



Pennant Walters

Glanllynfi Garth Wind Farm

Draft Design and Access Statement



August 2026

Report for

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Document revisions

No.	Details	Date
1	Draft DAS	August 2026

Executive summary

Purpose of this report

This report has been produced for the purpose of describing the approach taken by the Applicant (Pennant Walters) to the design of the Proposed Development which is a wind farm for up to eight turbines located across two parcels of land to the east of Maesteg, on land located within the Bridgend County Borough Council (BCBC) area. The access to the wind farm will be achieved via Forestry access tracks which pass through Rhondda Cynon Taf County Borough Council (RCTCBC) and Neath Port Talbot Council (NPTC).

The report identifies relevant planning policy relating both to design and to access at the national and local level. It explains the considerations given by the Applicant when selecting the site and how the design has evolved in response to environmental and technical surveys, guided by appropriate planning policy.

The Proposed Development is then assessed against the standards for Good Design which are contained in Planning Policy Wales (PPW) and which are consistent with the Welsh Government's guidance for Design and Access Statements (DAS).

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1. Introduction

1.1 Background

- 1.1.1 This DAS has been prepared by WSP UK Ltd (WSP) on behalf of Pennant Walters Ltd (the Applicant). It forms part of a suite of documents prepared to support the pre-application consultation process ahead of the submission of a Development of National Significance (DNS) application to Planning and Environment Decisions Wales (PEDW) on behalf of the Welsh Government.
- 1.1.2 The DAS supports a planning application for the development of up to eight turbines (with a maximum blade tip height of 180m) and associated infrastructure including access tracks and substation (the Proposed Development). The Proposed Development would take place across two land parcels comprised of semi-improved grassland, marshy grassland and heathland. The location of the two land parcels is identified below:
- Pwll-yr-lwrch (hereafter ‘Northern Array’) – Central Grid Reference SS 87102 92887; and
 - Cynhordy (hereafter ‘Southern Array’) — Central Grid Reference SS 88988 89854.
- 1.1.3 Combined, the Northern and Southern Array are known as the ‘Wind Farm Site’. The wind farm site lies within the Bridgend County Borough Council (BCBC) administrative area with the application site boundary also including the access tracks which pass through Rhondda Cynon Taf County Borough Council (RCTCBC) and Neath Port Talbot Council (NPTC). The application will be submitted to Welsh Government, via Planning and Environmental Decisions Wales (PEDW), to be considered as a Development of National Significance (DNS).
- 1.1.4 This draft DAS should be read in conjunction with the accompanying draft **Planning Statement**, which sets out the planning policy context for how the application’s design and access issues have been taken into account, and the draft **Environmental Statement** (ES), which sets out an assessment of the likely significant environmental effects of the Proposed Development.
- 1.1.5 This DAS has been prepared in line with the Planning (Wales) Act 2015 which sets out the requirements regarding the contents of a DAS and reflects the objectives of good design set out in PPW (Welsh Government, 2024)¹ and Technical Advice Note 12: Design (TAN 12) (Welsh Government, 2016)². The DAS is informed by the guidance in Design and Access Statements in Wales (Welsh Government, 2017)³.

1.2 Purpose and Structure of the Report

- 1.2.1 The DAS explains the design rationale for the wind farm, providing an explanation of the design principles and concepts that have informed the Proposed Development (as described in draft **ES Chapter 3: Scheme Need, Alternatives and Iterative Design Process** and draft **ES Chapter 4: Description of the Proposed Development** of the

¹ Welsh Government (2024) Planning Policy Wales Edition 12. Available online: <https://www.gov.wales/sites/default/files/publications/2024-07/planning-policy-wales-edition-12.pdf> (Accessed July 2026).

² Welsh Government (2016) Technical Advice Note 12 – Design. Available online: <https://www.gov.wales/sites/default/files/publications/2018-09/tan12-design.pdf> (Accessed July 2026).

³ Welsh Government (2017) Design and Access Statements in Wales. Available online: <https://www.gov.wales/sites/default/files/publications/2018-09/design-and-access-statements.pdf> (Accessed July 2026).

ES), and how access issues have been taken into consideration. The DAS is structured as follows:

- **Section 1: Introduction** – provides background information on Design and Access Statements, the approach to design, and renewable energy policy background;
- **Section 2: Summary of the Proposal** – provides a summary of the wind farm site location, Proposed Development, and the DNS regime;
- **Section 3: Vision** – sets out the vision for the Proposed Development;
- **Section 4: Wind Farm Site and Relevant Planning Policy** – sets out the wind farm site's context and the relevant planning policy;
- **Section 5: Design Development** – summarises the factors that were considered in the design process; and
- **Section 6: The Proposal** – shows how the Proposed Development responds to PPW's requirements for good design and highlights how the design process has produced an appropriate scheme in relation to the planning policy context.

1.3 Approach to the Design

- 1.3.1 The design process involved in formulating the layout of the Proposed Development has been led by a combination of engineering requirements and environmental considerations in order to produce an appropriate layout in terms of function and energy yield, whilst trying to avoid or minimise environmental effects.
- 1.3.2 The Proposed Development has been developed with environmental considerations at the forefront of both site selection and design. This is demonstrated through the site selection process which ensures that technical, environmental and economic criteria are considered. Other factors that have guided the site design have included planning policy and the presence of existing infrastructure.
- 1.3.3 A detailed understanding of the existing environment (including land use, infrastructure, ecology, hydrology, ornithology, noise and archaeology) helped to ensure a holistic approach to the design of the wind farm. The design has also been informed by an Environmental Impact Assessment (EIA) which has considered the likely significant effects on a range of environmental receptors. The findings of the EIA are contained in the draft **Environmental Statement** and where relevant this DAS refers to the findings of the ES.

1.4 Onshore Wind and National Policy

- 1.4.1 The need to address climate change is embedded in law. The Climate Change Act 2008 (as amended) requires the UK to achieve a 100% reduction in greenhouse gas (GHG) emissions, otherwise known as net zero, in 2050. Welsh Ministers are bound to deliver net zero in 2050 under the Environment (Wales) Act 2016, which also requires Welsh Ministers to produce a plan to show how Wales will meet the reductions in GHG required for each five-year period to 2050.
- 1.4.2 In September 2017 the Welsh Government Cabinet Secretary for Environment and Rural Affairs announced to the Welsh Assembly that it was setting a target of generating 70% of Wales' electricity consumption from renewable energy by 2030 and a target for one

Gigawatt of renewable electricity capacity in Wales to be locally owned by 2030⁴. This target is embedded in PPW and Future Wales: The National Plan 2040⁵ (which is discussed in more depth in the following section). In January 2023 the Welsh Government (Welsh Government, 2023a)⁶ announced an updated target to meet 100% of its electricity needs from renewable sources by 2035 and to achieve 1.5GW of renewable energy capacity within local ownership by 2035. This has now been adopted (Welsh Government, 2023b)⁷.

- 1.4.3 The Energy Generation & Use in Wales First Combined Edition⁸ sets out the latest data on renewable energy generation and use. It sets out that 7.9TWh of energy generated in Wales was from renewables in 2024. Renewable electricity generation supplied 36% of total generation (compared to 34% in 2023). Wales had 1,285 MW of onshore wind capacity, which is greater than that in 2023 (1,267MW). Onshore wind provided equivalent to 70% of renewable output generation capacity in Wales. In 2024, 54% of all electricity consumed in Wales originated from renewable sources, showing a marginal increase from the previous year (53%) but still substantially below the 2035, 100% target.
- 1.4.4 The Welsh Government recognises the importance of wind power in meeting the renewable targets for 2030 and to ensure that the necessary carbon reductions are achieved on the path to net zero in 2050.
- 1.4.5 As the effects of climate change continue to emerge, the UK Government has encouraged greater production of renewable energy within the UK. This can be seen through the production of documents such as the Powering Up Britain – March 2023 Energy Security Secretary Statements⁹, Clean Power 2030 Action Plan¹⁰ and the Overarching National Policy Statement for Energy (EN-1)¹¹ all of which are seeking to encourage renewable energy development within the UK.
- 1.4.6 The Carbon Budget Delivery Plan (March 2023)¹² identified that the UK would not be able to meet the requirements of the Sixth Carbon Budget, barely missing its target by 3% (reaching 97% of the required carbon savings by 2037) (page 15).. UK Government is however confident that the budget can be met through a combination of the quantified and unquantified policies identified. These policies include those designed to decarbonise power generation.

⁴ Welsh Government (2020). Lesley Griffiths high on ambition for clean energy. (Online) Available at: <http://www.assembly.wales/en/bus-home/pages/rop.aspx?meetingid=4644&assembly=5&c=Record%20of%20Proceedings#C494225> (Accessed July 2026).

⁵ Welsh Government (2021) Future Wales: the national plan 2040. (Online) Available at: <https://gov.wales/future-wales-national-plan-2040> (Accessed July 2026).

⁶ Welsh Government (2023a) Climate Change Minister - Wales aims to meet 100% of its electricity needs from renewable sources by 2035 (Online) Available at: <https://www.gov.wales/wales-aims-meet-100-its-electricity-needs-renewable-sources-2035> (Accessed July 2026).

⁷ Welsh Government (2023b) Consultation Document: Review of Wales' Renewable Energy Targets (Online) Available at: https://www.gov.wales/sites/default/files/consultations/2023-01/consultation-document-review-of-renewable-energy-targets_0.pdf (Accessed July 2026).

⁸ Welsh Government (2026) Energy Generation & Use in Wales First Combined Edition. (Online) Available at: Energy Generation & Use in Wales: first combined edition (Accessed July 2026).

⁹ HM Government (2023). Shapps sets out plans to drive multi billion pound investment in energy revolution. (Online) Available at: [Shapps sets out plans to drive multi billion pound investment in energy revolution - GOV.UK \(www.gov.uk\)](https://www.gov.uk/shapps-sets-out-plans-to-drive-multi-billion-pound-investment-in-energy-revolution). (Accessed July 2026).

¹⁰ Welsh Government (2024). Clean Power 2030 Action Plan. (Online) Available at: [Clean Power 2030 Action Plan - GOV.UK](https://gov.wales/clean-power-2030-action-plan) (Accessed June 2026).

¹¹ HM Government (2025). Overarching National Policy Statement for Energy (EN-1). (Online) Available at: <https://assets.publishing.service.gov.uk/media/695d1015f41883f4e50ed9ab/overarching-national-policy-statement-for-energy-en-1-web-accessible.pdf> (Access July 2026).

¹² HM Government (2023). Carbon Budget Delivery Plan. (Online) Available at: [Carbon Budget Delivery Plan \(publishing.service.gov.uk\)](https://assets.publishing.service.gov.uk/media/695d1015f41883f4e50ed9ab/carbon-budget-delivery-plan.pdf) (Accessed July 2026).

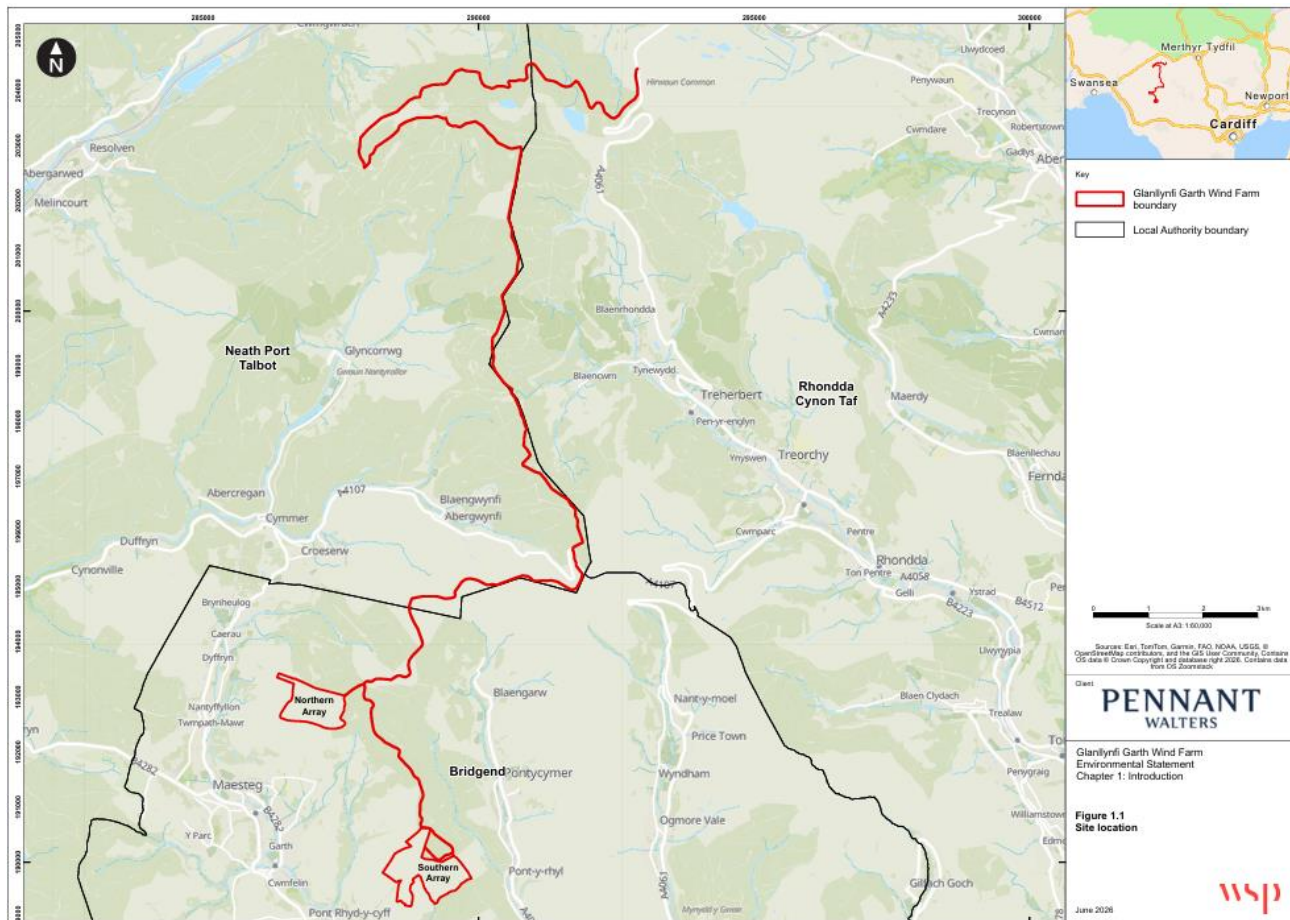
- 1.4.7 In addition to the mitigation of climate change, renewable energy also provides much needed energy security to the UK, which has become more of a pressing issue due to climate change, international politics and resource supply as identified within the British Energy Security Strategy (2022)¹³.

¹³ HM Government (2022). British Energy Security Strategy. (Online). Available at: [British energy security strategy - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/106904/bess-2022.pdf) (Accessed July 2026).

2. Summary of the Proposed Development

2.1 The location of the Proposed Glanllynfi Garth Wind Farm

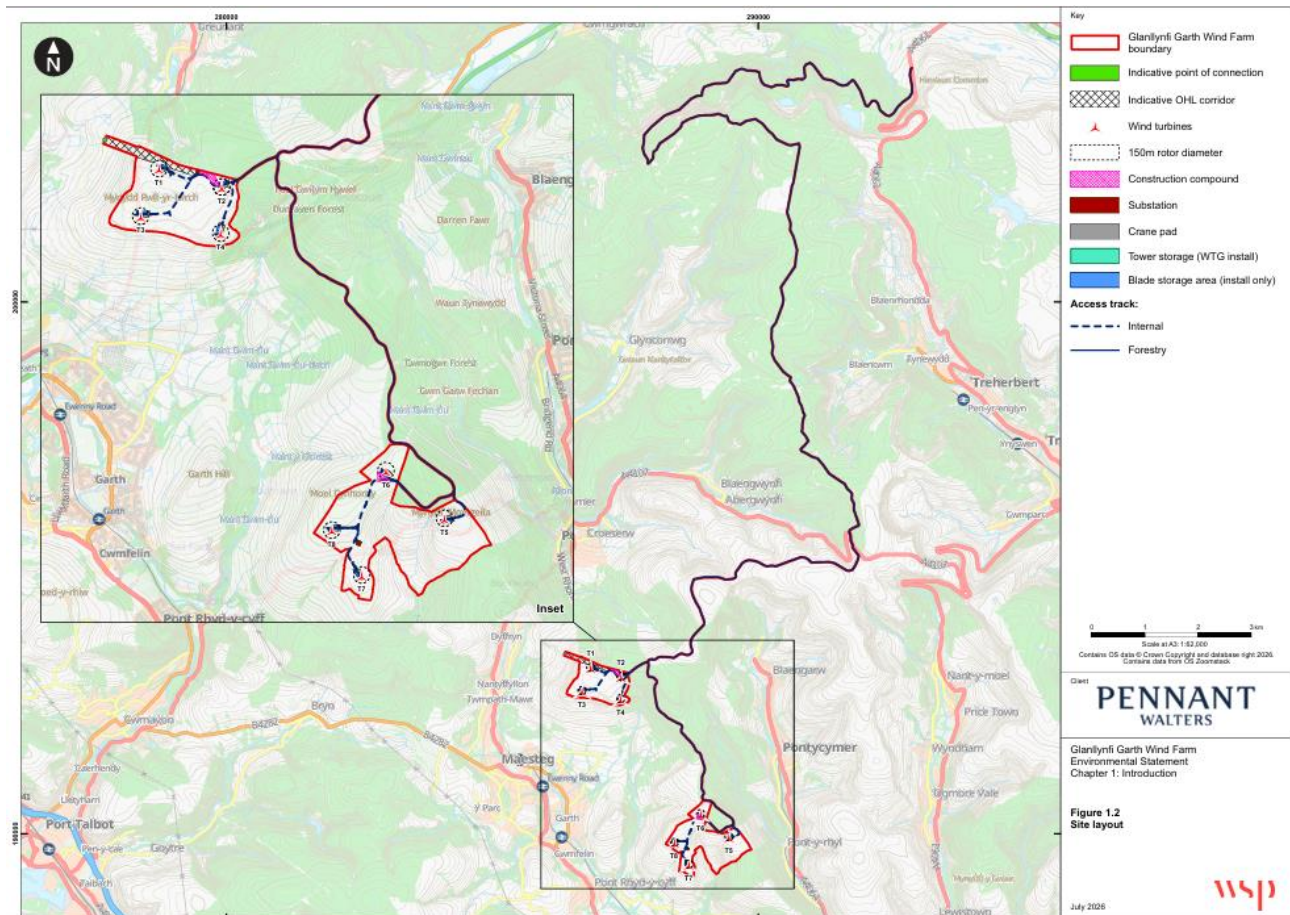
- 2.1.1 The Proposed Development would take place across two land parcels comprised of semi-improved grassland, marshy grassland and heathland. The location of the two land parcels is identified below:
- Pwll-yr-lwrch (hereafter 'Northern Array') – Central Grid Reference SS 87102 92887; and
 - Cynhordy (hereafter 'Southern Array') — Central Grid Reference SS 88988 89854.
- 2.1.2 The wind farm site lies within BCBC administrative area with the access tracks passing through RCTCBC and NPTC. Together, these areas form the planning application site boundary.
- 2.1.3 The nearest settlement is Maesteg, the outskirts of which are approximately 1km to the west of the Northern Array and 1.5km west of the Southern Array. There are a number of isolated residential properties located with 1km of each parcel. Dunraven Forest and Cwmogwr Forest are located immediately adjacent to the eastern boundary of the Northern Array and Southern Array, respectively. The forest areas contain a network of tracks and trails. The Proposed Development will utilise these tracks (hereafter 'Forestry access track') to connect the land parcels (Northern and Southern Array) and provide access to the wider public highway network..
- 2.1.4 The planning application site location is shown in **ES Figure 1.1 Site Location** and is reproduced in **Figure 2.1** below.

Figure 2.1 Site Location


2.2 The Proposed Development

- 2.2.1 The Proposed Development is to construct and operate a wind farm consisting of eight wind turbines, each with a three-bladed rotator with a diameter of up to 150m, a hub height of 105m and maximum height to blade tip of 180m.
- 2.2.2 The wind farm will be designed with an operational life of 30 years. At the end of this period the Applicant has three options; to decommission the wind farm and dismantle and remove the turbines; to apply for an extension to the operating period using existing equipment; or apply to install new equipment on the Wind Farm Site. For the purposes of this assessment, it is assumed that the wind farm will be decommissioned.
- 2.2.3 The Proposed Development will also include:
- Two substations and transformer housing;
 - Two temporary construction compounds;
 - Two temporary site offices;
 - Crane pads and cabling;
 - Access track construction; and
 - Overhead line connection (via wooden pole) to agreed Point of Connection (POC) with National Grid Electricity Distribution (NGED)
- 2.2.4 The layout of the wind farm is contained in **ES Figure 1.2 Site Layout** and reproduced in **Figure 2.2** below.

Figure 2.2 Site Layout



2.3 Developments of National Significance

- 2.3.1 Due to the potential generating capacity being over 10MW the Proposed Development constitutes a DNS. The DNS category was established under the Planning (Wales) Act 2015 to ensure timely decision making on applications of national significance for Wales. As a DNS the application for development is submitted to the Welsh Government for determination by PEDW rather than being submitted to the local planning authority. Following submission, a Planning Inspector will be appointed who will consider the application and supporting evidence before recommending to Welsh Ministers whether or not planning permission should be granted for the application.

3. Objectives

3.1 The Objectives for the Proposed Development

- 3.1.1 Underpinning the design of the Proposed Development is the intention to provide a wind farm that will provide a source of renewable energy to support the energy needs of Wales without having significant effects on the environment. This means that the Proposed Development has been located and designed to:
- ensure carbon emissions are reduced;
 - provide the most appropriate locations for wind turbines to ensure that the maximum amount of wind energy can be utilised;
 - ensure that visual impacts on the surrounding area are minimised;
 - ensure that the public access is maintained, in a safe manner; and
 - ensure that effects upon residential and the environmental amenity of features i are acceptable.
- 3.1.2 The design process reflects the vision for the Proposed Development.

4. Site and Relevant Planning Policy

4.1 Location and Context

- 4.1.1 The Wind Farm Site is located within BCBC. The nearest settlement is Maesteg, the outskirts of which are approximately 1km to the west of the Northern Array and 1.5km west of the Southern Array. There are a number of isolated residential properties located within 1km of each parcel.
- 4.1.2 Dunraven Forest and Cwmogwr Forest are located immediately adjacent to the eastern boundary of the Northern Array and Southern Array, respectively. The forest areas contain a network of tracks and trails including those which will be used by the Proposed Development to connect the land parcels (Northern and Southern Array) and provide access to the wider public highway network.
- 4.1.3 Public access across the Wind Farm Site is provided via footpath MAE/4/2 which adjoins the eastern boundary of the Northern Array and footpath MAE/59/1 crosses the northwestern corner of the Northern Array. Within the Southern Array, bridleway GWV/30/1 traverses the western part of the land parcel and Footpath GWV/29/1 crosses the southeastern part of the Southern Array and continues along the boundary. Footpath GWV/36/2 also runs along the northwestern part of the Southern Array. Further details are set out in draft **ES Chapter 12: Traffic and transport** and draft **ES Chapter 15: Socio-economics**.
- 4.1.4 An extensive number of PRoW across the BCBC, NPTC and RCTCBC areas interact with the Forestry access track.

4.2 The Development Plan

Future Wales

- 4.2.1 Future Wales: The National Plan 2040 (Future Wales from here on) was adopted in February 2021. Future Wales sets out national policy and is the highest tier of the development plan against which DNS applications are assessed. Future Wales includes a range of high-level policies which are intended to shape local authority development plans and inform decision making on applications for DNS.
- 4.2.2 There are two specific policies on renewable and low carbon energy:
- **Policy 17 – Renewable and Low Carbon Energy and Associated Infrastructure** sets out the Welsh Government's support for the development of all renewable and low carbon technologies in principle. It states 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 target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency. It has already modelled the likely impact on the landscape of wind turbines in Pre-assessed Areas and has found them to be capable of accommodating development in an acceptable way. The policy sets out the presumption in favour of large-scale wind within the Pre-assessed Areas but also outside, subject to performance against Policy 18. The Wind Farm Site is

predominantly located in a Pre-assessed Area (PAA) for wind (6 out of 8 turbines); and

- **Policy 18 – Renewable and Low Carbon Energy Developments of National Significance** states sets out a range of criteria that developments must meet including consideration of landscape effects with specific regard to national Parks and AONB and ensuring no unacceptable adverse: visual impacts on nearby communities; impacts on heritage assets; impacts by virtue of shadow flicker; and impacts on the transport network. The supporting text of Policy states that *“Irrespective of location or scale, the design and micro-siting of proposals must seek to minimise the landscape and visual impact, particularly those in close proximity to homes and tourism receptors.”*

4.3 Local Development Plan

- 4.3.1 The Proposed Development is predominantly located within the administrative boundary of BCBC. However, access to the Northern and Southern Array will be achieved via existing access tracks which serve operational wind farms in the area and traverse the RCTCBC and NPTC authority areas. Accordingly, relevant planning policy from all three local planning authority areas is set out below.

Replacement Bridgend Local Development Plan 2018 to 2033

- 4.3.2 BCBC adopted its RLDP in March 2024, which sets policies to guide development up to 2033 and supersedes and replaces the BCBC LDP 2006-2021. The policies of relevance to the Proposed Development are identified below in **Table 4.1**.

Table 4.1 Replacement Bridgend Local Development Plan 2018 to 2033

Adopted LDP Policy	Policy Summary
<u>Overarching Policies</u>	
SP1: Regeneration and Sustainable Growth Strategy	Requires the proposal to demonstrate alignment with the Plan’s strategic spatial approach, sustainability objectives and infrastructure led principles.
SP3: Good Design and Sustainable Placemaking	Requires the development to contribute in the creation of high quality, attractive, sustainable places that support active and healthy live and enhance the community in which they are located, whilst having full regard to the natural, historic and built environment.
SP4: Mitigating the Impact of Climate Change	Policy SP4 requires all development proposals to contribute positively to climate change mitigation and adaption. This includes promoting sustainable transport, minimising energy demand, supporting renewable and low carbon energy generation, using resources more efficiently, enhancing biodiversity resilience and avoiding flood risk. Proposals must clearly demonstrate how these measures are incorporated into their design and delivery.
SP5: Sustainable Transport and Accessibility	Policy SP5 requires development to be located and designed in a way that minimises the need to travel, reduces dependency on the private car and enables sustainable access to employment, education, local services and community facilities. Development must also be supported by appropriate transport measures and infrastructure.

PLA9: Development Affecting Public Rights of Way	Requires development to link with and seek to minimise impacts on the PROW network. The policy states that any adverse impacts on the character, safety, enjoyment and convenient use of a PROW must be mitigated.
SP10: Infrastructure	Requires proposal to demonstrate that it is supported by adequate infrastructure capacity or will contribute to the timely provision of necessary infrastructure required to make the development acceptable. This includes ensuring that impacts on transport, utilities, education, community facilities, drainage and other essential services are appropriately assessed and mitigated.
SP13: Renewable and Low Carbon Energy Development	The policy supports renewable and low carbon energy development where proposals avoid unacceptable environmental, landscape, transport and amenity impacts, provide for restoration and grid connection, and do not give rise to cumulative effects. It identifies specific Local Search Areas as suitable for wind and solar development, and seeks to safeguard these areas from development that would prejudice their renewable energy potential, including alignment with Future Wales Pre-Assessed Areas for Wind Energy.
ENT12: Development in Mineral Safeguarding Zones	Policy ENT12 seeks to safeguard mineral resources by ensuring that development within mineral safeguarding areas does not unnecessarily sterilise minerals. Proposals must demonstrate that extraction is either not viable, would not be prejudiced by the development, or that any temporary development can be restored within the timeframe required for future mineral working.
SP17: Conservation and Enhancement of the Natural Environment	Policy SP17 seeks to protect and enhance the natural environment by resisting development that would harm landscape character, biodiversity, natural resources or the integrity of the countryside. It affords strong protection to internationally and nationally designated sites, requiring Habitats Regulations Assessment where relevant, and permits development only where it can be demonstrated that there would be no adverse effects on designated sites or environmental quality.
DNP1: Development in the Countryside	Policy DNP1 seeks to conserve and enhance the countryside by maintaining a presumption against development outside settlement boundaries, except for specified uses including renewable energy. Acceptable development must be sustainable, respect natural and cultural heritage, and prioritise the re-use of existing buildings and previously developed land where possible.
DNP5: Local and Regional Nature Conservation Sites	Policy DNP5 seeks to protect local and regional nature conservation sites by resisting development that would harm their ecological or geological value, unless the benefits outweigh the harm or it can be appropriately mitigated or compensated. Development must be compatible with the site's conservation interest and support its ongoing management and educational role.
DNP6: Biodiversity, Ecological Networks, Habitats and Species	Policy DNP6 requires development to deliver a net benefit for biodiversity, maintain and enhance ecological networks, and support ecosystem resilience. Proposals must retain and enhance green infrastructure where possible, avoid harm to habitats and species, and minimise impacts through design. Where harm is unavoidable, it must be justified, mitigated, or compensated to ensure no loss—and where possible a net gain—in biodiversity, supported by appropriate ecological assessment.

DNP7: Trees, Hedgerows and Development

This policy requires proposals to demonstrate that they will not adversely affect trees, woodlands or hedgerows of amenity, ecological or cultural value, or those providing important ecosystem services. If any trees are affected the proposals must be supported by a BS 5837 compliant assessment.

Where tree loss is unavoidable, a replacement planting and aftercare scheme must be agreed prior to development.

DNP8: Green Infrastructure

Policy DNP8 requires development to integrate with, protect and enhance existing green infrastructure, improving its extent, quality, connectivity and multifunctionality. Where loss is unavoidable it is advised that appropriate mitigation and compensation measures must be provided.

The policy also requires all major developments to be supported by a Green Infrastructure Assessment.

DNP9: Natural Resource Protection and Public Health

Policy DNP9 seeks to protect natural resources and public health by ensuring development does not cause or worsen unacceptable risks from pollution, contamination, land instability or other environmental hazards. Proposals must demonstrate that impacts can be avoided or mitigated, with particular regard to sensitive uses and flood risks, supported by appropriate assessments where required.

SP18: Conservation of Historic Environment

Requires the proposals to demonstrate that they protect, conserve and, where appropriate, enhance the significance of heritage assets and their settings, with a strong presumption in favour of their preservation.

Rhondda Cynon Taf Local Development Plan 2006-2021

- 4.3.3 The Rhondda Cynon Taf Local Development Plan 2006-2021 (RCT LDP) is the statutory planning document that sets out the overall strategy for land use and development across the Country Borough over a 15-year period. It identifies areas suitable for development as well as those requiring protection and establishes a comprehensive policy framework and site-specific allocations to guide different types of development. Adopted in March 2011, the LDP provides the basis for determining planning applications, ensuring that growth is managed in a planned, sustainable and coordinated manner in line with local objectives and national planning policy.
- 4.3.4 The Forestry access track for the Proposed Development traverses partly through RCTBC and within its Northern Strategy Area. Relevant policies to the proposed access track are listed below in **Table 4.2**:

Table 4.2 Rhondda Cynon Taf Local Development 2006 – 2021 (RCT LDP)

Adopted LDP Policy	Policy Summary
CS1: Development in the North	Policy CS1 supports sustainable growth in the Northern Strategy Area by directing development to key settlements, promoting regeneration and reuse of brownfield land, improving accessibility and sustainable transport, supporting economic diversification, and protecting the natural and cultural environment, in order to reduce out-commuting and strengthen local communities.
CS10: Minerals	Policy CS10 seeks to safeguard mineral resources and ensure a sustainable supply by maintaining adequate reserves, protecting areas of known resources from sterilisation, and encouraging prior extraction

where appropriate. Proposals must incorporate restoration and aftercare, promote efficient use of resources, and ensure impacts on the environment, communities and transport networks are kept within acceptable limits.

AW5: New Development	Policy AW5 supports development where it is well-designed, protects local character and amenity, and is compatible with surrounding uses. Proposals must be accessible by sustainable transport, minimise reliance on the private car, and provide safe access and appropriate parking without causing unacceptable traffic impacts.
AW6: Design and Placemaking	Policy AW6 supports high-quality design and placemaking by requiring development to reflect local character, integrate landscaping, promote sustainable transport and connectivity, and make efficient use of land. Proposals must enhance the built and natural environment, support biodiversity, energy efficiency and water management, and demonstrate flexibility and functionality, with masterplans required for larger residential and commercial schemes.
AW7: Protection and Enhancement of the Built Environment	Policy AW7 seeks to protect and enhance the built and historic environment by requiring development affecting heritage or archaeological assets to preserve or enhance their character and appearance. It also resists the loss of open space and access routes unless there is clear surplus, appropriate replacement, or demonstrable enhancement of existing facilities.
AW8: Protection and Enhancement of the Natural Environment	Policy AW8 seeks to protect and enhance the natural environment by resisting development that would harm locally designated sites or features of ecological and landscape importance. Proposals must avoid or minimise impacts on biodiversity, ecological networks and natural resources, and demonstrate appropriate mitigation, compensation and ecological assessment where required, with support given to development that contributes to ecological network enhancement.
AW10: Environmental Protection and Public Health	Policy AW10 seeks to protect environmental quality and public health by resisting development that would cause unacceptable harm through pollution, contamination, land instability, flooding or other hazards. Proposals must demonstrate that any adverse impacts can be effectively avoided or mitigated to an acceptable level.
AW14: Safeguarding of Minerals	Policy AW14 seeks to safeguard mineral resources by resisting development that would unnecessarily sterilise or hinder their extraction. It protects identified areas of sand and gravel, sandstone, limestone and coal, and applies buffer zones around active quarries to ensure continued operation.
NSA25: Special Landscape Areas	Policy NSA25 identifies Special Landscape Areas and requires development within them to achieve high standards of design, siting and materials that are appropriate to, and conserve, the character and quality of the landscape.

The Neath Port Talbot Local Development Plan (LDP) 2011-2026

- 4.3.5 The Neath Port Talbot Local Development Plan (LDP) 2011–2026, adopted in January 2016, forms the statutory development plan for the County Borough and provides the framework for land use and development over the plan period. It establishes the strategic vision, objectives and spatial strategy for the area, alongside a comprehensive set of overarching, area-based and topic-specific policies and site allocations to guide

development. The LDP is used as the primary basis for determining planning applications and managing sustainable growth within Neath Port Talbot.

- 4.3.6 As stated above the Forestry access track for the Proposed Development traverses through NPTCBC. Relevant policies to the proposed access track are therefore listed below:

Table 4.3 Neath Port Talbot Local Development Plan (LDP) 2011-2026

Adopted LDP Policy	Policy Summary
SC1: Settlement Limits	Policy SC1 directs development to within defined settlement limits, where proposals proportionate to the settlement hierarchy are acceptable in principle. Outside settlement limits, development is strictly controlled and only permitted for specific uses, including infrastructure and energy generation, with any proposals required to be sustainably located, well-related to existing development, and appropriate in scale and form.
EN2: Special Landscape Areas	Policy EN2 designates Special Landscape Areas and seeks to protect their high landscape value by only permitting development where it can be demonstrated that there would be no significant adverse impact on their defining characteristics.
SP15: Biodiversity and Geodiversity	Policy SP15 seeks to protect, conserve and enhance biodiversity and geodiversity by safeguarding internationally, nationally, and locally designated sites, as well as important habitats, species and geological features. Development must avoid harm and support the long-term management of natural heritage assets.
EN6: Important Biodiversity and Geodiversity Sites	Policy EN6 seeks to protect important local and regional biodiversity and geodiversity sites by requiring development to conserve and enhance their natural heritage value. Proposals will only be permitted where impacts are acceptable or where there are no reasonable alternatives and the benefits outweigh the harm, with appropriate mitigation or compensation secured where necessary.
EN7: Important Natural Features	Policy EN7 seeks to protect important natural features, such as trees, hedgerows and watercourses, by requiring development to retain and integrate these features within design wherever possible. Where loss is unavoidable, appropriate mitigation measures must be provided to address impacts on biodiversity and landscape value.
EN8: Pollution and Land Stability	Policy EN8 requires development proposals to demonstrate that there would not be an unacceptable adverse effect on health, biodiversity and/or local amenity or expose people to unacceptable risk. Proposals must demonstrate that any adverse impacts can be effectively mitigated to an acceptable level.
SP16: Environment Protection	Policy SP16 seeks to protect and improve environmental quality by ensuring development does not cause significant adverse effects on air, water or land, prioritises brownfield land where appropriate, and avoids increasing exposure to pollution for existing or future occupants.
SP17: Minerals	Policy SP17 seeks to ensure a sustainable supply of minerals by safeguarding resources, maintaining adequate reserves, and promoting efficient use of materials. Development must minimise impacts on the environment and communities, with buffer zones used to protect sensitive uses from mineral operations.

M1: Development in Mineral Safeguarding Areas

Policy M1 seeks to safeguard mineral resources by controlling development within mineral safeguarding areas. Proposals will only be permitted where the resource is of no value, can be extracted prior to development, would not be prejudiced, or there is an overriding need, including ensuring temporary uses do not sterilise future mineral extraction.

M3: Development in Mineral Buffer Zones

Policy M3 seeks to protect mineral operations by restricting development within mineral buffer zones unless it can be demonstrated that mineral resources will not be sterilised and that the proposed development would not be adversely affected by ongoing mineral activities.

TR2: Design and Access of New Development

Policy TR2 requires development to ensure safe and efficient access, avoid adverse impacts on the highway network, and be accessible by a range of sustainable transport modes. Proposals must provide appropriate parking and servicing and be supported by Transport Assessments and Travel Plans where significant traffic generation is expected.

SP21: Built Environment and Historic Heritage

Policy SP21 seeks to conserve and enhance the built environment and historic heritage by promoting high-quality design, protecting key landscapes and gateways, and safeguarding designated heritage assets, including Conservation Areas, Listed Buildings, Scheduled Monuments and historic landscapes.

5. Design Evolution

5.1 Introduction

- 5.1.1 This section sets out the process undertaken to evolve the Proposed Development from site selection through to the onsite design options chosen. A full description of the approach to the selection of the site and to deciding on the specific design is set out in draft **ES Chapter 3: Scheme Need, Alternatives and Iterative Design Process**.

5.2 Wind Farm Site Selection

- 5.2.1 Pennant Walters as Applicant undertook a site selection process in 2019. The site selection was informed by national policy considerations and specific technical criteria relevant to the proposed use for wind turbines and landscape.
- 5.2.2 As set out in **Section 4.2**, Future Wales sets out a series of Pre-Assessed Areas (PAA) for Wind Energy within which the principle of developing large scale wind farms is supported. Although at the time of the site selection process the approach to PAA was emerging it was clear that the final version of Future Wales would include PAA. The Applicant undertook a high-level review of areas with a more detailed review of options that were within or close to PAAs.
- 5.2.3 The consideration of wind speed was a key consideration. Areas that did not have a mean annual average wind speed above 7 metres per second (considered by the Applicant to be the minimum required for a commercially viable scheme) in the ETSU NOABL database were excluded from further consideration. Those areas with wind speeds above 7m/s within the Bannau Brycheiniog National Park (BBNP), and any other national landscape designations were excluded from the search exercise consistent with emerging Future Wales planning policy.
- 5.2.4 Those areas within the former TAN 8 Area F that have already been developed for wind farms were also excluded. The results of the exercise identified what would become the eastern limb of PAA 10 and PAA9 as areas for potential wind farm development. This initially resulted in four sites being identified within PAA10, namely, Mynydd Carn-y-Cefn, Mynydd Llanhilleth, Trecelyn and Rhyswg, all of which have been taken forward as DNS applications by the Applicant.
- 5.2.5 Discussions with the land agents of relevant land holders in this region also indicated that land in and immediately adjoining PAA9 at Pwll-yr-Lwrch (Northern Array) and Cynhordy (Southern Array) was available to wind farm developers.
- 5.2.6 A summary of the main factors considered in the site selection and the performance of this Wind Farm site is set out in **Table 5.1**.

Table 5.1 Summary of Main Factors Considered in Site Selection

Assessment Category	Specific Factor	Site Performance
Wind resource	Average annual wind speed Wind direction	7m/s Predominantly southwest

Assessment Category	Specific Factor	Site Performance
Electronic Infrastructure	Proximity of transmission lines	66kv sufficiently close to each parcel.
	Proximity of grid connection points	Within the Southern Array and immediately adjacent to the Northern Array.
Land Value	Land ownership	Willingness of landowner.
	Ecological value	Low/moderate – not within any statutory designations.
	Archaeological value	Low/moderate – not within any statutory designations.
	Landscape value (and designations)	Predominantly within PAA 9 but outside any sensitive landscape designations; Outside statutory designations and sufficiently distant from Brecon Beacons National Park.
Land Form	Size of site, useable area	Predominantly flat ridge areas.
	Steepness of terrain	Plateau on steep sided banks.
	Smoothness of hill tops	Good.
	Alignment of high ground to prevailing wind	Very Good.
Land use/Land cover	Road network and access	Existing highway access via the A4061 and existing forestry access routes serving operational wind farms.
	Radio-telecommunications masts	Limited existing infrastructure. Existing infrastructure includes the existing overhead line in the Southern Array, which is anticipated to provide a connection to the National Grid.
	Current land use	Site used for grazing mixed livestock.
	Nearby land use	Wind Turbines within 1km.
	Proximity of urban settlements	Maesteg located to the west.

5.2.7 Overall, the Wind Farm Site was considered to be suitable due to a range of factors:

- Excellent wind resource;
- Predominantly within Future Wales PAA 9 and as such subject to Policy 17 and 18;

- Large usable area;
- Low vulnerability to major accidents and disasters arising from, for example, flooding or sea level rise, due to location on high ground plus an absence of existing infrastructure;
- Good potential highway access;
- Nearby wind farm developments but where cumulative visual effects could likely be accommodated;
- Available existing electrical infrastructure; and
- Likely low impact on ecology, geology etc. given the baseline conditions.

5.3 Design

5.3.1

Following site selection, the wind farm design has been informed by the technical and site-specific requirements. The design was optimised to maximise the capability for wind generation whilst reducing the environmental impact as far as possible. The design process was informed by a number of criteria:

- Ground conditions – ground conditions must be suitable for the installation of wind turbines, Forestry and internal wind farm access tracks and cables;
- Wind Farm Site topography – the site topography is computer modelled to establish the wind flow on and around the site to provide guidance on the best locations for the wind turbines;
- Distance between turbines – to minimise turbulence interaction between wind turbines (wake effect), turbines should be separated by set distances both perpendicular to, and in line with, the prevailing wind direction. This design feature is a key factor in maximising the overall power generating capacity of a site. Spacing requirements may vary between turbine manufacturers and are also subject to wind conditions;
- Proximity to occupied dwellings – wind turbines have to be located sufficiently far away from houses to protect local amenity;
- Environmental constraints – features and areas of local environmental sensitivity (ecology, archaeology, hydrology etc.) are identified and their implications considered;
- Landscape and visual design considerations are taken into account and the layout modified accordingly;
- Existing land use – whilst the wind turbines and their associated infrastructure typically occupy no more than 2% of a site, the existing use of the land is considered in the layout of tracks and turbines. For example, existing track lines are used where practicable;
- The presence and magnitude of woodland is also important, as these can reduce energy production from wind turbines;
- Proximity to obstructions – such as tall trees or buildings;
- Available spare capacity of the electricity grid to take power from the wind farm; and
- Access to a road network suitable to allow the transport of construction plant, equipment and wind turbine components to the Wind Farm Site.

- 5.3.2 In addition to the above considerations, planning guidance, discussions and/or consultation with statutory and non-statutory consultees and the landowners have influenced the evolution of the design.

Design Iterations

- 5.3.3 Wind farm design is an iterative process, and the layout of the Proposed Development has evolved in response to a number of environmental and technical constraints – including site character and appearance of the scheme – and discussions with the local community and statutory and non-statutory consultees during non-statutory consultation. **Table 5.2** identifies the main iterations of the design and the rationale for such changes.

Table 5.2 Design Iterations

Design Iteration	Rationale / Summary
Layout 1 September 2025	Prior to constraints mapping, the red line boundary for the Wind Farm Site was initially refined following early ecology survey work and the identification of key ecological constraints. Several initial layout options were then prepared following early-stage constraints identification and mapping, including national and international designations, existing energy infrastructure, cultural heritage, residential amenity, telecommunications, hydrology and ground conditions. These layouts served as a starting point for consideration of the Proposed Development.
Layout 2 September 2025	This layout comprised an eight turbine development and was presented in the EIA Scoping Report. The layout was refined to respond to additional constraints analysis, including the repositioning of a turbine to ensure better alignment with the Pre-Assessed Areas for Wind Energy.
Layout 3 – Draft ES Design	The layout was further refined through minor amendments to turbine positions. These changes responded to mining constraints affecting the northern array and considerations relating to the proximity to forestry. This iteration represents the draft design taken forward for Environmental Statement (ES) assessment.

Micro-siting

- 5.3.4 The application seeks a micro-siting allowance for the turbines and associated infrastructure. The allowance which is being sought is up to 50m for turbines and 100m for internal wind farm tracks and other infrastructure such as substations and compounds. This would allow minor changes to turbine locations at the construction stage and this allowance has been accounted for in the EIA process.

5.4 Public Involvement and Consultation

Introduction

- 5.4.1 EIA scoping is the process of identifying those aspects of the environment which need to be considered when assessing the effects of a particular development proposal. This recognises that there may be some environmental elements where there will be no significant effects resulting from the development and hence where there is no need for further investigations to be taken.
- 5.4.2 Scoping is undertaken through consulting organisations and individuals with an interest in and knowledge of the site combined with the professional judgement of the EIA team. It takes account of published guidance, the effects of the kind of development proposed and the environmental resources which could be affected.

Scoping Report

- 5.4.3 As the Proposed Development qualifies as a DNS, a formal Scoping Direction was sought from Planning and Environment Decisions Wales (PEDW) in March 2026 in order that the Environmental Statement contains the information required for it to evaluate the environmental effects of the Proposed Development. To assist it in reaching its opinion, and to allow broader consultation on the scope with bodies which may be unfamiliar with the proposals, the following information was provided in a Scoping Report:
- the development characteristics;
 - the anticipated temporal and technical scope;
 - an overview and evaluation of the main environmental issues, including:
 - ▶ landscape and Visual amenity;
 - ▶ historic environment;
 - ▶ biodiversity;
 - ▶ ornithology;
 - ▶ water environment;
 - ▶ ground conditions;
 - ▶ traffic and transport;
 - ▶ noise; and
 - ▶ infrastructure and other issues including Shadow Flicker; Socio-economics; Major accidents and disasters.
 - an outline of the proposed methodologies for completing the identification of the baseline conditions and the assessment of predicted impacts and effects; and
 - a summary of the proposed scope of the EIA.

Scoping Direction

- 5.4.4 A Scoping Direction was received from the PEDW in June 2026. The ES details the final scope of the assessment in relation to effects that it has assessed could be significant and therefore needed to be subject to more detailed assessment. Both the Scoping Report

and the subsequent Scoping Direction have been used as a basis to assess, and inform the design of, the scheme.

Consultation

- 5.4.5 As the Proposed Development is a DNS, in accordance with the Developments of National Significance: Procedural Guidance (Welsh Government, 2024)¹⁴ this draft Design and Access Statement has been prepared to allow consultees an opportunity to comment on its contents, and for the Applicant to consider and respond to any comments received.
- 5.4.6 Following consultation and a review of responses received, a final Design and Access Statement will be prepared prior to final submission to PEDW.

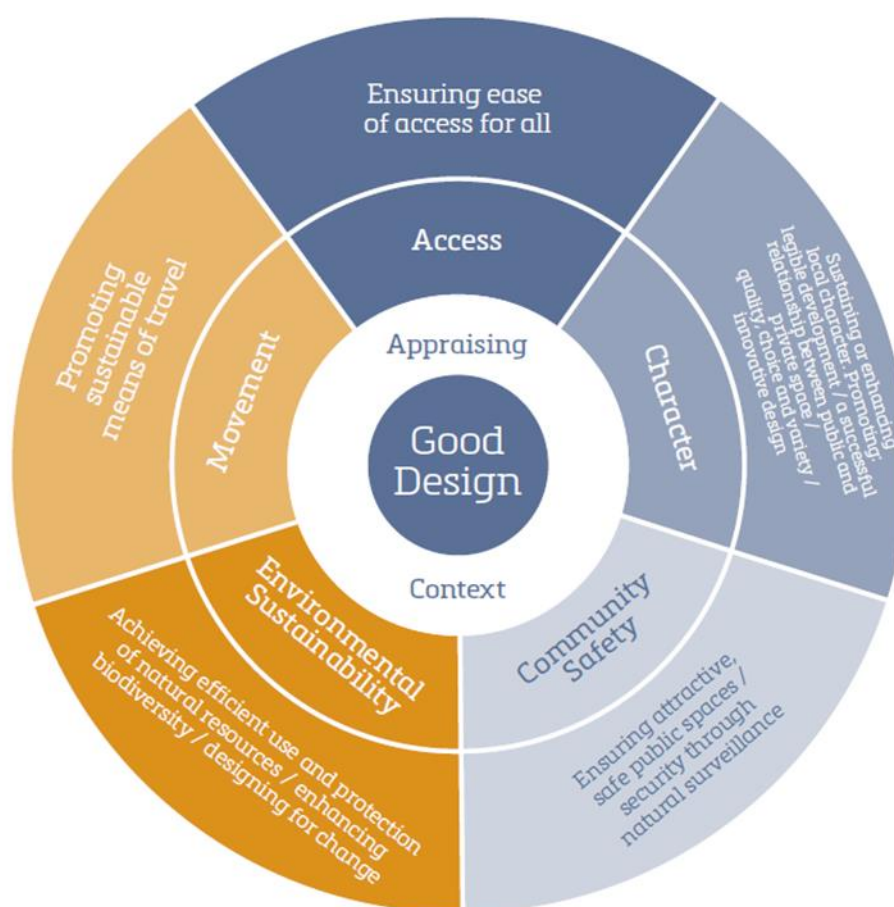
¹⁴ Welsh Government (2024) Developments of national significance (DNS): procedural guidance. (Online). Available at: [Developments of national significance \(DNS\): procedural guidance \[HTML\] | GOV.WALES](#) (Accessed July 2026).

6. The Proposal

6.1 Introduction

6.1.1 This section sets out further information about the Proposed Development and how it meets the objectives of Good Design contained in the PPW in line with the Welsh Government's DAS guidance (2017). The objectives of Good Design are included in **Figure 6.1**.

Figure 6.1 Objectives of Good Design



Source: Welsh Government (2021) Planning Policy Wales – Edition 11

6.1.2 The four objectives examined in the following sections are:

- **Character** – sustaining or enhancing local character promoting legible design and a successful relationship between public and private spaces;
- **Access** – ensuring access for all;
- **Movement** – promoting sustainable means of transport;
- **Environment sustainability** – ensuring the efficient use and protection of resources; and

- **Community safety** – ensuring safe and attractive spaces.

6.1.3 At the start of each section the Welsh Government's DAS guidance (2017) requirements are captured. Additionally, in the final section, consideration is given to how the Proposed Development responds to the policy context.

6.2 Character

DAS Guidance: How does the proposal sustain or enhance local character and promote legible development, a successful relationship between public and private space, quality, choice and variety and innovative design?

Wind Farm Design

Turbines

- 6.2.1 The Proposed Development consists of a maximum of eight wind turbines, each with a three-bladed rotor with a diameter of up to 150m, a hub height of up to 105m and maximum height to blade tip of 180m. This is a typical modern, horizontal axis design comprising four main components: a rotor (consisting of a hub and three blades); a nacelle (containing the generator and also often a gearbox) to which the rotor is mounted; a tower; and a foundation. This reflects ongoing innovation in wind turbine design.
- 6.2.2 The specific choice of wind turbine is dependent on the final commercial and technical choice by the Applicant but would not exceed the physical parameters specified in the consent (and as assessed in the ES). The turbines would be supported by two substations including transformer housing.
- 6.2.3 The design process has considered an appropriate colour for the wind turbines and determined that a neutral colour (colour specification, light grey RAL 7035) with a semi-matt finish, so as to minimise the visual intrusion, is the preferred colour to minimise contrast against the sky.
- 6.2.4 The wind farm has been designed to be operational for up to 30 years and will include site management to ensure that site facilities such as roads, boundaries, gates and signage are maintained. At the end of the operational life of the turbines, there are three possible options. Firstly, to decommission the wind farm and dismantle and remove the turbines; to apply for an extension to the operating period using existing equipment; or apply to install new equipment on the Wind Farm Site (for which a further planning consent would be required).

Foundations

- 6.2.5 The full foundation requirements will be subject to finalisation dependent on detailed ground investigation. The design of foundations will minimise excavation requirements and visible projection above ground level and allow for the re-establishment of surface vegetation when construction is complete. Foundations will usually comprise a reinforced concrete base slab with dimensions of approximately 20m diameter x 4m depth.

Substation

- 6.2.6 All wind farms need to be connected into the grid distribution system, though such connections are often subject to a different consenting process to the wind farms themselves. The arrangement of the substation within each parcel would depend on National Grids Electricity Distribution (NGED) requirements and shall be determined by the rating of the grid connection and requirement for a step-up transformer. If required, a transformer would be provided within the substation compound which would comprise a stoned area of approximately 37.5m x 35m containing the transformer and associated equipment (isolators, circuit breakers). If a transformer is not required, then all electrical equipment would be housed within the substation building.
- 6.2.7 The substation building (approximately 14m x 10m) would be a single storey building which will house metering, protection and control equipment, storage, and welfare facilities. The substation building would be traditional blockwork construction and faced in stone with a slate roof. Associated fencing would be either moorland green/brown or dark grey in order to blend with either the existing landscape colours or traditional building colours for the area.
- 6.2.8 Connection from the substations to the local electricity network will be via short overhead line connections to existing 66 kV overhead lines. The Northern Array will connect to the 66 kV overhead line located adjacent to the western extent of the parcel, whilst the Southern Array will connect to the 66 kV overhead line that traverses the centre of the parcel, as agreed with National Grid Electricity Distribution (NGED).

Site Context and Character

- 6.2.9 The assessment of the Wind Farm Site's wider context formed a key part of the site selection process as illustrated by **Section 5.2** of this draft DAS. Furthermore, the Proposed Development is supported by a draft ES, which has considered the likely significant environmental effects of the development on environmental and human receptors. With regard to the issue of character, the key environmental topics are considered to be landscape and heritage.

Landscape character

- 6.2.10 The whole of the Northern Array and two of the four wind turbines in the Southern Array are located within PAA9. As such Welsh Government has already modelled the likely impacts on the landscape for the majority of the Wind Farm Site and has found that the Pre-Assessed Area is capable of accepting development (large-scale wind up to 250m) in an acceptable way. The Proposed Development comprises wind turbines substantially smaller than the 250m heights modelled by Welsh Government (180m), it is predominantly within and physically adjoining the PAA and in consequence should not have an unacceptable effect upon landscape character. Notwithstanding Future Wales Policy 17, the Applicant has undertaken a Landscape and Visual Impact Assessment (LVIA), including a cumulative assessment, and it is reported in the draft **ES Chapter 6: Landscape and Visual Impact Assessment**.
- 6.2.11 The assessment identifies significant landscape and visual effects within the immediate vicinity of the Wind Farm Site, including on a limited number of nearby landscape character areas, settlements, recreational receptors and transport routes where the Proposed Development would be visible. Significant cumulative effects are also identified in some locations where the Proposed Development would be experienced alongside existing, consented or proposed wind energy developments. However, no significant effects are predicted on nationally designated landscapes, including the special qualities

of Bannau Brycheiniog National Park or the Gower National Landscape and effects upon landscape character overall are considered acceptable when considered in the context of Future Wales.

Historic character

- 6.2.12 An assessment of the impact on the cultural heritage setting has also been undertaken and is reported in draft **ES Chapter 7: Historic Environment**. There are no designated historic assets located within either the Northern or the Southern Array. There are records of fifty-three non-designated assets with the Northern and Southern Arrays. The draft ES Chapter identifies a small number of direct effects on known and potential archaeological features during construction, including historic field boundaries, mining-related remains and possible buried archaeological deposits. These effects would result in the partial loss or disturbance of features but are assessed as Minor Adverse and Not Significant due to their limited extent and generally low heritage significance. Potential impacts on previously unknown archaeological remains would be managed through consultation with Heneb and appropriate archaeological mitigation.
- 6.2.13 During operation, the assessment identifies potential setting effects on a range of designated and non-designated heritage assets, including scheduled monuments, conservation areas, listed buildings, the Margam Mountain Registered Historic Landscape, Bryngarw Registered Historic Park and Garden, and Cynnordy Farmstead. While the Proposed Development would introduce wind turbines into views experienced from these assets, their key heritage values, setting relationships and ability to understand and appreciate their significance would remain largely unchanged and as such effects are considered acceptable in policy terms. All operational effects are assessed as Minor Adverse or Negligible and Not Significant.

6.3 Access

DAS Guidance: How do the proposals ensure ease of access for all into the development and to all elements within the site?

Site Access

- 6.3.1 Draft ES Chapter 4 Development Description and 12: Traffic and Transport describes the transport network surrounding the planning application site boundary and the routes to be taken both by local construction vehicles and by deliveries of turbine components. Access to the Wind Farm Site will be achieved via existing Forestry access tracks which serve the operational Pen y Cymoedd Wind Farm and Lynfi Afan Wind Farm. Starting to north of the Wind Farm Site from an existing junction with the A4061, the access tracks travel south through Pen y Cymoedd Wind Farm, then cross the A4107 and travel through the Llynfi Afan Wind Farm. The Proposed Development would require the forestry access tracks to be upgraded to facilitate the movements of Abnormal Indivisible Loads (AILs).

Construction

Site Access

- 6.3.2 Draft **ES Chapter 12: Traffic and Transport** assesses the likely effects on the traffic and transport network. The A4107 (between each Forestry access track on the A4107) was the only road receptor identified as requiring detailed assessment.
- 6.3.3 Based on the indicative construction programme, the peak 12-hour HGV flow is predicted to occur during Month 3, with up to 73 HGV movements anticipated. This represents a 48.2% increase in HGV traffic on the affected section of the A4107 and is assessed as a low magnitude of change. This equates to approximately seven additional HGV movements per hour during the peak 12-hour period. The assessment concludes that the effects on severance, driver delay, non-motorised user amenity, non-motorised user delay, fear and intimidation (of pedestrians and cyclists), and road safety would be Negligible and Not Significant.
- 6.3.4 An outline Construction Traffic Management Plan (CTMP) has also been prepared (draft ES Appendix 12B). The CTMP sets out measures to manage construction traffic, including daily delivery profiles, routing arrangements, and controls on HGV movements to and from the Wind Farm Site, ensuring that impacts on the local highway network are minimised.

Onsite Access

- 6.3.5 Access will commence at the public highway junction at the A4061 Rhigos Road, providing access to, between the Northern Array and Southern Array. It will include the Forestry access track (from highway to the array areas) and internal access tracks (within the array areas). Approximately 9.4km of access tracks would be required for the Proposed Development between and within the Northern and Southern Array areas. This would include approximately 2.1km of new access tracks in the Northern Array, 2.7km of new access tracks in the Southern Array, and 4.8km of upgraded access tracks between the array areas.
- 6.3.6 Further upgrades to the Forestry access track between the highway and Northern Array would be required to facilitate traffic movements during the construction, operation and maintenance of the Proposed Development. At this stage, detailed surveys are currently being undertaken to inform the design of any required improvements. Following the completion of surveys, assessment and design, the identification of the required upgrades along the route, together with an assessment of environmental effects will be presented in the final ES.
- 6.3.7 The tracks will be approximately (~) 5m wide, ~0.6m deep (dependent of ground conditions), with a ~2m grass verge either side. The tracks will be constructed of suitable roadstone. Any existing track will be upgraded. Gradients for new tracks will be kept to less than 8 percent with radius curves to 50m where practicable. The track layout is designed to accommodate the requirements of delivery vehicles and to allow the construction workforce, plant and machinery to move safely. The track layout seeks to follow contours where possible and to avoid cross slopes and deep cut and fill into the existing terrain where possible. Tracks are routed to avoid sensitive ecological, archaeological and hydrological features where possible.

Operation

- 6.3.8 Once operational, traffic movements associated with the Proposed Development would be limited to occasional maintenance and inspection visits. These would typically be

undertaken using 4x4 vehicles or similar, although occasional HGV access may be required for maintenance or repair works. While maintenance activity may be more frequent during the early years of operation and towards the end of the anticipated 30-year operational life, overall traffic generation during the operational phase would be negligible.

Access for All

- 6.3.9 As a wind farm development located within a rural upland environment, the Proposed Development is not intended to function as a publicly accessible destination. Therefore, specific provisions for disabled access have not been incorporated into the design. However, existing public access routes would be retained and managed appropriately during construction and operation.
- 6.3.10 There are some Public Rights of Way (PRoW) which cross the Wind Farm Site. **Section 6.6** sets out considerations of the PRoW with respect to ensuring safe access during construction and operation.

6.4 Movement

DAS Guidance: How does the proposal promote sustainable means of travel?

- 6.4.1 The wind turbines, substation and other infrastructure on the Wind Farm Site will only be accessed by construction personnel and maintenance teams who will periodically attend the development to, for example, maintain and service the turbines.
- 6.4.2 As stated in draft ES Chapter 12: Traffic and Transport given the Wind Farm Site's location in relation to the public transport network, the opportunity for contractors to travel by public transport is not viable. Additionally, the distance to the established cycle network and lack of footway connections to local amenities and establishments means that travel by alternative sustainable modes is unlikely to be chosen by contractors. Car-sharing is something that can be promoted to the construction workforce. Safe access in the construction phase will also be specified in the Construction Traffic Management Plan (CTMP).
- 6.4.3 The public has access to the Wind Farm Site given that it includes a network of PRoWs and open access land. This will be managed through appropriate measures, set out in the Outline Public Rights of Way Management Plan (OPRoWP) (ES **Appendix 12A**) and Construction Environmental Management Plan (CEMP), for the duration of the proposed construction works. No turbines are proposed to be sited on the PRoWs and no PRoW diversions are currently proposed as part of the Proposed Development. While it is acknowledged that two PRoW bridleways route within the 198 m of a proposed wind turbine, these are not over sailed. Therefore, it is anticipated these routes would remain open during the operational period of the Proposed Development.

6.5 Environmental Sustainability

DAS Guidance: How does the proposal achieve efficient use and protection of natural resources, enhance biodiversity, and demonstrate designing for change?

Renewable Energy

- 6.5.1 The Welsh Government has set a target for 100% of energy consumption in 2035 to be provided by renewable sources. The Proposed Development has an installed capacity of 33.6 MW depending on the final turbine chosen.¹⁵ The annual generation would be expected to supply the domestic electricity needs of approximately 37,026 average households. With regards to resource efficiency, and supporting a reduced reliance on fossil fuels, this is considerable.
- 6.5.2 The Proposed Development will help to ensure environmental sustainability through the production of renewable energy thus supporting the move away from fossil fuels.
- 6.5.3 The Wind Farm Site design has been influenced by the optimal scheme for wind power generation, taking into account consideration of achieving the best wind resource and reducing turbulence from turbines. The design responds to site conditions whilst balancing the effects arising from construction and operation. The design layout was found to be the most sustainable and appropriate for the type of development proposed.

Natural Resources

Agricultural land

- 6.5.4 As set out in draft **ES Chapter 11: Ground Conditions**, the Northern Array is assessed as predominantly Grade 5 Agricultural Land Classification (ALC) and some Grade 4 and the Southern Array is assessed as predominantly Grade 4 with some Grade 5. Therefore, no land that is considered to be the 'best and most versatile' (Grades 1 to 3a) will be lost through the development. Measures embedded in the design will ensure that soil removed during construction is reused on-site where possible and low ground pressure machinery will be used where possible to minimise soil impaction. A Soil Management Plan (SMP) will be developed once a soil resources survey has been complete.

Water Environment

- 6.5.5 Draft **ES Chapter 10: Water Environment** outlines a series of embedded measures including good working practices, drainage and materials management and management of water discharges which would support appropriate management of the aquatic environment, water resources and flood risk during the construction phase. Measures such as a detailed drainage design integrating SuDS source and site control measures throughout construction and operation.

Biodiversity

- 6.5.6 Draft **ES Chapter 8: Biodiversity** examines how the proposals will affect biodiversity. It concludes that no significant effects will occur. Draft **ES Chapter 9: Ornithology**

¹⁵ The ES has assessed on the basis of candidate turbines with an output of 4.2MW being implemented.

considers the effects on ornithology, including breeding and non-breeding birds. The chapters conclude that no significant effects will occur. An Ecological Construction Method Statement (ECMS) will be prepared which will set out in detail the measures to be implemented to protect important ecological features during the construction phase of the Proposed Development. This can be secured by planning condition. The Construction Environmental Management Plan (CEMP) would ensure appropriate management measures in place.

- 6.5.7 An Outline Habitat Management Plan (HMP) will be prepared for the final ES submission, setting out measures for the restoration, enhancement and long-term management of habitats within the Wind Farm Site. A Green Infrastructure Statement (GIS) has been submitted alongside the application to demonstrate how the Proposed Development responds to the requirements of Planning Policy Wales (Edition 12) and applies the step-wise approach to achieving biodiversity enhancement. A Net Benefit for Biodiversity (NBB) Statement will accompany the final application submission and will detail the biodiversity enhancement measures proposed, together with an assessment of how the Proposed Development will deliver biodiversity net benefit in accordance with relevant planning policy requirements. Additionally, a Green Infrastructure Statement has been submitted with the application which reflects the requirements of PPW12 and sets out the step-wise approach to achieving net benefit in biodiversity.

6.6 Community Safety

DA DAS Guidance: How has the proposal ensured attractive, safe public spaces and security through natural surveillance?

- 6.6.1 The Proposed Development will be delivered in a safe manner and ensure that the opportunities for crime are minimised through effective design measures, such as fencing around the substation compound being incorporated into the scheme. Additionally, the construction compound would be lit with security lighting and it is anticipated that a small security area would be established at the junction to the public highway.
- 6.6.2 There are a number of Public Rights of Way (PRoWs) that cross or are in close proximity to the Wind Farm Site. There is potential for some temporary disruption to the PRoWs, with some mitigation proposed during construction including inspection and maintenance, communication on Proposed Development works and warning signage. Further details of the proposed mitigation is provided in the outline Public Rights of Way Management Plan (oPRoWMP) at **ES Appendix 12A**, which will be developed in consultation and agreement with the local authority PRoW officers and highways teams.
- 6.6.3 During operation, no turbines are proposed to be sited on the PRoWs and no significant permanent PRoW diversions are currently proposed as part of the Proposed Development. While it is acknowledged that two PRoW bridleways route within the 198 m of a proposed wind turbine, these are not over sailed. Therefore, these routes would remain open. Therefore, during the operation of the Proposed Development no specific management and mitigation measures are proposed. Effects on users of the PRoW network would be limited to user amenity. As set out further in draft **ES Chapter 12: Traffic and Transport** these effects are not considered to be significant.

6.7 Responding to the Planning Policy Context

DAS Guidance: This section of the document provides the opportunity to explain how the proposals have responded to relevant planning policy and guidance. The relevant policy and guidance should have been identified at the site and context analysis stage, this section should provide a summary of the design decisions that have been made in response to these policies.

- 6.7.1 The planning policy context is set out in **Section 4**. The proposal would see the development of a wind farm located predominantly within an area identified in Future Wales Policy 17 as a location suitable for large scale wind development (as a PAA for Wind Energy). The Proposed Development would make a contribution to the generation of renewable energy, required to support the reduction in carbon emissions that Future Wales and PPW are seeking to achieve.
- 6.7.2 The development has been designed so as to minimise the take up of land, the impact on the landscape and the effects on biodiversity assets. Additionally, through the ES the effects on a range of other environmental receptors have been assessed. The EIA process has helped to ensure that where possible the design of the windfarm has sought to avoid or reduce the environmental impacts. Detailed consideration has therefore been given to the criteria in Policy 18 of Future Wales through site selection and design refinement.
- 6.7.3 The draft **Planning Statement** provides a detailed assessment of the Proposed Development against the planning policy framework.

7. Conclusion

7.1 Summary of the Proposed Development Design

- 7.1.1 The Proposed Development positively contributes to the achievement of the UK and Wales' goal to increase renewable energy generation to help combat the challenges posed by climate change. The design of the Proposed Development has been informed by consideration of technical, environmental and policy constraints. Additionally, the iterative design process has been informed by consultation with key stakeholders and the local community.
- 7.1.2 The design has been informed by the EIA process. The draft ES demonstrates that the effects on a range of environmental receptors have been assessed, and a range of measures have been proposed to reduce, and avoid, impacts of the Proposed Development on the environment where possible.
- 7.1.3 Whilst the draft ES identified that some significant environmental effects are predicted to occur, national policy highlights that these are often inherent in the development of onshore wind energy and that the level of effect should be balanced against the socio-economic benefits and environmental benefits arising from the mitigation of climate change. Furthermore, whether inside or outside a PAA, a positive policy framework exists for large-scale wind (Future Wales).
- 7.1.4 There will be some limited and managed disruption to public access during the construction phase, but this will be temporary and once operational the Proposed Development will not restrict access with appropriate mitigation measures. The ES concludes there will be no significant negative effects regarding access to the Proposed Development, or upon it, as a result of the construction activities proposed. Furthermore, non-significant effects will be further reduced via the adoption of management measures in the form of a CEMP and CTMP.

