changes likely to arise from the wind energy development.
 - Identification of the extent of theoretic visibility of the wind energy development and potentially sensitive views or view locations, and a viewpoint analysis
 - Consideration of potential landscape and visual effects of the proposed wind turbine development; design of mitigation and enhancement measures to avoid, reduce or remedy significant adverse effects
 - Assessment of magnitude and potential significance of effects on the landscape or on views, with the mitigation proposals in place.
 - A cumulative landscape and visual assessment considering the proposed development in conjunction with other renewable energy developments in the defined cumulative study area.

5.8.3 Wind farm developments have particular characteristics which are potential sources of impact on landscape character and on visual amenity:

Table 5.7 – Potential sources of impact on landscape character and visual amenity:

Characteristics of wind farm developments	
Character	Indicative criteria
Location	To make the best of the wind resource over land, wind farms are frequently sited in exposed, elevated places, which are often also scenic landscapes and exposed to view over a wide area.
Movement	Unlike, for example, pylons which are static and comparatively unnoticed in their landscape setting, the movement of the turbine blades attracts attention.
Sound	When approaching the wind farm, the combined sound of the revolving blades produces a background sound effect similar to "white noise". Closer to, the rhythmical sounds of the individual turbines are distinguishable and, as with movement, attract attention.
Shadow	Passing near the turbines, the shadow of the revolving blades cast on the ground adds to the awareness of movement, which becomes more pronounced as one passes through the shadow cast.
Colour	The effect of white/pale colour of turbines catching the sunshine when viewed from the south is to increase their visual prominence.
Silhouette	When viewed against the sky in different light conditions, the silhouette effect may increase visual prominence.
Ground disturbance	The concrete bases and materials for the structures, the access track and cable trench must be brought to the site in heavy vehicles. It is generally accepted that removal of bases and tracks on decommissioning would cause a greater adverse environmental impact than leaving them in situ.
Construction plant	Specialist long loader lorries, cranes and rigs are required to bring the very large components to the site and install the turbine towers, nacelles and blades. The booms of cranes and rigs would rise to greater heights than the turbines themselves.
Activity for maintenance and repair	Personnel, with vehicles and equipment, will visit the wind farm at regular intervals to conduct maintenance operations. In case of breakdown, large plant may be needed to transport and install large components.
Distance	In near views, turbines may appear as distinct individuals, at moderate distances, as a group of individual elements, while at greater distances, as a composition, identifiable as a wind farm.
Importance in the view	The potential prominence of the wind farm is considered, and their likely dominance in the view.
Duration	The wind farm would be in place and operational for 35 years. Effects during the operational period are considered long-term, but temporary. The construction period would be in the order of 24 months'

Characteristics of wind farm developments	
Character	Indicative criteria
	duration and the decommissioning period in the order of 24 months, and the effects during these periods are considered short term.

Landscape Effects Assessment

Establishing the landscape baseline

- 5.8.4 Baseline studies for assessing the landscape effects included a mix of desk study and field work to identify and record the character of the landscape and the elements, features and aesthetic and perceptual factors which contribute to it.
- The elements that make up the landscape in the study area were recorded, including:
 - physical influences - geology, soils, landform, drainage and water bodies;
 - land cover, including different types of vegetation and patterns and types of tree cover;
 - the influence of human activity, such as, land use and management, the character of settlements and buildings, the pattern and type of fields and enclosure; and
 - the aesthetic and perceptual aspects of the landscape, e.g.: its scale, complexity, openness, tranquillity, wildness.
- 5.8.5 The overall character of the landscape in the study area will be considered, including the particular combinations of elements and aesthetic and perceptual aspects that make each distinctive, usually by identification as key characteristics of the landscape. Evidence about change in the landscape will be considered, including the condition of the different landscape types and/or areas, and their constituent parts and evidence of current pressures causing change in the landscape.

Landscape value

- 5.8.6 The European Landscape Convention promotes taking account of all landscapes, including ordinary or undesignated landscapes. The relative value attached to the landscape will be considered at the baseline stage to inform the judgments about the effects likely to occur, whether to areas of landscape as a whole or to individual elements, features and aesthetic or perceptual dimensions, at the community, local, national or international levels. (Council of Europe, 2000)
- 5.8.7 Landscape designation is a starting point in understanding landscape value, but value may also be attached to undesignated landscapes. Special Qualities, reasons for designation, relevant policies in management plans or designation-specific policies in development plans, will be consulted in assessing the relative value of the landscape within designated areas.

- 5.8.8 Areas of landscape whose character is judged to be intact and in good condition, and where scenic quality, wildness or tranquillity, and natural or cultural heritage features make a particular contribution to the landscape, or where there are important associations, are likely to be highly valued. For "ordinary, everyday landscapes", the judgement will be based upon the degree to which they are representative of typical character, the intactness of the landscape and the condition of its elements, scenic quality, sense of place, aesthetic and perceptual qualities.
- 5.8.9 When determining the landscape value, the following elements will be considered, in addition to consideration of values associated with designations:
- The importance of the landscape, or the perceived value of the landscape to users or consultees, as indicated by, for example, international, national or local designations;
 - The importance of elements or components of the landscape in the landscape character of the area or in their contribution to the landscape setting of other areas;
 - Intrinsic aesthetic characteristics, scenic quality or sense of place, including providing landscape setting to other places;
 - Cultural associations in the arts or in guides to the area, or popular use of the area for recreation, where experience of the landscape is important;
 - The presence and scale of detractors in the landscape and the degree to which they are susceptible to improvement or upgrading; and
 - Conservation interests: The presence of features of wildlife, earth science or archaeological or historical and cultural interest can add to the value of the landscape as well as having value in their own right.
- 5.8.10 The following table indicates the criteria used to determine the Landscape value:

Table 5.8 – Criteria to determine landscape value

Landscape value	
Value	Indicative criteria
High Value	Landscapes subject to international or national designations, and non-designated landscapes where the following considerations apply: Areas of landscape whose character is judged to be intact and in good condition; Scenic quality, wildness or tranquillity, and/or natural or cultural heritage features make a particular contribution to the landscape; There are important cultural and artistic associations; They are representative of typical character of the area or have a character or elements that are valued for their rarity; Particular components may be identified as important

Landscape value	
Value	Indicative criteria
	contributors to the landscape character; The landscape is valued for recreational activities where experience of the landscape is important.
Medium Value	Landscapes subject to local designations, and non-designated landscapes where the following considerations apply: Areas of landscape whose character is judged to be intact with few detractors; Scenic quality, wildness or tranquillity, and/or natural or cultural heritage features make a contribution to the landscape; There are cultural and artistic associations; They are representative of typical character of the area or have a character or elements that are identified for their rarity; Particular components may be identified as contributors to the landscape character; The landscape is a setting for recreational activities where experience of the landscape forms part of the experience.
Low Value	Areas of non-designated landscapes whose character is in poor condition; Scenic quality, wildness or tranquillity, and/or natural or cultural heritage features are not key characteristics of the landscape; Cultural and artistic associations are absent; They are not representative of typical character of the area, but are also not valued for rarity; Particular components may be identified as contributors to the landscape character; There is little scope for recreational activities where experience of the landscape is important.

5.8.11 The landscape baseline report aims to:

- describe, map and illustrate the character of the landscape of both the wider study area and the Site and its immediate surroundings;
- identify and describe the individual elements and aesthetic and perceptual aspects of the landscape, particularly those that are key characteristics contributing to its distinctive character;
- indicate the condition of the landscape, including the condition of landscape elements or features;
- project forward drivers and trends in change and how they may affect the landscape over time, in the absence of the proposal; and
- evaluate the landscape and, where appropriate, its components, aesthetic and perceptual aspects, particularly the key characteristics.

Assessing the Landscape Effects

- 5.8.12 The baseline information about the landscape will be combined with understanding of the details of the proposal to identify and describe the landscape effects. The landscape receptors will be identified, that is, the components or aspects of the landscape likely to be affected, such as, overall character or key characteristics, individual elements or features, or specific aesthetic or perceptual aspects.
- 5.8.13 Interactions between the landscape receptors and the components or characteristics of the development at its different stages will be considered: construction and operation, and the different types of effect: direct and indirect, secondary, cumulative, short, medium and long- term, permanent and temporary, adverse and beneficial.
- 5.8.14 Landscape effects considered include:
- change in and/or partial or complete loss of elements, features or aesthetic or perceptual aspects that contribute to the character and distinctiveness of the landscape;
 - addition of new elements or features that will influence the character and distinctiveness of the landscape; and
 - combined effects of these changes on overall character.
- 5.8.15 The landscape effects will be categorised as adverse, beneficial, or negligible in their consequences for the landscape, judged from the degree to which the proposal fits with existing character and the contribution the development makes to the landscape in its own right, even if in contrast to existing character.
- 5.8.16 The assessment of the landscape effects will be based on assessment of the sensitivity of the landscape receptors and the magnitude of the change in the landscape arising from the proposal.

Sensitivity of the landscape receptors

- 5.8.17 The sensitivity of landscape receptors combines judgments of their susceptibility to the type of change arising from the development proposal and the value attached to the landscape.
- 5.8.18 Susceptibility to change means the ability of the landscape receptor to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.
- 5.8.19 The value attached to the landscape receptors will be established in the baseline study.
- 5.8.20 The sensitivity of landscape receptors to change is categorised as high, moderate or lesser, in accordance with the criteria set out below to determine the susceptibility and value of the landscape receptor.

5.8.21 When determining the landscape susceptibility, the following elements will be considered:

- The ability of the landscape receptor to accommodate the proposed development without undue consequences for the maintenance of the landscape character and/or the achievement of landscape planning policies and strategies;
- The degree to which the changes arising from the development would alter the overall character, quality/condition of a particular landscape type or area;
- The degree to which the changes arising from the development would alter individual elements or features or aesthetic and perceptual aspects important to the landscape character; and
- Existing landscape studies may identify the sensitivity of the landscape type or area or its characteristics to the general type of development that is proposed.

5.8.22 The following table indicates the criteria used to determine the landscape susceptibility:

Table 5.9 – Criteria to determine landscape susceptibility

Landscape susceptibility	
Category	Indicative criteria
High Susceptibility	The changes arising from the type of development would alter the overall character, quality/condition of a particular landscape type or area. The changes arising from the type of development would alter or remove individual elements or features or aesthetic and perceptual aspects important to, or add new elements incongruous to, the landscape character. The type of development would compromise the achievement of landscape planning policies and strategies for the landscape. The changes arising from the type of development would alter or remove elements or features or aesthetic and perceptual aspects important to the landscape character or add new elements that would reinforce the key characteristics of the landscape character.
Low Susceptibility	The changes arising from the type of development would not alter the overall character, quality/condition of a particular landscape type or area. The type of development would not compromise the achievement of landscape planning policies and strategies for the landscape. The changes arising from the type of development would not alter or remove individual elements or features or aesthetic and perceptual aspects important to, or add new elements incongruous to, the landscape character.

5.8.23 Where the susceptibility identified falls between high and low, an intermediate level of susceptibility is assigned, e.g., "moderate". The basis for the scale of susceptibility assigned to the landscape receptor is linked back to evidence from the baseline study.

5.8.24 The following table illustrates indicative criteria for assessing landscape sensitivity:

Table 5.10 – Criteria for assessing landscape sensitivity

Landscape sensitivity	
Category	Indicative criteria
High sensitivity	A highly valued landscape e.g., of national or international importance, whose character or key characteristics are very susceptible to change; Aspects of the landscape character are highly valued as “key characteristics” and, often identified as susceptible to change in national or local character assessments; The landscape character is highly valued as intact and in good condition and particularly vulnerable to disturbance; A highly valued landscape with no or limited potential for substitution or replacement.
Moderate sensitivity	A landscape of local importance or value, whose character or key characteristics are susceptible to change; Other characteristics of the landscape character also valued in national or local character assessments and susceptible to change; The landscape character is valued for moderate condition and not particularly vulnerable to disturbance; A moderately valued landscape with some potential for substitution or replacement.
Lesser sensitivity	No or little evidence of value or importance attached to the landscape area, its features or characteristics; Few features, characteristics or qualities susceptible to disturbance or particularly susceptible to improvement or upgrading. Good potential for substitution or replacement.

Magnitude of Landscape Change

- 5.8.25 Effects on landscape receptors are assessed in terms of size or scale, the geographical extent of the area influenced, and its duration and reversibility.

Table 5.11 – Considerations for assessing magnitude of landscape change

Considerations for magnitude of landscape change	
Consideration	Indicative criteria
Size or scale of change	Categorised on a scale of major, moderate, minor or none, based upon: The degree of the loss or addition of features in the view; The extent of changes in the composition of the view, including the proportion of the view occupied by the proposed development; The degree of contrast or integration of the changes with the existing or remaining landscape elements and characteristics; The nature of the view of the proposed development, whether full, partial or glimpsed, or the relative amount of time over which it will be experienced.
Geographical area over	The geographic extent reflects: The extent of the area over which the changes would be

Considerations for magnitude of landscape change	
Consideration	Indicative criteria
which the landscape would be changed	visible; The angle of view in relation to the main activity of the receptor; The distance of the viewpoint from the proposed development.
The duration of the changes	The durations of changes due to the development are categorised as: Short term: zero to three years; Medium term: three to twenty years; Long term: twenty to forty years; Permanent: more than forty.
Reversibility	The prospect and the practicality of the effect being reversed

5.8.26 Indicative criteria used to determine the magnitude of change is as follows:

Table 5.12 – Criteria for assessing magnitude of landscape change

Assessing magnitude of landscape change	
Magnitude of change	Landscape change
Great change	Major size or scale of change, affecting the landscape type or character of the area within which the proposal lies or extending over the wider area; likely to be longer term or permanently, with low prospect of reversibility
Medium change	Intermediate size or scale of change, affecting part of the landscape type or character of the area within which the proposal lies, or larger scale of change at the level of the site or immediate context; likely to continue into the medium term, with good prospect of reversibility
Small change	A minor proportion of the extent of the character type or area is affected or smaller scale of change over a larger extent; the changes occur at the level of the Site or immediate context and might be short term with good prospect of reversibility.
Negligible	No apparent change to landscape characteristics

5.8.27 While GLVIA3 includes the duration of the change in the consideration of the magnitude of change, in some cases a major size or scale of change of shorter duration may be considered a "great change".

Significance of landscape effects

5.8.28 Final conclusions about the degree of effect, whether adverse or beneficial, relate the separate judgements about sensitivity of the receptors and magnitude of the changes combined, based upon the following indicative considerations and criteria:

Table 5.13 – Criteria for assessing landscape effects

Assessing landscape effects	
Landscape effect	Indicative criteria

Major	Highly sensitive landscape completely degraded or greatly changed, with little or no scope for mitigation; Great improvement, sufficient to upgrade overall landscape character. Irreversible adverse or beneficial effects, over an extensive area, on elements and/or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes.
Moderate	Medium change to moderately sensitive landscape or its character; lesser change to higher sensitivity landscape or greater change to less sensitive landscape.
Minor	Small or limited adverse change to the existing landscape or its character; greater change to less sensitive landscape; Considerable scope for mitigation; Small improvement to the existing landscape. Reversible adverse or beneficial effects of short duration, over a restricted area, on elements and/or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of landscapes of community value.
Negligible	No perceptible change to the existing landscape or its character; The change is difficult to discern.

- 5.8.29 Intermediate conditions may be described, such as Moderate-Major, where the criteria for Moderate may be exceeded but not qualify as Major. Where there is no magnitude of change the effect would correspondingly be Negligible
- 5.8.30 Effects may be adverse or beneficial. In some instances, the effect may be offset by other considerations, for example, through the mitigation or landscape proposals, and the resulting effect may be neither beneficial nor adverse.
- 5.8.31 The criteria for significance of landscape effects are based upon the following considerations:
- Major loss or irreversible negative effects, over an extensive area, on elements and/or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes are likely to be of the greatest significance.
 - Reversible negative effects of short duration, over a restricted area, on elements and/or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of landscapes of community value, are likely to be of least significance and may be judged not significant.
 - Where assessments of significance place landscape effects between these extremes, judgments are made about whether they are significant.
 - Where landscape effects are judged to be significant and adverse, proposals for preventing/avoiding, reducing or offsetting or compensating for them are set out (referred to as mitigation).

- 5.8.32 The significant landscape effects remaining after mitigation are summarised as the final step in the process.

Visual Effects Assessment

Establishing the visual baseline

- 5.8.33 Baseline studies for visual effects establish:
- the area in which the development may be visible;
 - the different groups of people who may experience views of the development;
 - the location where they will be affected;
 - the nature of the views at those points; and
 - the different groups of people who may be affected by the changes in views or visual amenity.
- 5.8.34 The potential areas where the Site and development proposal are likely to be visible will be mapped. Landscape components affecting visibility, like buildings, walls, fences, trees, hedgerows, woodland and banks, will be identified through field surveys and mapped where relevant.
- 5.8.35 The people within the area who may be affected by the changes in views and visual amenity - the visual receptors - are identified, for example:
- people living in the area;
 - people passing through on roads and the local lanes;
 - people visiting promoted landscapes or attractions; and
 - people engaged in recreation of different types, including users of public rights of way, bridleways and access land.
- 5.8.36 Where relevant, views that form part of the experience and enjoyment of the landscape are noted, for example, from promoted paths, tourist or scenic routes and associated viewpoints.
- 5.8.37 The proposed viewpoints selected are discussed with the local authority, and informed by the visual appraisal, field surveys, and by desk-based research on various issues, for example, access and recreation, valued landscapes, tourist attractions and destinations, popular vantage points, and relative distribution of population. Viewpoints were selected to represent the experience of different types of visual receptors.
- 5.8.38 The details of viewpoint locations were mapped and catalogued, sufficient to allow someone else to return to the location and record the same view. Photography will be carried out in accordance with the Landscape Institute; Advice Note 06/19 Visual Representation of Development Proposals (2019) (Landscape Institute, 2019).

5.8.39 The baseline report aims to describe, map and illustrate:

- the type of people (visual receptors) likely to be affected, making clear the activities they are likely to be involved in when enjoying the view;
- details of the viewpoints and of the visual receptors likely to be affected at each;
- the nature, composition and characteristics of the existing view, noting any particular horizontal or vertical emphasis, and any key foci; existing views have been illustrated in annotated photographs identifying important components of the view.
- elements, such as landform, buildings or vegetation, which may interrupt, filter or otherwise influence the views;
- whether or how the view may be affected by seasonal or weather variation.

Assessing the Visual Effects

Predicting and describing visual effects

5.8.40 The baseline information about the visual receptors will be combined with understanding of the details of the proposal **to identify and describe the visual effects, considering:**

- changes in views and visual amenity arising from elements of the development;
- the distance of the viewpoint from the development and whether the viewer would focus on the development due to its scale and proximity or whether the development would be only a small or minor element in a panoramic view;
- whether the view is stationary or transient or one of a sequence of views;
- the nature of the changes: changes in the skyline, creation of a new visual focus in the view, introduction of new elements, changes in visual simplicity or complexity, alteration of visual scale or the degree of visual enclosure; and
- seasonal differences in effects, arising from the varying degree of screening and/or filtering of views by vegetation in summer and winter.

5.8.41 Categorising the visual effects as adverse or beneficial (or neutral) in their consequences for views and visual amenity will be based on judgments about whether the changes affect the quality of the visual experience, and the nature of the existing views and the nature of the changes to the views.

5.8.42 The visual effects will be assessed, based on assessment of the nature of the visual receptors and their sensitivity, and the nature of the effect on views and visual amenity, that is, the magnitude of visual change.

Sensitivity of the visual receptors

- 5.8.43 The people or groups of people likely to be affected at a specific viewpoint - the visual receptors - are assessed in terms of their susceptibility to change in views and visual amenity and the value attached to particular view locations and views.
- 5.8.44 The susceptibility of visual receptors to changes in views and visual amenity is a function of the occupation or activity of people experiencing the view at particular locations and the extent to which their attention or interest is focused on the views or the visual amenity they experience at particular locations. The context of the location also contributes to susceptibility, for example, people viewing from residential properties or from a valued landscape are likely to be more susceptible to change than people viewing from an industrial context.
- 5.8.45 The following table illustrates indicative criteria used to determine visual receptor susceptibility:

Table 5.14 – Criteria to determine visual susceptibility

Visual susceptibility	
Category	Indicative criteria
High Susceptibility	Residents at home. People engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focused on the landscape and on particular views. Visitors to designated landscapes, heritage assets, or other attractions, where views of the surroundings are an important contributor to the experience. Communities where views contribute to the landscape setting enjoyed by residents in the area.
Low Susceptibility	People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape. People at their place of work whose attention may be focused on their work or activity not on their surroundings and where the setting is not important to the quality of working life. Travellers on road, rail or other transport routes, except along recognised scenic routes, where awareness of views is likely to be high.

- 5.8.46 Where the susceptibility identified falls between high and low, an intermediate level of susceptibility is assigned, e.g., "medium". The basis for the scale of susceptibility assigned to the visual receptor is linked back to evidence from the baseline study.
- 5.8.47 Judgments will be made about the value attached to the views identified, taking account of recognition, for example, in relation to heritage assets, or through planning designations, appearance in guidebooks or on tourist maps, promotion of particular locations or provision of facilities provided for their enjoyment, such as parking places, sign boards and interpretive material, or references to them in literature or art.

5.8.48 The sensitivity of visual receptors to change is categorised as high, moderate or lesser, in accordance with the criteria set out below.

Table 5.15 – Criteria for assessing visual sensitivity

Visual sensitivity	
Category	Indicative criteria
High sensitivity	A highly valued landscape e.g., of national or international importance, whose character or key characteristics are very susceptible to change; Aspects of the landscape character are highly valued as "key characteristics" and, often identified as susceptible to change in national or local character assessments; The landscape character is highly valued as intact and in good condition and particularly vulnerable to disturbance; A highly valued landscape with no or limited potential for substitution or replacement.
Moderate sensitivity	A landscape of local importance or value, whose character or key characteristics are susceptible to change; Other characteristics of the landscape character also valued in national or local character assessments and susceptible to change; The landscape character is valued for moderate condition and not particularly vulnerable to disturbance; A moderately valued landscape with some potential for substitution or replacement.
Lesser sensitivity	No or little evidence of value or importance attached to the landscape area, its features or characteristics; Few features, characteristics or qualities susceptible to disturbance or particularly susceptible to improvement or upgrading Good potential for substitution or replacement

Magnitude of visual change

5.8.49 The visual effects identified are evaluated in terms of size or scale, the geographical extent of the area influenced, duration and reversibility.

Table 5.16 – Considerations for assessing magnitude of visual change

Considerations for magnitude of visual change	
Consideration	Indicative criteria
Size or scale of change	Categorised on a scale of major, moderate, minor or none, based upon: The degree of the loss or addition of features in the view; The extent of changes in the composition of the view, including the proportion of the view occupied by the proposed development; The degree of contrast or integration of the changes with the existing or remaining landscape elements and characteristics; The nature of the view of the proposed development, whether full, partial or glimpsed, or the relative amount of

	time over which it will be experienced.
Geographical area over which the changes would be experienced:	The geographic extent reflects: The extent of the area over which the changes would be visible; The angle of view in relation to the main activity of the receptor; The distance of the viewpoint from the proposed development.
The duration of the changes	Categorised as: Short term: zero to three years; Medium term: three to twenty years; Long term: twenty to forty years Permanent: more than forty.
Reversibility	The prospect and the practicality of the effect being reversed

5.8.50 Indicative criteria used to determine the magnitude of change is as follows:

Table 5.17 – Criteria for assessing magnitude of visual change

Assessing magnitude of visual change	
Magnitude of change	Indicative criteria
Great change	Major size or scale of change, affecting a large proportion of the angle of the view, or affecting views from a wide area; continuing into the longer term or permanently, with low prospect of reversibility.
Medium change	Intermediate size or scale of change, affecting part of the angle of the view, or affecting some views from the wider area, or larger scale of change in views from within the immediate context of the Site; continuing into the medium term, with good prospect of reversibility.
Small change	A minor proportion of the angle of view is affected or the contribution of the changed elements or characteristics to the composition of the view is not important; the changes are viewed from longer distances; and might be short term with good prospect of reversibility.
Negligible	Barely perceptible change or the change is difficult to discern; No change in the view or the changes due to the development are screened from view.

Significance of visual effects

5.8.51 Final conclusions about the degree of visual effects, whether adverse or beneficial, relate the separate judgements about sensitivity of the receptors and magnitude of the changes combined, based upon the following indicative considerations and criteria:

Table 5.18 – Criteria for assessing visual effects

Assessing visual effects	
Visual effect	Indicative criteria
Major	Great change or visual intrusion experienced by highly sensitive viewers or from highly sensitive public viewpoints;

Assessing visual effects	
Visual effect	Indicative criteria
	The proposal would cause a great deterioration in the existing view available to highly sensitive viewers; Great improvement in the view, sufficient to upgrade overall visual amenity. Large scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view, especially where affecting people who are particularly sensitive to changes in views and visual amenity or people at recognised and important viewpoints or from recognised scenic routes.
Moderate	Medium change or visual intrusion experienced by moderately sensitive viewers; Smaller change to higher sensitivity viewers or greater change to less sensitive viewers.
Minor	Small or localised visual intrusion in the existing view, especially for less sensitive viewers. Small or localised reduction in visual intrusion, or improvement in the view. Reversible short-term changes, in views available to people for whom the view of the landscape is not the principle focus of interest.
Negligible	Negligible change in the view or the change is difficult to discern even for a highly sensitive viewer.

5.8.52 In addition to these criteria, in some instances the effect may be discernible or greater, but offset by other considerations, for example, through the mitigation or landscape proposals for the development, and the resulting effect is neither beneficial nor adverse.

5.8.53 The following factors inform the judgment about the significance of visual effects:

- Major effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant.
- Major effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant.
- Large scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view.
- As for landscape effects, where visual effects are judged to be significant and adverse, proposals for preventing/avoiding, reducing or offsetting or compensating for them are set out (referred to as mitigation).

5.8.54 The significant visual effects remaining after mitigation are summarised as the final step in the process.

Methodology for the Cumulative Assessment

- 5.8.55 The cumulative assessment considers the potential effects upon landscape character and potential effects upon visual amenity that may arise as an indirect consequence of the Proposed Development.

Types of cumulative effects

- 5.8.56 Cumulative landscape and visual effects result from additional changes to landscape and visual amenity caused by the proposed development in conjunction or in combination with other renewable energy developments. The types of cumulative effects assessed are:
- Additive effects: landscape and/or visual effects combined with or in addition to the effects of the other renewable energy developments;
 - Sequential effects: experience of first one effect, and later another at different places as one moves through the landscape;
 - Temporal effects: effects accumulating over a period of time on the landscape or visual amenity, from this proposal and the other wind farms that are either operational, under construction, or have planning approval.
- 5.8.57 Cumulative landscape and visual effects that may introduce new types of change and/or increase or extend effects of the Proposed Development are identified and whether the Proposed Development adds to or combines with the other renewable energy developments to create a significant cumulative effect.

Assessing the Cumulative Landscape Effects

- 5.8.58 The assessment considers cumulative effects on the fabric of the landscape and its individual elements or features; on the aesthetic, perceptual or experiential aspects of the landscape, such as scale, sense of enclosure, diversity, pattern, colour, sense of naturalness, remoteness or tranquillity, and on the overall character of the landscape, especially modification to key characteristics and possible creation of new landscape character.
- 5.8.59 Final conclusions about the degree of the cumulative effect on the landscape of the Proposed Development with the other renewable energy developments considered are based upon the following considerations:

Table 5.19 – Criteria for assessing cumulative landscape effects

Assessing cumulative landscape effects	
Cumulative landscape effect	Indicative criteria
Major	Large irreversible effects, over an extensive area, on elements and/or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes.

Assessing cumulative landscape effects	
Cumulative landscape effect	Indicative criteria
	Cumulatively, renewable energy developments are a key characteristic of the landscape, defining a new landscape character type or area.
Moderate	Cumulatively, renewable energy developments are becoming a characteristic of the landscape, but not of sufficient dominance to be a defining characteristic of the area.
Minor	Cumulatively, renewable energy developments are not an important or key characteristic of the landscape and have little effect on the values and experiences associated with the landscape e.g., wildness, sense of history; Reversible effects of short duration, over a restricted area, on elements and/or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of the landscape.
Negligible	Renewable energy developments have little effect on the landscape character cumulatively.

Assessing the Cumulative Visual Effects

- 5.8.60 Cumulative visual effects, resulting from changes in the content and character of the views due to introduction of new elements or removal of or damage to existing ones, are identified and the nature of views available and the contribution of the Proposed Development being assessed to cumulative visual effects. Additive effects may occur either when developments are seen together in one angle of view or where they are seen when looking in different directions from one location. The effects on viewers as they follow linear routes and move through the landscape are considered as sequential effects.
- 5.8.61 Final conclusions about the degree of the cumulative effect on the visual amenity of this proposed project with the other renewable energy developments considered are based upon the following considerations:

Table 5.20 – Criteria for assessing cumulative visual effects

Assessing cumulative visual effects	
Cumulative visual effect	Indicative criteria
Major	Cumulatively, renewable energy developments dominate the view, seeming to define a new visual aesthetic; Large-scale effects arising from new, non-characteristic or discordant or intrusive elements into the view of highly sensitive receptors, or at recognised and important viewpoints, or from recognised scenic routes.
Moderate	Cumulatively, renewable energy developments are seen as a characteristic of the landscape in the view, but not of

Assessing cumulative visual effects	
Cumulative visual effect	Indicative criteria
	sufficient dominance to be a defining characteristic of the visual amenity.
Minor	Cumulatively, the renewable energy developments are separate, isolated elements of the landscape in the view, too infrequent and of insufficient importance to be perceived as a characteristic of the area; Cumulatively, the effects on visual amenity are reversible, of short duration, or occur over a restricted area.
Negligible	The renewable energy developments have little effect on the visual amenity cumulatively.

Judging the overall significance of cumulative landscape and visual effects

- 5.8.62 Major effects are likely to be considered "significant", especially if adverse and long term or not reversible, and Minor or Negligible effects "not significant". The significance of intermediate effects is determined on a case-by-case basis and, even if the effects are not considered significant, they may be important considerations in decision making about the Proposed Development.
- 5.8.63 Effects may be adverse or beneficial. In some instances, the effect may be offset by other considerations, for example, through the mitigation proposals, and the resulting effect is neither beneficial nor adverse.

5.9 Summary of Scoping Position

- 5.9.1 The Landscape and Visual Impact Assessment (LVIA) will assess the landscape, visual and cumulative effects and significance of the Proposed Development. The methodology to be used will be in accordance with current best practice and guidance, including GLVIA3 (Landscape Institute, 2024), Landscape Institute Technical Guidance Notes, NRW LANDMAP guidance (Natural Resources Wales, 2021), and NatureScot visualisation standards (NatureScot, 2017).
- 5.9.2 This Landscape and Visual Impact Assessment (LVIA) Scoping request is being made to the Welsh Ministers in respect of an Infrastructure Consent Order under the Significant Infrastructure Projects (SIP) regime (Senedd Cymru, 2024). The LVIA is intended to form a topic chapter of the Environmental Impact Assessment (EIA) accompanying the Infrastructure Consent application.
- 5.9.3 The LVIA will use Study Areas proportionate to the scale of the Proposed Development and will combine desk-based review, field surveys, viewpoint photography, ZTV mapping, viewpoint analysis, and cumulative assessments. The photography and visualisations will be prepared in accordance with industry guidance, using standardised equipment and modelled wirelines and photomontages to illustrate the likely views of the Proposed Development.

5.9.4 The desktop baseline identifies the Site as being within a regionally and locally valued upland landscape, for the following reasons:

- The Site lies within the Ceredigion Southern Uplands Special Landscape Area.
- The Cambrian Way LDFP crosses the western part of the Site with other LDFPs located within the Study Area.
- The northern part of the Site lies within the Upland Ceredigion Landscape of Outstanding Historic Interest.
- The Cambrian Mountains (south) LANDMAP Visual and Sensory area covers the Site and has a High overall evaluation.
- The Site is covered by LANDMAP overall evaluations of Outstanding for Landscape Habitat and Historic Landscape layers. A SSSI is also located adjacent to the eastern boundary of the Site.
- Scheduled Monuments are located within and close to the Site.
- Bannau Brycheiniog National Park is located circa 19 km from the Site.

5.9.5 The initial ZTV work assumes turbines up to 230m blade tip height for the maximum number of turbines of up to 27no. The initial ZTVs illustrate that the potential visibility is shaped by the upland plateau and surrounding valleys. 16 initial viewpoints are identified, representing residents, users of LDFPs, and visitors to the surrounding landscape.

5.9.6 The LVIA will assess the landscape, visual and cumulative effects and significance during the construction, operational, and decommissioning phases of the Proposed Development. Residential Visual Amenity Assessment (RVAA) and nighttime assessments may also be undertaken.

5.10 References

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