Chapter 4: Landscape and Visual Impact Assessment

Glyn Taff Solar Farm – Environmental Statement

04/03/2024

Disclaimer

Neo Environmental Limited shall have no liability for any loss, damage, injury, claim, expense, cost or other consequence arising as a result of use or reliance upon any information contained in or omitted from this document.

Neo Environmental Ltd	
Head Office - Glasgow: Wright Business Centre, 1 Lonmay Road, Glasgow. G33 4EL **T:** 0141 773 6262 **E:** info@neo-environmental.co.uk	
Warrington Office: Cinnamon House, Crab Lane, Warrington, WA2 0XP. **T:** 01925 661 716 **E:** info@neo-environmental.co.uk	**Rugby Office:** Valiant Suites, Lumonics House, Valley Drive, Swift Valley, Rugby, Warwickshire, CV21 1TQ. **T:** 01788 297012 **E:** info@neo-environmental.co.uk
Ireland Office: C/O Origin Enterprises PLC, 4-6 Riverwalk, Citywest Business Campus Dublin 24, D24 DCW0, **T:** 00 353 (1) 5634900 **E:** info@neo-environmental.ie	**Northern Ireland Office:** 83-85 Bridge Street Ballymena, Co. Antrim BT43 5EN **T:** 0282 565 04 13 **E:** info@neo-environmental.co.uk

Prepared For:

Renantis UK Limited

Prepared By:

Kathryn Blade BSc (Hons) MSc

	Name	Date
Edited By:	Kathryn Blade	04/03/2024
Checked By:	Conor Cochrane	04/03/2024
	Name	**Signature**
Approved By	Paul Neary	

INTRODUCTION

4.1 Neo Environmental Ltd has been appointed by Renantis UK Limited (the "Applicant") to undertake a Landscape and Visual Impact Assessment as part of the overall Environmental Impact Assessment for a proposed solar farm (the "Proposed Development") on lands at Bryn Tail Farm, Bryntail Lane, Pontypridd (the "Application Site"). Please see **Figure 1** for the layout of the Proposed Development.

Development Description

4.2 Installation, operation and subsequent decommissioning of a renewable energy scheme comprising ground mounted photovoltaic solar arrays together with substation compound, transformer stations, internal access track, landscaping, biodiversity measures, boundary fencing, security measures, CCTV posts, monitoring house, storage containers access improvement and ancillary infrastructure. The solar arrays will have a combined capacity of up to 39.9MWp.

Site Description

4.3 The area of the Proposed Development (the "Application Site") lies at an elevation of approximately 140m – 330m AOD and covers a total area of c. 70.9 hectares. It is centred around Bryn Tail Farm at approximate National Grid Reference (NGR) E 309333, N 189800. It is south of Eglwysilan Road. The site extends west of Bryntail Farm and east of the Bryn Tail Lane. The site is within the administrative area of Rhondda Cynon Taf Council.

4.4 The site comprises 38 agricultural fields that are currently in use for livestock farming. It is on the east side of the Taff Valley c. 1.6 km east of Ynysangharad War Memorial Park. Access will be gained from the Bryn Tail Lane.

4.5 The site is adjacent to the Twyn Hywel Energy Park, a consented wind farm including 14 turbines (DNS/3272053).

Purpose of this Chapter

4.6 This chapter summarises the likely impacts and significant effects of the Scheme on landscape and views, and where necessary proposes measures to mitigate these impacts and effects.

4.7 The assessment comprises a Landscape and Visual Impact Assessment (LVIA) which has been undertaken and reported by a team of competent Landscape Architects with extensive experience in LVIA of solar farms, renewable energy projects and other large-scale infrastructure development.

4.8 This Landscape and Visual Impact Assessment (LVIA) identifies and assesses the potential effects of a Proposed Solar Farm Development on the landscape and visual resources of the study area, within Rhondda Cynon Taf.

4.9 The LVIA has taken the following approach:

- Identify and evaluate the existing landscape and visual baseline within an initial 10km study area which has then been reduced to 5km following desktop and site surveys. A detailed 5km study area has identified and evaluated the existing landscape and visual baseline through desk-based analysis, GIS mapping, and fieldwork, based on professional judgement and guidance;
- The area in which the Proposed Development may be visible was established through preparation of Zone of Theoretical Visibility (ZTV) plans;
- Determine the landscape and visual receptors with the potential to be affected by the Proposed Development and their sensitivity to the proposed changes resulting from the Proposed Development;
- Consultation with Rhondda Cynon TAF council on selected viewpoints at Pre-Application Planning meetings (Pre-App 24/5063/PRE);
- Assess the interaction of the Proposed Development with the landscape and visual receptors to establish a judgement of the degree of effects the Proposed Development would have upon each receptor.

4.10 This report considers how:

- Landscape effects associated with a development relate to changes to the fabric, character and quality of the landscape resource and how it is experienced; and

- Visual effects relate closely to landscape effects but also concern changes in views as visual assessment is also concerned with people's perception and response to changes in visual amenity.

4.11 Landscape and visual effects are interrelated with other environmental effects but are assessed separately. Whilst elements of cultural heritage such as heritage landscapes are important elements of the landscape and contribute to its character and influence its quality and value, effects on the significance of these designated features and their setting do not form part of this assessment. The potential indirect impacts on the setting of heritage assets is presented in **Chapter 10: Cultural Heritage Impact Assessment**.

4.12 This chapter also addresses the landscape and visual impact of ancillary elements such as the proposed roads, substation, and grid connection; however, the proposed solar array is the primary focus of this assessment chapter.

4.13 The following appendices also support this chapter:

Appendix 4A - Figures:

- Figure 4.1a – LANDMAP Visual and Sensory Aspect Areas
- Figure 4.1b – LANDMAP Visual and Sensory Overall Rating
- Figure 4.2 – Landscape Designations
- Figure 4.3 – ZTV and Viewpoint Locations
- Figure 4.4 – VP01 & VP02
- Figure 4.5 – VP03 & VP04
- Figure 4.6 – VP05 & VP06
- Figure 4.7 – VP07 & VP08
- Figure 4.8 – AVP1 & AVP2
- Figure 4.9 – AVP3 & AVP4
- Figure 4.10– AVP5 & AVP6
- Figure 4.11– AVP7 & AVP8
- Figure 4.12– VP01 Photomontage
- Figure 4.13 – VP02 Photomontage
- Figure 4.14 – VP03 Photomontage
- Figure 4.15 – VP04 Photomontage
- Figure 4.16 – AVP1 Photomontage

- Figure 4.17 – AVP2 Photomontage
- Figure 4.18 – AVP4 Photomontage
- Figure 4.19 – AVP6 Photomontage
- Figure 4.20 – AVP7 Photomontage
- Figure 4.21 – AVP8 Photomontage

Appendix 4B – Landscape and Visual Impact Methodology

Statement of Authority

4.14 This chapter was prepared by Neo Environmental's Associate Landscape Architect Kathryn Blade BSc (Hons) MSc., with assistance from Neo Environmental's, Graduate Landscape Architect, Scarlet Coates BA (Hons).

4.15 Scarlet Coates is a Graduate Landscape Architect at Neo Environmental, where she has been contributing to landscape planning and assessment since 2024. She holds a degree in Landscape Architecture from Leeds Beckett University. Scarlet has extensive experience in conducting and drafting Landscape and Visual Impact Assessments (LVIAs) and Landscape and Ecological Management Plans (LEMPs) for numerous successful renewable energy planning applications across the UK and Ireland. She also undertakes site visits for verified viewpoint photography and plays a key role in overseeing technical team operations. With a strong proficiency in graphical communication, she produces high-quality visual outputs that support landscape assessments and planning applications.

4.16 Kathryn Blade is the Team Lead for the Landscape and Visual team at Neo Environmental, bringing eight years of specialist experience as a Landscape Architect focusing on Landscape and Visual Assessments. She holds a Master's in Spatial Planning from TU Dublin and a bachelor's in landscape architecture from the University of Dublin. Kathryn has extensive experience conducting Landscape and Visual Impact Assessments (LVIAs) for a wide range of projects, including industrial, power, and grid infrastructure developments, as well as solar farms, wind farms, leisure developments, and residential schemes. She has been responsible for the development and preparation of Environmental Statements, Environmental Impact Assessments (EIA), and Environmental Impact Assessment Report (EIAR) chapters, including landscape and visual assessment contributions for Strategic Infrastructure Developments (SIDs) and Nationally Significant Infrastructure Projects (NSIPs) across the UK and Ireland. Her expertise also extends to character assessments, feasibility studies, residential visual amenity assessments, site suitability assessments, and associated mapping, ensuring high-quality analysis and reporting in support of planning applications and environmental assessments.

ASSESSMENT METHODOLOGY

4.17 The methodology followed for this LVIA chapter is contained within **Appendix 4B**, in addition to the supporting figures which are referenced throughout this report. The assessment is based on the final layout of the Proposed Development as shown on the Proposed Development Layout (**Figure 1 of Appendix 1A**) and various detailed structure drawings which accompany this planning application.

4.18 The LVIA has been undertaken in accordance with:

- *'Guidelines for Landscape and Visual Impact Assessment'* (GLVIA), 3rd Edition, 2013, Landscape Institute (UK) & Institute of Environmental Management and Assessment (IEMA)[1];
- *'Visual Representation of Development Proposals'*, Technical Guidance Note 06/19, 17 September 2019[2];
- *'Guidelines on the information to be contained in Environmental Impact Assessment Reports',* Environmental Protection Agency (EPA): Draft, August 2017[3];
- *'Landscape Institute Technical Guidance Note 04/20: Infrastructure'*, Landscape Institute (2020)[4],
- 'Landscape Institute Technical Guidance Note Tranquillity', Landscape Institute (2017)[5],
- 'Landscape Institute Technical Guidance Note 02/19', Landscape Institute (2019)[6];
- *'Landscape Institute Technical Guidance Note 02/21: Assessing landscape value outside national designations'*, Landscape Institute (2021)[7].

[1] https://www.landscapeinstitute.org/technical/glvia3-panel/

[2] https://www.landscapeinstitute.org/visualisation/

[3]https://www.epa.ie/publications/monitoring--assessment/assessment/guidelines-on-the-information-to-be-contained-in-environmental-impact-assessment-reports-eiar.php

[4] https://www.landscapeinstitute.org/technical-resource/infrastructure-guidance/

[5] https://www.landscapeinstitute.org/technical-resource/tranquillity

[6] https://www.landscapeinstitute.org/technical-resource/rvaa

[7]https://www.landscapeinstitute.org/publication/tgn-02-21-assessing-landscape-value-outside-national-designations

Desktop Research

4.19 The following section summarises the publications that have been reviewed as part of the desktop research:

- Relevant national energy policies, planning policy, and planning practice guidance;
- Landscape and visual amenity-related policies contained in adopted and emerging Rhondda Cynon Taf County Borough Council planning policy as well as Landscape Institute best practice policy;
- Natural Resources Wales – National Landscape Character Assessment[8]
- Rhondda Cynon Taf County Borough Council - Proposals for Designation of Special Landscape Areas[9]
- ZTVs, aerial photography and Ordnance Survey (OS) maps.

Surveys

4.20 Fieldwork was undertaken between March and October 2024 to review the desktop analysis, verify the statements within the published landscape character assessments, analyse the landscape character, describe baseline views and determine the likely visibility of the Proposed Development.

Landscape Baseline

4.21 The landscape baseline identifies the existing physical fabric and individual features of the landscape; as well as patterns of land use, land cover and aesthetic and perceptual qualities which combine to create landscape character.

4.22 Landscape character is defined by GLVIA3 as "a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse."

4.23 The landscape baseline identifies landscape character areas defined in published landscape character assessments from the national to district scales.

[8] NLCA37 South Wales Valleys - description

[9] EB 49 - Proposal for Designation of SLA's 2008

Visual Baseline

4.24 Visual receptors are defined in GLVIA3 as *"individuals and/or defined groups of people who have the potential to be affected by a proposal".* This includes residents, recreational users including those on public rights of way (PRoW), workers (including those outdoors) and motorists/vehicle users.

4.25 A computer-generated ZTV has been prepared based on 3-dimensional models of existing terrain and the Scheme. The purpose of the ZTV is to:

- Identify the theoretical extents of the Proposed Developments visibility i.e. the locations from which it could potentially appear in existing views;
- Assist in the identification of the study area;
- Identify visual receptors likely to be affected by the Proposed Development;
- Identify locations that are representative of the views experienced by visual receptors at different locations within the study area (representative viewpoints);
- Specific viewpoints, identified on Ordnance Survey maps; and
- Inform the design, including the extent and type of proposed mitigation

4.26 The visual assessment relates to the potential changes to existing views of identified visual receptors e.g. residents, Public Right of Way (PRoW) users and motorists, as a result of the addition or loss of features to their existing view. Visual receptors (people with potential to experience change in their views) have been identified through interrogation of the ZTV and fieldwork. Once the potential visual receptors were identified, 16 viewpoints were selected to represent the existing views experienced by visual receptors and assess the change to their view that will result from the Proposed Development.

4.27 Photographs and visualisations have been included to assist in describing baseline views and visual effects, with reference to the viewpoints, which have been agreed with local planning authorities. They have been prepared in accordance with best practice guidance published by the Landscape Institute and are presented as Type 1 (annotated viewpoint photographs) or Type 3 (photomontage) within Appendix 4-1

Sensitivity of Landscape Receptors

4.28 The value of each landscape receptor has been determined, influenced by factors such as whether the landscape is designated and at what scale, and with reference to criteria set out in Box 5.1 of GLVIA3, the condition, rarity, scenic quality, and perceptual aspects.

Consideration of landscape value has also been informed by Landscape Institute TGN 02-21: Assessing landscape value outside national designations.

4.29 The susceptibility of each landscape receptor has also been considered, referring to the ability of the landscape receptor to accommodate the specific change proposed without undue change to its baseline conditions.

4.30 The value and susceptibility of each landscape receptor was then combined to determine overall sensitivity defined as either very high, high, medium, low or very low.

Sensitivity of Visual Receptors

4.31 The value attached to the view and their susceptibility to change has been assessed to determine the sensitivity of each receptor to the Proposed Development. Assessing the value attached to views has been informed by the location of the viewpoint and the quality or designation of the existing landscape and elements in the view. This can include whether the view is of, or from, important heritage assets; is afforded its own designation or is from or towards a designated landscape; or is named or promoted (such as those found in guidebooks and tourist literature).

4.32 The susceptibility of visual receptors to the change brought about by the Proposed Development relates mainly to their occupation or activity and the extent to which their attention or interest is focused on the view.

4.33 Visual receptor sensitivity is defined as either very high, high, medium, low or very low, by combining judgements on the value attached to views and susceptibility to change.

Magnitude of Landscape Effects

4.34 The magnitude of landscape effect (change) resulting from the Proposed Development is assessed in relation to each receptor for each assessment phase. The magnitude of impact considers the size and scale, geographical extent, duration and reversibility of the effect and is determined upon a scale of high, medium, low, very low and none.

Magnitude of Visual Effects

4.35 The magnitude of visual effects considers the size/scale of change in the view, the geographical extent of the views influenced, the elements of the Proposed Development introduced and their integration into the existing view, and the duration for which receptors experience the view.

Significance of Landscape and Visual Effects

4.36 The significance of landscape and visual effects has been determined by considering the relationship between the receptor's sensitivity and the magnitude of the effect.

4.37 A guide to this relationship is set out in the matrix in Table 4.1. However, should professional judgment consider that the effect is different from that in the matrix, a reasoned justification is presented in the LVIA. Similarly, where the matrix allows for varying levels of significance of effect (e.g. major or moderate) a reasoned explanation is provided in the assessment as to the conclusion.

Table 4.1 Sensitivity of Receptor in Relation to Magnitude of Effect

Sensitivity or value of resource/ receptor	Magnitude of Effect				
	High	Medium	Low	Very Low	None
Very High	Major	Major or Moderate	Moderate or Minor	Minor or Negligible	Neutral
High	Major or Moderate	Moderate	Moderate or Minor	Minor or Negligible	Neutral
Medium	Major or Moderate	Moderate or Minor	Minor or Negligible	Negligible	Neutral
Low	Moderate or Minor	Minor	Minor or Negligible	Negligible	Neutral
Very Low	Minor	Minor or Negligible	Negligible	Negligible	Neutral

4.38 Following the classification of an effect, clear statements has been made within the LVIA as to whether that effect is significant or not significant.

4.39 As a general rule, major and moderate (adverse or beneficial) effects are considered to be significant, whilst minor, negligible and neutral effects are considered not to be significant.

LEGISLATION AND PLANNING POLICY

4.40 A hierarchy of strategies, policies and legislation operates to underpin the management of both land and landscape. Some of these enable statutory designation at national level and others provide for local designations and appropriate management, with the aim of conserving and protecting the quality of the landscape.

4.41 The following section provides a summary of legislation and planning policy which is of direct relevance to the assessment of the landscape and visual effects.

National

Future Wales – The National Plan 2040[10]

4.42 The Welsh Assembly Government published the new policy document Future Wales – The National Plan 2040 on 24th February 2021. It includes specific targets for the whole of Wales and sets out that;

"in determining planning applications for renewable and low carbon energy development, decision-makers must give significant weight to the need to meet Wales' international commitments and our target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency".

4.43 Along with the eleventh edition of Planning Policy Wales (PPW 11), it sets out that;

"the Welsh Government strongly supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs" and that the planning system should "maximise renewable and low carbon energy generation".

4.44 The Proposed Development which can be described as a large-scaled energy development, is considered a 'Developments of National Significance'. Policies 17 and 18 should be considered in the determination of DNS projects, they set Future Wales' approach to renewable energy generation across Wales.

"Policies 17 and 18 contain strategic spatial and detailed criteria-based policies respectively and should be considered together in the determination of applications, along with detailed advice on assessing benefits and impacts in Planning Policy Wales".

4.45 Policy 17 – Renewable and Low Carbon Energy and Associated Infrastructure supports the principle of developing renewable and low carbon energy from all technologies and at all

[10] Planning Policy Wales. Available at: https://gov.wales/sites/default/files/publications/2021-02/planning-policy-wales-edition-11_0.pdf

scales as means to meet Wales' international commitments and its' need to meet the target to generate 70% of consumed electricity by renewable means by 2030.

4.46 In terms of landscape impact, policy 17 states:

"Applications for …solar will not be permitted in National Parks and Areas of Outstanding Natural Beauty and all proposals should demonstrate that they will not have an unacceptable adverse impact on the environment."

4.47 Policy 18 - Renewable and Low Carbon Energy Developments of National Significance, sets out eleven criteria that DNS must demonstrate that they are in accordance with. The relevant criteria in terms of this assessment are:

"1. outside of the Pre-Assessed Areas for wind developments and everywhere for all other technologies, the proposed development does not have an unacceptable adverse impact on the surrounding landscape (particularly on the setting of National Parks and Areas of Outstanding Natural Beauty);

2. there are no unacceptable adverse visual impacts on nearby communities and individual dwellings.

11. there are acceptable provisions relating to the decommissioning of the development at the end of its lifetime, including the removal of infrastructure and effective restoration.

The cumulative impacts of existing and consented renewable energy schemes should also be considered."

Future Policy Wales Edition 12 (PPW)[11]

4.48 Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. PPW establishes the Welsh Government's commitment to transitioning towards a low-carbon economy, with renewable energy playing a central role in addressing climate change, reducing greenhouse gas emissions, and improving energy security. The policy framework promotes the efficient deployment of renewable and low-carbon energy generation across Wales, ensuring that planning authorities facilitate sustainable energy development while balancing environmental and social considerations.

4.49 The Welsh Government recognises a range of renewable energy technologies, including solar power, wind energy, biomass, geothermal, and hydroelectric power. These are identified as key contributors to meeting national and international climate change targets. In line with this, local planning authorities are expected to identify opportunities for renewable energy

[11] Planning Policy Wales 12. Available at: https://www.gov.wales/sites/default/files/publications/2024-07/planning-policy-wales-edition-12.pdf

development within their respective areas and create policies that enable their successful implementation.

4.50 PPW Edition 12 emphasises the need for careful environmental consideration when determining applications for renewable energy developments. While renewable energy generation is a priority, it must be balanced against the protection of designated landscapes, biodiversity, and the historic environment. Planning applications for solar farms, for example, should include impact assessments on landscape character, local amenities, and potential ecological effects. Where adverse impacts are identified, mitigation measures should be incorporated to ensure developments remain environmentally and socially sustainable.

Regional (Rhondda Cynon Taf Local Development Plan)

Rhondda Cynon Taf Local Development Plan 2006 - 2021[12]

4.51 This is the main strategic and still current (as per time of submission) planning policy document guiding the future renewal and development of Rhondda Cynon Taf council area. The Proposed Development is located within the jurisdiction of the LDP. It should be noted that the LDP is currently undergoing review with updated plans incorporate enhanced provisions for renewable energy, including the promotion of solar installations, to support sustainable development and a low-carbon future.

4.52 Policies relating to Landscape and Visual amenity within the LDP are summarised below;

4.53 Policy CS2: Development in The South states:

"In the Southern Strategy Area the emphasis will be on sustainable growth that benefits Rhondda Cynon Taf as a whole. This will be achieved by:

- *Promoting residential development with a sense of place which respects the character and context of the Principal Towns and Key Settlements of the Southern Strategy Area;*
- *Protecting the culture and identity of communities by focusing development within defined settlement boundaries and promoting the reuse of under used and previously developed land and buildings;*
- *Promoting large scale regeneration schemes in the Principal Town of Pontypridd and Key Settlement of Tonyrefail;*

[12] Local Development Plan 2006 - 2021 | Rhondda Cynon Taf County Borough Council

- *Realising the importance of the Principal Town of Llantrisant / Talbot Green as an area of social and economic growth;*
- *Providing opportunities for significant inward investment, in sustainable locations, that will benefit the economy of Rhondda Cynon Taf and the Capital Region;*
- *Reducing daily out commuting by private car and promoting sustainable forms of transport;*
- *Protecting the cultural identity of the Strategy Area by protecting historic built heritage and the natural environment, and*
- *Promoting and enhancing transport infrastructure services to support growth and investment."*

4.54 Policy AW4 - Community Infrastructure and Planning Obligations states:

"Planning obligations may be sought where development proposals require the provision of new, improved or rely on existing services, facilities, infrastructure and related works, to make the proposal acceptable in land use planning terms. Contributions may be sought in respect of:

- *Affordable housing;*
- *Physical infrastructure works;*
- *Open space, sport / play space and access to natural green space;*
- *Educational facilities;*
- *Recreational and leisure facilities;*
- *Management of Strategic Transport Corridors;*
- *Public transport facilities and services;*
- *Travel plan initiatives; 9. Highway infrastructure works;*
- *Walking and cycling schemes;*
- *Waste management and recycling;*
- *Renewable energy and energy efficiency initiatives.*
- *Environmental and landscape improvements;*

- *Nature conservation;*
- *Public Art;*
- *Culture and community facilities; and*
- *Any other contribution the Council considers appropriate to the development."*

4.55 Policy AW5 – New Development states:

"Development proposals will be supported where:

Amenity

- *The scale, form and design of the development would have no unacceptable effect on the character and appearance of the site and the surrounding area;*
- *Where appropriate, existing site features of built and natural environment value would be retained;*
- *There would be no significant impact upon the amenities of neighbouring occupiers;*
- *The development would be compatible with other uses in the locality;*
- *The development would include the use of multi-functional buildings where appropriate;*
- *The development designs out the opportunity for crime and anti social behaviour.*

Accessibility

- *The development would be accessible to the local and wider community by a range of sustainable modes of transport;*
- *The site layout and mix of uses maximises opportunities to reduce dependence on cars;*
- *The development would have safe access to the highway network and would not cause traffic congestion or exacerbate existing traffic congestion;*
- *Car parking would be provided in accordance with the Council's Supplementary Planning Guidance on Delivering Design and Placemaking: Access, Circulation and Parking Requirements."*

4.56 Policy AW6 – Design and Placemaking states:

"Development Proposals will be supported where:

- *They are of a high standard of design, which reinforces attractive qualities and local distinctiveness and improves areas of poor design and layout;*
- *They are appropriate to the local context in terms of siting, appearance, scale, height, massing, elevational treatment, materials and detailing;*
- *In the case of extensions to buildings, they reflect, complement or enhance the form, siting, materials, details and character of the original building, its curtilage and the wider area;*
- *In the case of proposals for new and replacement shop fronts and signage, they make a positive contribution to the streetscene;*
- *In the public realm and key locations such as town centres, major routes, junctions and public spaces, the character and quality of the built form is to a high standard of design;*
- *They include public art;*
- *Landscaping and planting are integral to the scheme and enhance the site and the wider context; 8. They include an integrated mixture of uses appropriate to the scale of the development;*
- *They include the efficient use of land, especially higher-density residential development on sites in proximity to local amenities and public transport;*

  Open space is provided in accordance with the Fields in Trust Standards;
- *A high level of connectivity and accessibility to existing centres, by a wide range of modes of sustainable transport;*
- *Schemes incorporate a flexibility in design to allow changes in use of buildings and spaces as requirements and circumstances change;*
- *The development reflects and enhances the cultural heritage of Rhondda Cynon Taf;*
- *The design protects and enhances the landscape and biodiversity;*
- *The development promotes energy efficiency and the use of renewable energy; and*

- *The design promotes good water management, including rainwater storage, sustainable urban drainage, porous paving etc.*

Developers will be required to submit comprehensive masterplans for residential proposals of 50 dwellings and over; for commercial developments of 10,000m2net and over; and for schemes where the Council considers the issue of place making can only be fully considered through the submission of a masterplan. Masterplans must have regard to the need to create high quality, sustainable and locally distinct places."

4.57 Policy AW7 – Protection and Enhancement of the Built Environment states:

"Development proposals which impact upon sites of architectural and / or historical merit and sites of archaeological importance will only be permitted where it can be demonstrated that the proposal would preserve or enhance the character and appearance of the site.

Development proposals which affect areas of public open space, allotments, public rights of way, bridleways and cycle tracks will only be permitted where it can be demonstrated that:

- *There is a surplus of such facilities in the locality, or;*
- *The loss can be replaced with an equivalent or greater provision in the immediate locality; or*
- *The development enhances the existing facility."*

4.58 Policy AW8 – Protection and Enhancement of the Natural Environment states:

"Rhondda Cynon Taf's distinctive natural heritage will be preserved and enhanced by protecting it from inappropriate development. Development proposals will only be permitted where:

They would not cause harm to the features of a Site of Importance for Nature Conservation (SINC) or Regionally Important Geological Site (RIGS) or other locally designated sites, unless it can be demonstrated that:

- *The proposal is directly necessary for the positive management of the site; or*
- *The proposal would not unacceptably impact on the features of the site for which it has been designated; or*
- *The development could not reasonably be located elsewhere and the benefits of the proposed development clearly outweigh the nature conservation value of the site.*

There would be no unacceptable impact upon features of importance to landscape or nature conservation, including ecological networks, the quality of natural resources such as air, water and soil, and the natural drainage of surface water.

All development proposals, including those in built up areas, that may affect protected and priority species will be required to demonstrate what measures are proposed for the protection and management of the species and the mitigation and compensation of potential impacts. Development proposals must be accompanied by appropriate ecological surveys and appraisals, as requested by the Council. Development proposals that contribute to the management or development of Ecological Networks will be supported."

4.59 Policy AW12 – Renewable and Non-Renewable Energy states:

"Development proposals which promote the provision of renewable and non-renewable energy such as schemes for energy from biomass, hydro-electricity, anaerobic digestion, on-shore oil and gas and small / medium sized wind turbines, will be permitted where it can be demonstrated that there is no unacceptable effect upon the interests of soil conservation, agriculture, nature conservation, wildlife, natural and cultural heritage, landscape importance, public health and residential amenity.

Development proposals should be designed to minimise resource use during construction, operation and maintenance."

4.60 Policy SSA23 - Special Landscape Area states:

"Special Landscape Areas are identified at the following locations:

- *Llanharry Surrounds;*
- *Talygarn Surrounds;*
- *Ely Valley at Miskin;*
- *Coed-yr-Hendy and Mwyndy;*
- *Llantrisant Surrounds;*
- *Mynydd y Glyn and Nant Muchudd Basin; 7. Mynydd Hugh and Llantrisant Forest;*
- *Efail Isaf, Garth and Nantgarw Western Slopes;*
- *Craig yr Allt;*
- *Taff Vale Eastern Slopes, and*
- *Treforest Western Slopes.*

Development within the defined Special Landscape Areas will be expected to conform to the highest standards of design, siting, layout and materials appropriate to the character of the area.

CONSULTATION

4.61 Consultation has been undertaken with key stakeholders throughout the development of the Landscape and Visual Impact Assessment ("LVIA"), including Rhondda Cynon Taf council. A summary of engagement including date, time and a summary of discussions is listed in **Table 4.2** below;

Table 4.2 Consultation Summary Table

Meeting date / name	Attendees (organisation)	Summary of Discussions
Thursday, 11 April 2024	• Cllr Loretta Tomkinson (Upper Rhydfelen and Glyn-taf) • Cllr Michael Powell (Trallwng) • Cllr Steve Powderhill (Treforest) • Representative from Neo Environmental	Focused on reviewing the initial set of selected viewpoints for the project. Along with initial project constraints. All viewpoints agreed upon are mapped in **Appendix 4A**
Monday, 02 September 2024	• Jason Bragg, Countryside & Public Rights of Way Officer, Rhonda Cynon Taf Council	Letter detailing the impact of the proposed development on Public Footpaths PON/11, PON/11A, and PON/11B. Highlights the need for the planning application to consider these paths, especially as PON/11A and PON/11B are part of the Pontypridd Circular Route, a main promoted walking route.
Thursday, 12 September 2024	• Gareth Davies (RCTCBC – planning), • Alex Henderson (Blackhall Powis), • Saurabh Shah (Nadara), • Conor Cochrane (Neo Environmental) • Iwan Irranca-Davies (Grasshopper Communications)	Suggestions for additional viewpoints from higher terraces in Treforest (e.g., Upper Alma Terrace, top of Stowhill, St Michaels Avenue, Laura Street) to assess visual impact. Importance of evaluating cumulative effects, particularly concerning Twyn Hywel, was noted.

BASELINE CONDITIONS

Existing Baseline

4.62 This section describes the baseline characteristics for the Proposed Development and the study area. Baseline information on topography and hydrology, vegetation patterns, settlement and land use, movement and connectivity, tranquillity and designations are discussed in this section.

Study Area

4.63 Computer-generated ZTV modelling was used to help determine the potential visibility of the Scheme from the wider landscape, as advocated in the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)[13]. The extent of the study area has also been informed by desktop study, verified on-site during fieldwork surveys. This included desk-based reviews of published landscape character assessments and the wider landscape setting to determine the area that might be influenced by the Proposed Development. It also includes consideration of other related environmental aspects, including biodiversity, where relevant to informing landscape character.

4.64 The initial 'Area of Search' extended 5km from the red line boundary of the Proposed Development to the north, south, east and west. This was informed by consideration of the location and scale of the Proposed Development, best practice guidance for solar farm developments and desk-based analysis of mapping and aerial photography. A series of ZTV (refer to **Appendix 4A: Figure 4.1a – 4.3**) was used to determine the potential visibility of the Proposed Development. Fieldwork was subsequently undertaken to verify the findings of the desk study. This analysis determined the study area, which is defined as the extent to which the Proposed Development may result in significant landscape or visual effects.

The initial 5km study area identified that:

4.65 Within 5km to the immediate east, southeast and north southwest, south and southeast of the Proposed Development boundary, sits several mountain ranges and hilltops. The rolling hills and steep landscape seen in this area are prominent and recognisable features within this section of Wales. The mountains and hills enclose the landscape, screening distant views to and from the site itself. The mountain ranges in proximity to the Proposed Development include Mynydd Eglwysilan(355m), located approximately 2km to the northeast of the Proposed Development site, Mynydd Dimlaith(224m), which sits to the east of this, and further west, beyond the 5km study area sits Mynydd y Glyn(377m) and Cefn Gwyngul(356m). The screening provided by these mountains and associated rolling hills is evident within the

[13] https://www.n-somerset.gov.uk/sites/default/files/2022-05/E1%20-%20GLVIA%203rd%20Edition.pdf

ZTV mapping produced for the 5km study area, as it shows very patchy visibility beyond 500m to the east, northeast and southeast of the Proposed Development boundary.

4.66 Within the 5km study radius, the land steeply rises from Pontypridd to the site of the Proposed Development, creating almost a valley in which the town is situated within, surrounded to the west and east by landform, creating almost a shelter. The lands to the west and northwest of the Proposed Development site descend towards the town of Pontypridd with lower-lying, slightly flatter ground around the outer extents of the town until the land rises again towards the south and west. Distant views towards the east, in the direction of the Proposed Development site, can be achieved from the eastern extent of the town of Pontypridd.

4.67 Closer to the Application Site, within 1km of the red line boundary, land to the immediate north and west of the site, outside the red line boundary, contains areas of woodland plantations, with other smaller pockets of woodland running along the ridgelines of the rolling hills and field boundaries. During the site assessment, it was found that the hedgerows, field boundaries made up of mature trees and hedges, and the plantations observed during the desktop study provided considerable screening, which further restricts visibility to and from the Proposed Development site. Particularly with the neighbouring golf course, which is greatly screened from the surrounding area due to the mature vegetation that makes up its boundaries.

4.68 With reference to the ZTV mapping (**Appendix 4A: Figure 4.1 – 4.3**) and taking into account the above considerations, the detailed study area extends approximately 5km around the red line boundary of the Proposed Development site. This study area is in response to the topographical setting of the Proposed Development, existing screening provided by pockets of woodland, extensive vegetation along field boundaries and roads as well as changes in landform as described above.

4.69 Extensive review within the study area was undertaken to identify landscape and visual receptors that have potential to be affected by the Proposed Development.

LANDSCAPE BASELINE

Landscape Designations

4.70 Landscape designations are landscapes that are attributed special protection at the national (legislative) to local (Local Development Plan) level to protect against inappropriate development. Historic and ecological designations also contribute to the overall landscape character and quality. These are briefly outlined below and considered in detail within the respective Technical Reports. The designations are indicated in Figure 4.3: Appendix 1A.

4.71 Desktop research has shown that the Proposed Development is located with a Special Landscape Area. This is referred to in Policy SSA 23 in Rhondda Cynon Taf County Borough Local Development Plan.[14]

LANDMAP

4.72 LANDMAP is a GIS (Geographical Information System) base landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent data set. LANDMAP separates information into five 'aspect layer's as follows:

- Geological Landscape: identifies those landscape qualities which are linked to the control or influence exerted by bedrock, surface processes, landforms and hydrology;
- Landscape Habitats: identifies the characteristics and spatial relationships of habitats and vegetation;
- Visual & Sensory: identifies perceptual landscape qualities as well as including information on individual physical attributes of landform and land cover, and the relationships between them;
- Historic Landscape: identifies those qualities that depend on key historic land uses, patterns and features; and
- Cultural Landscape: includes information on the relationship between people and places, meaning of places to people, how landscape has shaped peoples' actions and how peoples' actions have shaped the landscape.

[14] Local Development Plan 2006 - 2021 | Rhondda Cynon Taf County Borough Council

4.73 LANDMAP also includes evaluation scores which are defined as 'Outstanding' (important at an international or national level), 'High' (important at a regional or county level), 'Moderate' (important at a local level), or 'Low' (little or no importance). This LVIA Visual & Sensory and the overall evaluation as defined by LANDMAP aspects within 5km of the Proposed Development.

4.74 The LANDMAP Visual & Sensory aspect areas and overall evaluation are listed in Table 4-3 below. These are mapped in relation to Proposed Development, as shown on Figures 4.1a to 4.1b.

Table 4.3: LANDMAP Aspect Areas within 5km

Aspect Area	Aspect ID	Area Name	Location in the Site	Overall Evaluation	Justification
VS	MRTHRVS185	Whitehall Farmlands	c.4.53km N	Moderate	The area is generally pleasant and well maintained with attractive views in some directions. The pattern of the landcover is changing with the introduction of the golf course.
VS	MRTHRVS767	Taff/Bargoed Confluence	c. 3.90km NW	High	The area is very attractive with a high scenic quality combining dramatic steep wooded valley sides and a tortuous river corridor where views and vistas are grudgingly revealed. These characteristics make the area very distinctive and rare.
VS	CYNONVS114	Blackwood	c.4.68km E	Low	75%criteria low, but the distinctive combination of strong north/south trending valleys and prominent hills swathed beneath built form adds to the sense of place and sufficient to justify the moderate value for character.
VS	CYNONVS141	Ynysbwl	c. 1.71km NW	Moderate	All criteria moderate.
VS	CYNONVS142	Mynydd y Glyn	c.1.37km SW	Moderate	75% of criteria moderate, but overall of sound local importance, with some areas(eg higher elevations) with greater integrity and character of probable high value.

VS	CYNONVS143	Llanfabon	Covers the entire site and most study area to the north and east.	Moderate	All criteria are moderate, although scenic quality and integrity are borderline mod/high, therefore of strong local importance.
VS	CYNONVS271	Rhymney Valley South of Caerphilly	c. 4.59km SE	Moderate	The area is open and has views down into the valley and has attractive short scale views within the "Common" areas but the area has no remarkable/valuable/unique features and the coniferous plantations and views down on to the built up area of Caerphilly.
VS	CYNONVS317	Mynydd Eglwysilon & Mynydd Meio	c.0.01km NE	High	75% of criteria high.
VS	CYNONVS337	Treherbert		Low	All criteria low.
VS	CYNONVS384	Nelson	c.4.92km NW	Low	Urban area with most criteria low.
VS	CYNONVS544	Abertridwr	c.1.89km E	Low	Most criteria low.
VS	CYNONVS572	Hendre		Moderate	All criteria moderate.
VS	CYNONVS580	St Gwynno	c. 4.77km N	Moderate	All criteria moderate for this typical upland plantation. it should be noted that the area has a recreational amenity value, indicated by picnic sites, trails and carparking.
VS	CYNONVS596	A470	c.0.48km E	Low	2 low and 2 moderate, but lows(scenic quality /integrity) considered more relevant to the overall evaluation.
VS	CYNONVS618	Caerphilly	c.3.37 SE	Low	75% criteria low.
VS	CYNONVS633	Nant muchudd	c.4.31 SW	Moderate	75% criteria moderate.
VS	CYNONVS660	Aberpennar	c. 4.17km N	Low	All criteria low.
VS	CYNONVS709	Pontypridd	c.0.13km SW	Low	All criteria low therefore overall low.
VS	CYNONVS999	Llantrisant	C. 2.07km S	Low	All criteria low.

Published landscape character assessments

4.75 The study area is covered by published landscape character assessments and related studies at national, regional, and local authority levels. These studies have been reviewed to provide context and to inform the definition of landscape receptors, against which the effects of the Scheme will be assessed. Local planning authorities use published landscape character assessments aspart of their planning policy evidence base and the published assessments often provide specific guidance or recommendations on managing landscape change. The following section summarises the relevant landscape character assessments covering the study area.

National Landscape Character Areas

4.76 The Application Site falls within National LCA 37 – South Wales Valleys and covers the whole of the 5km study area.

4.77 The key characteristic for this LCA as stated in Natural Resources Wales Landscape Character Assessment[15] are as follows:

- *"Extensive Upland plateaux – typically wild and windswept, often with unenclosed tracts, running roughly north-south as 'fingers' parallel between intervening deep valleys.*
- *Numerous steep-sided valleys - typically aligned in parallel, flowing in southerly directions, shaped by southward flowing glaciers, leaving behind distinctive corrie ('cwm') and crag features. Major rivers include the Tawe, Taff and Rhymney.*
- *Ribbon urban and industrial areas in valleys – in places extending up valley sides and to valley heads. The area is sometimes regarded as being part of a 'city region'. Middle and eastern valleys tend to be the most heavily and continuously developed, e.g Rhondda Valley. The uplands by comparison have little or no settlement.*
- *Extensive remains of heavy industry – with a mix of derelict, preserved and largely redeveloped areas, notably for coal mining. Preserved as heritage (World heritage Site) at Blaenafon this typically includes old railway alignments, buildings and former tips.*

[15] NLCA37 South Wales Valleys - description

- *Contrast of urban valley activity next to quiet uplands – e.g. busy roads, new developments, traffic noise, night lighting, verses the adjacent wilder, remoter, quieter uplands.*
- *Large blocks of coniferous plantation and deciduous woodland fringes – covering many steep hillsides and hilltops, most notably in the middle to western portion of the area, providing a softer contemporary landscape where there was once industry.*
- *Heather, rough grassland and steep bracken slopes – dominate many plateaux and are grazed mainly by sheep. Much is common land.*
- *Improved pastures on some lower valley sides - grazed by sheep and some dairy cattle.*
- *Field boundaries - dry stone walls mark the boundary of common land while fields on lower slopes are bounded by dense hawthorn hedges, interspersed with swathes of broadleaved woodland.*
- *Transport routes restricted to valleys – the intervening topography makes valley to valley travel difficult, except at heads and bottoms of valleys. Occasionally there are roads that climb steeply over passes with dramatic views and 'hair pin' bends.*
- *Iconic cultural identify – many popular images of a tough, rugby-playing, religious, radically-minded society still remain associated with the South Wales Valleys, however today's post-industrial, internet-connected reality is somewhat different."*

4.78 The key points from the Visual and Sensory Profile for this LCA as stated in Natural Resources Wales Landscape Character Assessment[16] are as follows:

"The South Wales Valleys is one of Wales' more widely known iconic images, combining the wilder and often inclement upland setting with the heavily industrialised and busy valleys. Active mines and industry are now generally an image of the past, however the legacy remains extensively apparent today and together with the steep topography of the valley sides, has a defining influence on landscape character.

It is a landscape of contrasts. The valleys contain the extensive ribbon development, which snakes along the valley floors and lower valley sides, and sometimes with settlements precariously extending over intervening slopes and spurs. The windswept upland plateaux that separate the valleys could not be more different. Devoid of settlement, the uplands engender a strong sense of openness and remoteness, although in places compromised by proximity to industry and people, for example reclaimed spoil heaps, fly tipping, abandoned cars,

[16] NLCA37 South Wales Valleys - description

'horsiculture' and associated ramshackle sheds or allotments, pressure of people accessing the area for recreation in an unmanaged way, and occasional pylon lines, telecommunications masts and occasional wind turbine developments. But the open plateaux afford extensive views across the valleys, southwards to the Severn Estuary and northwards to the Brecon Beacons. At times, views from plateau to plateau conceal the intervening valleys and thus visually connect more with the wider uplands of Wales.

The middle to western valleys are dominated by the extensive coniferous plantations whereas the eastern valleys, although generally smaller, are more intimate. On many valley sides, there are distinctive 'ffridd' and 'rhos pasture' mosaics of small fields, hedgerows, boundary walls, wet flushes and marshland, interspersed with small stands of trees, copses and woodlands. It is the vestige of the former agricultural landscape that once dominated before the expansion of coal mining and the iron industries."

Regional Landscape Character

4.79 Rhondda Cynon Taf County Borough Council have identified Special Landscape Character Areas within both the Northern and Southern Strategy Areas as stated in their Local Plan. These are specified as landscape designations however within the Evidence Base for the Local Plan EB49 - Proposals for Designation of Special Landscape Areas in Rhondda Cynon Taf, 2008[17] have been listed with landscape qualities and features specific to each location.

4.80 The Proposed Development is located within the Southern Strategy Area and falls within Taff Vale Eastern Slopes Special Landscape Area.

4.81 The Primary Landscape Qualities and Features for Taff Vale Eastern Slopes are as follows:

- *"Long stretch of rural hillsides in contrast to densely developed valley floor and valleys to west.*
- *All area plays important role in overall impression of the South Wales Valleys as gained from the A470, the major north/south route through Wales.*
- *Gradation of small-scale irregular fields and woods on lower slopes, to larger fields on shallower mid slopes, to open land on tops, linked by steep winding lanes.*
- *High point of Cefn Eglwysilan with prominent masts on skyline acting as landmarks.*
- *Various earthworks relating to historically important medieval estate of Senghenydd on ridge top*

[17] EB 49 - Proposal for Designation of SLA's 2008

- *Prominent Cilfynydd tips in north overlook Taff Vale. Unreclaimed and steep with sculptural forms, they are an important reminder of industrial past, now becoming attractively covered with gorse and heather.*
- *In places the upper edge of the valley settlements are starting to creep up the hillside intrusively.*
- *Taff Trail cycleway passes through lower part of the area."*

4.82 The Key Policies and Management for Taff Vale Eastern Slopes are as follows:

- *"Conserve skyline*
- *Protect/preserve/conserve historic features relating to Senghenydd*
- *Bracken control on open common land*
- *Introduction of Tir Gofal for conservation of grasslands*
- *Restrict edge of settlement developments, especially on steep sites*
- *Recreational and other rural developments to be in keeping with conspicuous hillside location.*
- *Conserve Cilfynydd tips in generally unreclaimed condition for historic/cultural and visual value."*

VISUAL BASELINE

4.83 The purpose of the visual assessment as defined in GLVIA 3 *is "to establish the area in which the development may be visible, the different groups of people who may experience views of the development, the places where they will be affected and the nature of the views and visual amenity at those points"*.

4.84 The extent of visibility is firstly considered within the ZTV and subsequently from a number of agreed representative viewpoints that cover a broad range of sensitive receptors to represent different types of view and different types of viewers (i.e., visual receptors). Integral to this process is the need to define the visual value and susceptibility to change, against which the assessment of effects can be made.

Key Visual Receptor Groups

4.85 The development from both static and sequential points can be expected to affect a range of visual receptors and receptor groups. These receptors will include, but are not limited to, residents, road users, and those visiting the area.

Public Rights of Way (PRoW)

4.86 Three Public Rights of Way (PRoW), and an Other Route with Public Access (ORPA) are found in the northern section of the site. PON/11A and PON/11B passes through the Proposed Development, while PON/11 runs in close proximity to the RLB of the site.

4.87 A popular walking route, known as the Pontypridd Circular Route, uses Public Footpaths PON/11A and PON/11B.

Viewpoint Appraisal

4.88 The viewpoint ("VP") appraisal has been undertaken from 16 viewpoints (VP). They are supported by eight photomontages (PM) which demonstrate particular views.

4.89 The viewpoints represent a range of visual receptors and view types and were selected following the GLVIA 3 guidance and further Landscape Institute guidance for the Visual Representation of Development Proposals[18]. They are used as 'samples' on which to base judgements and will help establish how visible the Proposed Development will be from specific locations and help to gauge the anticipated effects upon visual amenity.

4.90 The photographs for the visualisations have also been taken from a range of 'publicly accessible' points, to cover a representative range of viewing distances, elevations and orientations, with different viewing experiences, in line with GLVIA. The Viewpoints are defined in **Table 4.13** below, and the Viewpoint Panoramas for the Representative Views within **Figures 4.4 & 4.21** of **Appendix 1A.**

[18] Landscape Institute (LI) Visual Representation of Development Proposals, Technical Guidance note 06/19 (available at https://www.landscapeinstitute.org/visualisation/)

Table 1.13: Representative Viewpoint Baseline

VP	Location	Approx Distance to Proposed Development	Key Receptor Group
Viewpoint 1	Llantwit Fardre, Efail Isaf, Rhondda Cynon Taf, Wales, CF38 1SN	4.47km	Road Users
Viewpoint 2	Llantwit Fardre, Efail Isaf, Rhondda Cynon Taf, Wales, CF38 1SN	4.1km	Road Users
Viewpoint 3	Eglwysilan Road, Aber Valley, Rhydyfelin, Pontypridd, Rhondda Cynon Taf, Wales, CF83 4EQ	0.015km	Road Users
Viewpoint 4	New Park Terrace, Hawthorn, Pontypridd, Rhondda Cynon Taf, Wales, CF37 1TH	0.95km	Residential and Road Users
Viewpoint 5	Eglwysilan Road, Aber Valley, Abertridwr, Caerphilly County Borough, Wales, CF83 4JG	0.875km	Residential and Road Users
Viewpoint 6	Lady Windsor Cycle Route, Ynysybwl and Coed-y-cwm, Cilfynydd, Ynysybwl, Rhondda Cynon Taf, Wales, CF37 3DR	3.48km	Road users and Lady Windsor Cycle Route Users
Viewpoint 7	Mound Road, Maesycoed, Pontypridd, Rhondda Cynon Taf, Wales, CF37 1EE	2.28km	Residential and Road users
Viewpoint 8	Llantwit Fardre, Efail Isaf, Rhondda Cynon Taf, Wales, CF38 1SN	4.49km	Residential and Road users
Additional	PRoW PON 11B/1	0km	PRoW Users

VP	Location	Approx Distance to Proposed Development	Key Receptor Group
Viewpoint 1 (AVP1)	Bryn Tail, Pontypridd, Rhondda Cynon Taf, Wales		- PON 11B/1
Additional Viewpoint 2 (AVP2)	PRoW – PON 10/1 Rhydyfelin, Pontypridd, Rhondda Cynon Taf, Wales, CF37 5LJ,	10m	PRoW Users - PON 10/1
Additional Viewpoint 3 (AVP3)	Rhydyfelin, Pontypridd, Rhondda Cynon Taf, Wales	0km	Residential and PRoW Users - PON 11/1
Additional Viewpoint 4 (AVP4)	Eglwysilan Road, Aber Valley, Rhydyfelin, Pontypridd, Rhondda Cynon Taf, Wales	17m	PRoW Users - PON 11/1
Additional Viewpoint 5 (AVP5)	Tennyson Close, Rhydyfelin, Pontypridd, Rhondda Cynon Taf, Wales	0.35km	Residential and Road users
Additional Viewpoint 6 (AVP6)	Graig Terrace, Y Graig, Pontypridd, Rhondda Cynon Taf, Wales	1.57km	Residential and PRoW Users - PON 102/2
Additional Viewpoint 7 (AVP7)	Eglwysilan Road, Aber Valley, Abertridwr, Caerphilly County Borough, Wales	1.54km	Pedestrains
Additional Viewpoint 8 (AVP8)	Chestnut Street, Rhydyfelin, Pontypridd, Rhondda Cynon Taf, Wales	1.15km	Residential and Road users

IMPACT ASSESSMENT

4.91 The following section assesses the magnitude of effects that the Proposed Development would have on the landscape character and the physical features of the baseline landscape. These effects would be combined with the value attached to the landscape and the landscape's susceptibility and sensitivity to the Proposed Development, as mentioned in the baseline section above, to determine the extent of the effects.

4.92 The assessment will firstly consider the effects of construction on the Application Site and then assess the operational effects as well as at the decommissioning phase.

Construction Effects

4.93 During the temporary construction phase, there would be a notable increase of construction activity within the confines of the Application Site. The works will have a localised temporary disturbance to a small portion of the rural landscape within NLCA 37 – South Wales Valley.

4.94 The construction works would require a temporary disturbance to southern boundary of the Application Site. The construction period will last no more than 12 to 18 months. Disturbed ground resulting from the movement of machinery, construction of new access tracks and installation of the various structures and underground cabling trenches and temporary passing bays will be reinstated back and reseeded with species rich grassland upon completion.

4.95 Access along PON/11A and PON/11B will need to be managed for short periods of time for health and safety reasons, accounting for vehicle and material movements. This will result in a large-scale change experienced locally from the entirety of PRoW PON/11A and PON/11B for the temporary duration of the build-out period.

4.96 Movement of construction traffic to and from the Application Site would result in some minor disturbance, particularly along the access route. HGV movements are expected to be the most intense during the delivery of materials, reducing in numbers towards the final weeks. For more information, see Vol 3 Annex 3 Construction Traffic Management Plan.

4.97 The direct effects upon the Application Site during the construction phase would be temporary and short-term lasting for the construction period. They would have a **Medium to Low magnitude** of change given the partial to limited loss or damage to key characteristics or features. When combined together with the Application Site's medium sensitivity, this would result in a **Moderate adverse** effect during construction.

Decommissioning effects

4.98 At the decommissioning phase, there would be some localised disturbance to the rural landscape. However, at the end of decommissioning, the land would be reinstated to its former agricultural/crop use.

4.99 The direct effects upon the Application Site during Decommissioning would be temporary and short-term lasting for the decommissioning period. They would have a **Low** magnitude of change which together with the Application Site's Medium to Low sensitivity, would result in no more than a **Moderate/Minor** adverse effect during decommissioning.

Operational Effects

Landscape Effects

4.100 The following potential direct and indirect landscape effects (along with their duration and nature) arising from the Proposed Development have been identified. Direct or indirect landscape effects on the fabric of the landscape and its receptors are closely related to the nature and extent of visibility.

4.101 Once operational, the Proposed Development will result in the placement of a series of solar arrays within the existing field pattern and associated infrastructure across the extent of the Application Site for the duration of the permitted planning consent period.

4.102 The existing mature field boundary vegetation, mitigation hedgerow and infill planting will be maintained throughout the operational phase helping to improve the condition of these hedgerows and further enclosing the new solar farm structures within each field.

4.103 The additional mitigation planting will also be maintained to help increase biodiversity across the Application Site. The current areas of agricultural landcover will be replaced by a species rich grassland between the solar arrays which will be managed by light grazing of sheep or maintained by cutting.

4.104 The Proposed Development will be unmanned, with only occasional servicing of the solar farm equipment and landscape maintenance as required throughout the year. The level of traffic will be minimal with one or two vehicles and a small number of personnel requiring access at any given time.

4.105 The introduction of the operational Proposed Development will increase the influence of electricity infrastructure in combination with existing the existing pylon lines at the site level.

4.106 The Proposed Development will result in a medium-scale change experienced locally. Overall, the magnitude of landscape change for the Application Site is judged to be Medium reducing as mitigation planting matures. Taking account of the high sensitivity of the Application Site

this will result in a Moderate adverse landscape effect during the operational period. While the mitigation measures will help further contain the Proposed Development by c. Year 5 they are unlikely to fully screen elements at higher elevations.

Visual Effects

4.107 The Proposed Development is located approximately 2km east of Pontypridd. There are a number of residential dwellings and farmsteads along the local road network which surround the site.

4.108 Visual effects will mainly relate to the introduction of the solar array and the impact on the nature of the site and immediate surroundings.

4.109 The main visual receptor groups are local residents, travellers in vehicles and pedestrians. Residents and pedestrians will have a higher sensitivity to change than the road users. Vehicle travellers will focus on traffic and not primarily on available views and will see experience the views in transit.

4.110 The zone of visual influence will be confined to the 1.5km radius of the Proposed Development boundary, from locations with open or partial views of the Proposed Development. The visual effects of the Proposed Development, though significant, are, however, considerably lessened by screening provided to the Proposed Development, where visibility of the development as a whole is extremely limited. The magnitude of visual change for views up to 1km from the solar array is considered **medium, resulting in a moderate adverse**.

4.111 The majority of residential dwellings in the immediate environment of the Proposed Development are in the form of individual houses and farmsteads. The magnitude of visual effects on local residents and residential areas with views of the Proposed Development within approximately 1km to 5km are considered to range from **Low to Medium**, with effects ranging between **Moderate to Slight Adverse** depending on the openness of views and intervening screening by vegetation, topography or built structures.

4.112 Views beyond approximately 2km are limited; however, glimpses through gaps in vegetation or from elevated areas within the study area are possible. These views will generally be glimpsed and fleeting in nature. The magnitude of visual change for views between 2km to 5km are considered **Low,** and the significance as **Not Significant.**

Viewpoint Assessment

4.113 The analysis detailed below refers to the potential visual effects on the sixteen representative viewpoints identified in the baseline and confirmed through discussions with Rhonda Cynon Taf Council and relevant Stakeholders. To help understand the assessment, references should be made to the existing panoramas, wireframes, and ten photomontages (Appendix 4A –

Figure 4.4 – 4.21), which demonstrate the existing and proposed views from each location. The assessment findings are summarised in Table 4.14 below.

Viewpoint 1: Unnamed Local Road in Llantwit Fardre, Efail Isaf, Rhondda Cynon Taf

4.114 Viewpoint 1 shows a view along an unnamed local road in Llantwit Fardre, Efail Isaf, Rhondda Cynon Taf, looking north/northwest towards the Proposed Development. The Proposed Development is approximately c.4.47km from Viewpoint 01. The nearby views consist of a local road running into the distance and boundary vegetation on either side of the road. An existing solar farm is present within the landscape and is a key feature in the view. Distant views show the agriculture fields which extend into the distance as well as the presence of nearby towns within the view. The landscape is generally undulating terrain with field boundaries consisting of hedgerows and some trees. Clusters of woodland are also present in the landscape.

4.115 The value of the view is considered to be Medium-Low. The visual receptors are road users travelling east-west. The sensitivity and susceptibility to change are considered Medium - Low as the main receptor groups will be road users who experience this view in transit.

4.116 The introduction of the Proposed Development's solar farm into the landscape will add additional electrical element to this view. This addition will intensify the energy infrastructure within the landscape. An existing solar farm can be seen to the view's right and is a prominent feature in the landscape. The Proposed Development will be partially visible within the existing view. Views would be long distance, looking towards elevated areas of the Proposed Development. It should also be noted that this view will be fleeting in nature, given the location on these roads and intervening vegetation and landforms found within the surrounding landscape. The Proposed Development will result in Low magnitude of visual change, with a resulting significance of Minor / Negligible.

Viewpoint 2: Maesmaw Road, Llantwit Farde, Upper Boat, Tonteg, Rhondda Cynon Taf

4.117 Viewpoint 2 is representative of views along Maesmawr Road Llantwit Fardre, Upper Boat, Tonteg, Rhondda Cynon Taf looking northwest towards the Proposed Development. The nearest point of the Proposed Development is approximately c.4.1km from Viewpoint 02. The nearby view consists of a large solar farm with intervening vegetation and trees. Middle-distant views comprise nearby agricultural land, hedgerow vegetation and mature trees along field boundaries with more elevated farmland in more long-distant views. The topography of the land is undulating and increasingly steep terrain in the more distant landscape.

4.118 The value of the view is considered to be Medium- Low. The visual receptors are road users travelling south-north along the Maesmaw Road. The sensitivity and susceptibility to change are considered Medium -Low as the main receptor groups will be road users who experience this or similar views on a daily basis.

4.119 There will be clear long-distance views the Proposed Development, increasing the energy infrastructure's prominence within this view. Due to the elevation of the Proposed Development, it will be visible even at longer distances. This addition will intensify the energy infrastructure within the landscape. The Proposed Development also occupies approximately a quarter of the view across the horizon. However, there are numerous existing distracting element found with the view. The Proposed Development will result in a Low magnitude of visual change, with a resulting Minor significance.

Viewpoint 3: Eglwysilan Road Aber Valley, Rhydyfelin, Pontypridd, Rhondda Cynon Taf

4.120 Viewpoint 3 is representative of views Eglwysilan Road, looking southwest towards the Proposed Development. The Proposed Development is approximately c.15m from Viewpoint 03. The nearby view consists of agricultural fields with stone walls along field boundaries. Middle distant views show an open expansive agricultural field with patches of shrub planting across the fields. Hedgerows, boundary field vegetation and mountainous terrain makeup the long distant views. The topography of the land is softly undulating with views of mountain peaks in the distance.

4.121 The value of the view is considered to be High. The visual receptors are road users travelling north-south along the Eglwysilan Road. The sensitivity and susceptibility to change are considered High as the main receptor groups will be road users who experience this or similar views on a daily basis.

4.122 There will be open views of the solar farm, increasing the prominence of the energy infrastructure within this view. The topography of the landscape screens the other fields from the view. The solar farm will cover most of the view from this location. This addition will intensify the energy infrastructure within the landscape. However, the scenic quality of the view remains unchanged, as the Proposed Development does not hinder views to the surrounding development. The Proposed Development will result in High magnitude of visual change, with a resulting significance of Major - Moderate.

Viewpoint 4: New Park Terrace, Hawthorn, Pontypridd, Rhondda Cynon Taf

4.123 The view is representative of views near New Park Terrace southwest of the Proposed Development. Overall, this viewpoint shows elevated views of the undulating vegetated landscape with pockets of agricultural fields. The Proposed Development is approximately c.95m from Viewpoint 04. Short to Medium distant views looking northeast shows residential properties rooves and elements of electrical infrastructure including lampposts. Medium to long distant views show an undulating landscape with vegetated slopes with woodland planting and pockets of open farmland.

4.124 The value of the view is considered to be Medium-Low. The visual receptors are residential. The sensitivity and susceptibility to change are considered Medium-Low as the main receptor groups will be residential, who experience this view every day.

4.125 There will be views of the Proposed Development, fields 18-31 and 34-37 will be visible from this viewpoint. Near these receptors, there will be open views of some of the fields with partial screening due to existing vegetation in the landscape, increasing the prominence of the energy infrastructure within this view. The solar farm will be seen along the ridge and most elevataed fields of the slope. This addition will intensify the energy infrastructure within the landscape. The Proposed Development will result in a **Low** magnitude of visual change, with a resulting significance of **Minor.**

Viewpoint 5: Eglwysilan Road, Aber Valley, Abertridwr, Caerphilly County Borough

4.126 The view is representative of views along Eglwysilan Road southeast of the Proposed Development. Immediate and middle distant views consist of agricultural fields and boundary vegetation. The long distance views of the landscape are that of mountainous terrain with agricultural fields. The landscape is undulating with few individual farmsteads and residential properties.

4.127 The value of the view is considered to be Medium. The visual receptors are local residents and road users travelling south to north along Eglwysilan Road. The sensitivity and susceptibility to change is considered Medium as the main receptor groups will be road users and residents who experience this or similar views on a daily basis.

4.128 Parts of the southern half of the Proposed Development are visible from this viewpoint as the Proposed Development is in an elevated position. Existing vegetation, along with mitigation planting, will partially screen the development from view. The solar farm will be seen along the ridge and most elevated fields of the slope. However, the solar farm will be seen in sections, and not across the view, given the patchwork of fields and screening provided by their boundaries. The Proposed Development will result in a **Medium** magnitude of visual change, with a resulting significance of **Moderate.**

Viewpoint 6: Lady Windsor Cycle Route, Ynysybwl and Coed-y-cwm, Cilfynydd, Ynysybwl, Rhondda Cynon Taf,

4.129 The view is representative of views along a cycle route and roadway west 3.5km northwest of the Proposed Development. Overall, this viewpoint shows open expansive views of the landscape which extends into the distance. Short distant views consist of a field with well-designed field boundaries; a pylon stands tall in the centre of the images. Distant views are of the mountainside, which is dominant across the study area.

4.130 The value of the view is considered to be Medium. The visual receptors are local residents and road users travelling south to north. The sensitivity and susceptibility to change is

considered Medium as the main receptor groups will be road users and residents who experience this or similar views on a daily basis.

4.131 There will be long-distance views of a section of the Proposed Development, increasing the energy infrastructure's prominence within this view. Due to the elevation of the Proposed Development, it will be visible even at longer distances, however the development will be viewed at a great distance from this area and will be imperceptible within this view. The Proposed Development will result in a Very Low magnitude of visual change, with a resulting Negligible significance.

Viewpoint 7: Mound Road, Maesycoed, Pontypridd, Rhondda Cynon Taf, Wales,

4.132 The view is representative of views within a residential estate 2.28km west of the Proposed Development. Overall, this viewpoint shows views of the landscape which extends into the distance. Short distant views consist of a built-up residential area. Distant views are of the mountainside, which is dominant across the study area.

4.133 The value of the view is considered to be Medium. The visual receptors are local residents and road users travelling east to west. The sensitivity and susceptibility to change is considered Medium as the main receptor groups will be road users and residents who experience this or similar views on a daily basis.

4.134 There will be long-distance views of a section of the Proposed Development, increasing the energy infrastructure's prominence within this view. Due to the elevation of the Proposed Development, it will be visible even at longer distances. However, the development will be viewed at a great distance from this area and will be imperceptible within this view. The vegetation on the west face of the hillside also further screens the development from view. The Proposed Development will result in a Very Low magnitude of visual change, with a resulting Negligible significance.

Viewpoint 8: Llantwit Fardre, Efail Isaf, Rhondda Cynon Taf, Wales.

4.135 The view is representative of views from an elevated area, southwest of the proposed development. From this location, the development is 4.49km away. Overall, this viewpoint shows open expansive views of the landscape which extends into the distance. Short distant views consist of a field with well-designed field boundaries. Distant views are of the mountainside, with a section of built development seen to the left of view.

4.136 The value of the view is considered to be Medium. The visual receptors are local residents and road users travelling east to west. The sensitivity and susceptibility to change is considered Medium as the main receptor groups will be road users and residents who experience this or similar views on a daily basis.

4.137 There will be distance views of a section of the Proposed Development, increasing the energy infrastructure's prominence within this view. The field vegetation seen within the middle

ground screens the development within this view, with only glimpses of the development, therefore visible and imperceptible within this view. The Proposed Development will result in a Very Low magnitude of visual change, with a resulting Negligible significance.

Additional Viewpoint 1 (AVP1): View from PRoW PON 11B/1 Bryn Tail, Pontypridd, Rhondda Cynon Taf

4.138 AVP1 is representative of views from along PRoW PON 11B/1, looking northwest towards the Proposed Development. The Proposed Development panels are approximately 5m from this viewpoint at its nearest point. The nearby view consists of agricultural fields with stone walls along field boundaries. Middle distant views show an open, expansive agricultural field with patches of shrub planting across the fields. Field vegetation and mountainous terrain make up the views. The topography of the land is softly undulating, with views of mountain peaks in the distance.

4.139 The value of the view is considered to be High. The visual receptors are pedestrian users travelling north-south along the Public Right of Way. The sensitivity and susceptibility to change are considered High as the main receptor groups will be recreational users who experience this or similar views on a daily basis.

4.140 There will be open views of the solar farm, increasing the prominence of the energy infrastructure within this view. The topography of the landscape screens the other fields from the view. The solar farm will cover most of the view from this location. This addition will intensify the energy infrastructure within the landscape. However, the scenic quality of the view remains unchanged, as the Proposed Development does not hinder views to the surrounding landscape. The Proposed Development will result in a High magnitude of visual change, with a significance of Major - Moderate.

Additional Viewpoint 2 (AVP2): View from PRoW – PON 10/1 Rhydyfelin, Pontypridd, Rhondda Cynon Taf.

4.141 AVP2 is representative of views from along PRoW PON 10/1, looking southeast towards the Proposed Development. The Proposed Development panels are approximately 10m from this viewpoint at its nearest point. The nearby view consists of agricultural fields with stone walls along field boundaries. Middle distant views show an open, expansive agricultural field with patches of shrub planting across the fields. Field vegetation and mountainous terrain make up the views. The topography of the land is softly undulating, with views of mountain peaks in the distance.

4.142 The value of the view is considered to be High. The visual receptors are pedestrian users travelling east-west along the Public Right of Way. The sensitivity and susceptibility to change are considered High as the main receptor groups will be recreational users who experience this or similar views on a daily basis.

4.143 There will be glimpsed views of the solar farm from this location, given the amount of existing mature vegetation within this view and within the intervening fields. The topography of the landscape screens the other fields from the view. The scenic quality of the view remains unchanged, as the Proposed Development does not hinder views to the surrounding landscape. The Proposed Development will result in a **Low** magnitude of visual change, with a significance of **Minor - Moderate**.

Additional Viewpoint 3 (AVP3): View from along PRoW PON 11/1 Rhydyfelin, Pontypridd, Rhondda Cynon Taf

4.144 The view is representative of views from along PRoW PON 11/1, within the proposed development site. Overall, this viewpoint shows views of the landscape extending into the distance. Distant views are of the surrounding countryside, which is scenic in nature.

4.145 The value of the view is considered to be **Medium**. The visual receptors are PRoW users travelling east to west. The sensitivity and susceptibility to change is considered Medium as the main receptor groups will be recreational users who experience this or similar views on a daily basis.

4.146 Due to the elevations on site, the topography screens any element of the proposed development from view. The proposed development will result in **no visual change**.

Additional Viewpoint 4 (AVP4): View from Eglwysilan Road, Aber Valley, Rhydyfelin, Pontypridd, Rhondda Cynon Taf

4.147 AVP4 is representative of views from along PRoW PON 11/1, looking northwest towards the Proposed Development. The Proposed Development panels are approximately 17m from this viewpoint at its nearest point. The nearby view consists of agricultural fields with stone walls along field boundaries. Middle distant views show an open, expansive agricultural field with patches of shrub planting across the fields. Field vegetation and mountainous terrain make up the views. The topography of the land is softly undulating, with views of mountain peaks in the distance.

4.148 The value of the view is considered to be High. The visual receptors are pedestrian users travelling east-west along the Public Right of Way. The sensitivity and susceptibility to change are considered **High** as the main receptor groups will be recreational users who experience this or similar views on a daily basis.

4.149 There will be glimpsed views of the solar farm from this location, given the amount of existing mature vegetation within this view and within the intervening fields. The topography of the landscape screens the other fields from the view. The scenic quality of the view remains unchanged, as the Proposed Development does not hinder views to the surrounding landscape. The Proposed Development will result in a **Low** magnitude of visual change, with a significance of **Minor - Moderate**.

Additional Viewpoint 5 (AVP5): Tennyson Close, Rhydyfelin, Pontypridd, Rhondda Cynon Taf

4.150 The view is representative of views from within a cemetery to the south of the proposed development. Overall, this viewpoint shows views of short distance, limiting the view.

4.151 The value of the view is considered to be **Medium**. The visual receptors are visitors of the cemetery. The sensitivity and susceptibility to change is considered **Medium** as the main receptor groups will be recreational users who experience this or similar views on a daily basis.

4.152 Due to the elevations on site, the topography screens any element of the proposed development from view. The proposed development will result in **no visual change**.

Additional Viewpoint 6 (AVP6): View from Graig Terrace, Y Graig, Pontypridd, Rhondda Cynon Taf

4.153 AVP6 is representative of views from along PRoW PON 102/2, looking northwest towards the Proposed Development. The Proposed Development is approximately 1.5km from this viewpoint at its nearest point. The nearby view consists of forestry scrubland. Middle distant views show an open, expansive agricultural field with patches of shrub planting across the fields. Field vegetation and mountainous terrain make up the views. The topography of the land is softly undulating, with views of mountain peaks in the distance.

4.154 The value of the view is considered to be High. The visual receptors are pedestrian users travelling east-west along the Public Right of Way. The sensitivity and susceptibility to change are considered **High** as the main receptor groups will be recreational users who experience this or similar views on a daily basis.

4.155 There will be glimpsed views of the solar farm from this location, given the amount of existing mature vegetation within this view and within the intervening fields. The topography of the landscape screens the other fields from the view. The scenic quality of the view remains unchanged, as the proposed development does not hinder views from the surrounding landscape. The Proposed Development will result in a **Low** magnitude of visual change, with a significance of **Minor - Negligible**.

Additional Viewpoint 7 (AVP7): Eglwysilan Road, Aber Valley, Abertridwr,

4.156 The view is representative of views from along Eglwysilan Road, 1.5km southeast the proposed development site. Overall, this viewpoint shows views of the landscape extending into the distance. Distant views are of the surrounding countryside, which is scenic in nature.

4.157 The value of the view is considered to be **Medium**. The visual receptors are visitors of the cemetery. The sensitivity and susceptibility to change is considered **Medium** as the main receptor groups will be recreational users who experience this or similar views on a daily basis.

4.158 Due to the elevations on site, the topography screens any element of the proposed development from view. The proposed development will result in **no visual change**.

Additional Viewpoint 8 (AVP8): View along Chestnut Street, Rhydyfelin, Pontypridd, Rhondda Cynon Taf

4.159 The view is representative of views within a residential estate 1.15km south of the Proposed Development. Overall, this viewpoint shows views of the landscape which extends into the distance. Short distant views consist of a built-up residential area. Distant views are of the mountainside, which is dominant across the study area.

4.160 The value of the view is considered to be Medium. The visual receptors are local residents and road users travelling east to west. The sensitivity and susceptibility to change is considered **Medium** as the main receptor groups will be road users and residents who experience this or similar views on a daily basis.

4.161 There will be long-distance views of a section of the Proposed Development, increasing the energy infrastructure's prominence within this view. Due to the elevation of the Proposed Development, it will be visible even at longer distances. However, the development will be viewed at a great distance from this area and will be imperceptible within this view. The vegetation on the west face of the hillside also further screens the development from view. The Proposed Development will result in a **Very Low** magnitude of visual change, with a resulting **Negligible** significance.

Summary of Visual Effects

Table 1.14 Summary of Visual Effects from representative viewpoint locations

Receptor	Visual Sensitivity	Magnitude of visual effects	Significance / quality of visual effects
Viewpoint 1	Medium / Low	Low	Minor / Negligible
Viewpoint 2	Medium / Low	Low	Minor
Viewpoint 3	High	High	Major – Moderate
Viewpoint 4	Medium / Low	Low	Minor

Viewpoint 5	Medium	Medium	Moderate
Viewpoint 6	Medium	Very Low	Negligible
Viewpoint 7	Medium	Very Low	Negligible
Viewpoint 8	Medium	Very Low	Negligible
Additional Viewpoint 1 (AVP1)	High	High	Major / Moderate
Additional Viewpoint 2 (AVP2)	High	Low	Minor / Moderate
Additional Viewpoint 3 (AVP3)	Medium	No Change	No Change
Additional Viewpoint 4 (AVP4)	High	Low	Minor / Moderate
Additional Viewpoint 5 (AVP5)	Medium	Medium	No Change
Additional Viewpoint 6 (AVP6)	High	Low	Minor / Negligible
Additional Viewpoint 7 (AVP7)	Medium	No Change	No Change
Additional Viewpoint 8 (AVP8)	High	Very Low	Negligible

CUMULATIVE EFFECTS

4.162 Cumulative effects are defined in GLVIA3 as:

"Result from additional changes to the landscape or visual amenity caused by the Development in conjunction with other developments (associated with or separate to it), actions that occurred in the past, present or are likely to occur in the foreseeable future".

4.163 Cumulative landscape effects may occur to the landscape components e.g., loss of hedgerows or landscape characteristics by introducing new features.

4.164 Cumulative visual effects may occur where one development is viewed in combination (static views of up to 90-degree arc), successively (turning around on the spot) or sequentially where the user moves along routes, roads or paths with one or more development evident.

4.165 Developments that are subject to a valid planning application are included within such an assessment, where specific circumstances indicate there is potential for cumulative effects to occur, with progressively decreasing emphasis placed on those which are less certain to proceed.

4.166 Typically, operational and consented developments are treated as being part of the landscape and visual baseline. i.e., it is assumed that consented schemes will be built except for occasional exceptions where there is good reason to assume that they will not be constructed. Schemes that are at earlier stages such as scoping are not usually considered within such an assessment unless specifically requested by the Planning Authority.

4.167 A search of planning portals/interactive maps and applications was undertaken of any existing, approved or proposed (in planning) developments within the agreed 5km study area, as of the 28th of February 2025 which could have potential notable cumulative landscape or visual effects with the Proposed Development.

4.168 The assessment found that the introduction of the Proposed Development within this landscape will result in additional industrial and electrical infrastructure located within this LCA. The cumulative effects on the LCA are deemed to be moderate/minor due to the presence of existing features of a similar nature across the study area.

4.169 However, the Proposed Development, due to its strategic placement near existing electrical infrastructure, is expected to minimally impact the visual landscape. The solar panels are designed to be low-lying, further reducing their profile and minimizing visibility from most vantage points. While the Proposed Solar Array will introduce a new element into the viewshed, its visibility will be limited or fleeting, owing to these thoughtful placement and design choices. It is anticipated that the solar array will seamlessly integrate into the existing landscape, recognized only to a minor degree as a new visual element. This design approach

helps in preserving the natural aesthetic of the area while contributing to sustainable energy goals.

Table 4.15: Key Planning Applications within 5km of the Proposed Development

Planning Reference and site location	Type of Development	Planning Application	Planning Status	Distance from Application Site
DNS/3272053 23/0427/DNS/ 22/1272/DNS	Wind	Construct and operate up to 14 wind turbines and associated infrastructure	Granted Permission	10m East
23/0116/DNS	Solar Farm	Construct and operate a Solar Photovoltaic (PV) Farm - Development of National Significance	Granted Permission	2.754km East
16/0385/FULL	Wind Farm	Erect a single wind turbine of up to 77m tip height and associated infrastructure	Granted Permission	1.7km Northeast
DNS 3280378 22/1129/DNS	Wind Farm	To construct and operate a wind farm consisting of up to 7 wind turbines and associated infrastructure (Development of National Significance)	Granted Permission	4.6km West
15/1635/FUL	Wind Farm	Erection of two wind turbines with a tip maximum height of 125m, associated infrastructure, transformer cabin and access track, including access via the public highway and across Cribin Ddu Farm and Llwyncelyn Farm	Granted Permission	4.4km North West
22/1128/DNS	Solar Farm	Solar park, access and associated development (Development of National Significance)	Granted Permission	2.7km South

CONCLUSIONS

Construction Effects

4.170 Landscape and visual effects and their significance at construction stage will be temporarily adverse and will result in:

- Likely effects to landscape character or visual amenity within the core study area of 5km as a result of the visibility of construction activities such as, cranes, the movement of construction vehicles along local
- Effects of temporary site infrastructure such as site traffic and temporary site construction compounds; and
- Likely direct effects arising from construction of the development will be confined to the immediate site of the Proposed Development.

4.171 The primary landscape and visual effects during the construction stage will be experienced in the vicinity of the Site, from locations with open or partial views. Construction works may be visible beyond the 5km core study area in views at elevation towards the hill side location of the site. While discernible, the construction effects in long-distance views are not considered significant as they will form part of a wide panoramic view in which they form one visible component of many.

Operational Effects

Landscape Effects

4.172 The introduction of the Proposed Development will locally alter the existing agricultural use of the Application Site to a landscape comprising a solar farm with associated infrastructure, mixed agricultural land use and new hedgerow and tree planting. During operation, the Proposed Development will initially have a Moderate adverse landscape effect on the characteristics of the Application Site. Although mitigation planting will help contain the lower elevations of the Proposed Development.

4.173 The Proposed Solar Farm will directly affect LCA 37 South Wales Valley and will result in a solar farm located over 70.34 hectares of this landscape. This will result in a localised direct Moderate adverse landscape effect within c. 2km and a Minor adverse effect across the wider extents of these landscapes.

4.174 In terms of designated landscapes, the introduction of the Proposed Development will indirectly affect a small area of the eastern part of a Special Landscape Area, however, through the TV and on-site fieldwork, visibility from within this area is extremely limited, as shown across the visual assessment. It is considered unlikely that the Special Qualities of the Special Landscape Area will be compromised by the introduction of the Proposed Development.

Visual Effects

4.175 Potential views of the Proposed Development will be experienced by a number of local receptors including some of the nearest residential receptors and passing transient receptors on recreational routes and minor roads. Longer distance views will largely be limited to a small part of the overall Proposed Development experienced from higher elevations to the west, north and south.

4.176 The lower elevations of the solar farm and associated structures will be partly contained by the mix of hedgerows and trees within the boundaries of the Application Site and surrounding farmland, along with screening by built elements and local topographical variations. The higher elevations of the Proposed Development will be evident in longer distance views mainly to the south, west, southeast and southwest. The potential changes to the existing views of these receptors have been determined from the viewpoints in the above appraisal.

4.177 The appraisal identifies operational Major/Moderate adverse visual effects from the PRoW network within the Application Site. However, the significance is fleeting, as quickly the views are screened given the nature of the topography and existing screening, quickly screening visibility in its entity. Moderate adverse visual effects are identified from the recreational and residential receptors within close proximity to the site, however, beyond a distance of c. 1km where the Proposed Development is evident in views visual effects largely reduce to Minor adverse effects.

Cumulative

4.178 Cumulative effects related to the proposed development are primarily confined to localized interactions with existing infrastructure, specifically the pylon lines, and the presence of other solar farms in the vicinity. As outlined in the visual assessment, these interactions are not extensive but are concentrated within a specific geographical area. The visibility of the development itself is localized, and as one progresses through the study area, natural and architectural screening elements quickly diminish the visual presence of the solar arrays. This ensures that while the development contributes to the cumulative landscape changes, its impact remains limited and is mitigated by the surrounding environment and design considerations. The assessment confirms that the development, although adding to the cumulative effects, does so in a manner that is visually and spatially contained. Minor adverse

to no change cumulative visual effects are anticipated for the majority of visual receptors considered in the appraisal.

Mitigation

4.179 Mitigation measures are proposed to help reduce any potential landscape and visual effects. The existing tress and hedgerows around the Application Site will be retained as far as is practicable. Trees will be introduced along sections of the north-western and southwestern boundaries. Hedgerows and infill planting will also be introduced along open sections of the boundaries to help screen inward views and provide additional biodiversity opportunities. While the mitigation screens aspects of the development, it also is mindful not to screen views of the surrounding landscape, therefore it has been designed to allow the receptor to see over and not limit views to many scenic aspects of this landscape. Mitigation measures can be found in Figure 4.22a – Figure 4.22e of Appendix 4A.

4.180 As the mitigation planting becomes established it will help contain elements of the Proposed Development at lower elevation.

Residual Effects

4.181 Given the scale and location of the Proposed Development, the main landscape and visual mitigation measures focus on mitigation planting to screen views towards the Proposed Development. Hence measures will be implemented immediately and come into effect following the completion of construction works. The existing vegetation, while retained (i.e. it is off-site and outside the control of the applicant), will screen the lower parts of the existing and Proposed Development.

4.182 Considering the possible often localised nature of available views, landscape mitigation will further reduce landscape and visual effects. There may be a slight increase in visual effects during the winter season due to the absence of foliage. The majority of differences in visibility will be experienced locally within an approximate 250m radius, depending on the pruning status of intervening hedgerows as well as the amount of other intervening vegetation. Overall, the difference in visibility is considered not material.

4.183 In considering the nature of residual effects, it should be recognized that large scale renewable energy projects are likely to generate significant effects on landscape character and visual amenity. In particular, a change in landscape character at a local level is inevitable as a result of the change in land-use and the introduction of solar panels. Visual effects from the Proposed Development at specific locations have been mitigated as a result of measures within the Landscape and Ecological Management Plan, with significant effects reducing in nature as mitigation is established.

APPENDICES

Appendix 4A - Figures:

- Figure 4.1a – LANDMAP Visual and Sensory Aspect Areas
- Figure 4.1b – LANDMAP Visual and Sensory Overall Rating
- Figure 4.2 – Landscape Designations
- Figure 4.3 – ZTV and Viewpoint Locations
- Figure 4.4 – VP01 & VP02
- Figure 4.5 – VP03 & VP04
- Figure 4.6 – VP05 & VP06
- Figure 4.7 – VP07 & VP08
- Figure 4.8 – AVP1 & AVP2
- Figure 4.9 – AVP3 & AVP4
- Figure 4.10– AVP5 & AVP6
- Figure 4.11– AVP7 & AVP8
- Figure 4.12– VP01 Photomontage
- Figure 4.13 – VP02 Photomontage
- Figure 4.14 – VP03 Photomontage
- Figure 4.15 – VP04 Photomontage
- Figure 4.16 – AVP1 Photomontage
- Figure 4.17 – AVP2 Photomontage

- Figure 4.18 – AVP4 Photomontage
- Figure 4.19 – AVP6 Photomontage
- Figure 4.20 – AVP7 Photomontage
- Figure 4.21 – AVP8 Photomontage
- Figure 4.22a – LEMP
- Figure 4.22b – LEMP
- Figure 4.22c – LEMP
- Figure 4.22d – LEMP
- Figure 4.22e – LEMP

Appendix 4B – Landscape and Visual Impact Methodology