



Pennant Walters

Glanllynfi Garth Wind Farm

Draft Green Infrastructure Statement



August 2026

Report for

Meryl Lewis
Pennant Walters
Hirwaun House
Hirwaun Industrial Estate
Hirwaun
Aberdare
CF44 9UL

Main contributors

George Burrows
Holly Taylor
Andrew Williamson

Issued by

Andrew Williamson
.....

Approved by

David Kenyon
.....

WSP

Canon Court West
Abbey Lawn
Shrewsbury SY2 5DE
United Kingdom
Tel +44 (0) 1743 342 000
Doc Ref.

document1

Copyright and non-disclosure notice

The contents and layout of this report are subject to copyright owned by WSP save to the extent that copyright has been legally assigned by us to another party or is used by WSP under licence. To the extent that we own the copyright in this report, it may not be copied or used without our prior written agreement for any purpose other than the purpose indicated in this report. The methodology (if any) contained in this report is provided to you in confidence and must not be disclosed or copied to third parties without the prior written agreement of WSP. Disclosure of that information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests. Any third party who obtains access to this report by any means will, in any event, be subject to the Third Party Disclaimer set out below.

Third party disclaimer

Any disclosure of this report to a third party is subject to this disclaimer. The report was prepared by WSP at the instruction of, and for use by, our client named on the front of the report. It does not in any way constitute advice to any third party who is able to access it by any means. WSP excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage howsoever arising from reliance on the contents of this report. We do not however exclude our liability (if any) for personal injury or death resulting from our negligence, for fraud or any other matter in relation to which we cannot legally exclude liability.

Management systems

This document has been produced in full compliance with our management systems, which have been certified to ISO 9001, ISO 14001 and ISO 45001 by Lloyd's Register.

Document revisions

No.	Details	Date
1	Draft GIS	August 2026

Executive summary

Purpose of this Report

This draft Green Infrastructure Statement supports a planning application for the development of up to eight wind turbines located on land to the east of Maesteg in South Wales. This statement has been produced for the purpose of describing how green infrastructure has been incorporated into the design of the Proposed Development and how the step-wise approach has been used to ensure that loss of habitat is avoided and minimised and impacts on protected and priority species are appropriately mitigated, where necessary. An assessment is also included within the statement which utilises The Building with Nature standards. As set out within Planning Policy Wales these standards represent good practice. A Net Benefit for Biodiversity (NBB) Statement will accompany the final application submission and will set out the biodiversity enhancement measures proposed as part of the development, together with an explanation of how the Proposed Development contributes towards the delivery of biodiversity net benefit in accordance with relevant planning policy requirements.

Contents

1.	Introduction	4
1.1	Background	4
1.2	Summary of the Proposed Development	4
1.3	Purpose and Structure of the Report	5
1.4	Approach to Developing the Green Infrastructure Statement	5
2.	Summary of the Proposed Development	7
2.1	The location of the Proposed Glanllynfi Garth Wind Farm	7
2.2	The Proposed Development	7
3.	Context	9
3.1	Policy and Guidance	9
	National Planning Policy	9
	Regional Planning Policy	11
	Local Planning Policy	11
3.2	Green Infrastructure Assets	17
	Site and Surroundings	17
	National Landscape Character	18
	LANDMAP	19
	Biodiversity	19
	Historic Environment	22
	Water Environment	25
4.	Scheme Strategy	27
4.1	Objectives and design strategy	27
	The Proposed Development	27
	Embedded environmental measures	28
5.	Green Infrastructure Assessment	31
5.1	Demonstrating the Step-wise Approach	31
5.2	DECCA Framework	33
5.3	Building with Nature Framework	34
6.	Conclusion	41
6.1	Summary of the Green Infrastructure Statement	41

Table 3.1	Bridgend County Borough Council Replacement Local Development Plan Policies up to 2033	12
Table 3.2	Rhondda Cynon Taf County Borough Council 2006 - 2021	15
Table 3.3	Neath Port Talbot Local Development Plan (LDP) 2011 - 2026	16
Table 3.1	Statutory and Non-Statutory Designations	20

Table 3.2	Non-Designated Assets within the Site (GGAT HER)	23
Table 4.1	Proposed Turbine Locations	27
Table 5.1	Application of the step-wise approach at the site	31
Table 5.2	BwN Core Standards	34
Table 5.3	BwN Wellbeing Standards	36
Table 5.4	BwN Water Standards	37
Table 5.5	BwN Wildlife Standards	39

Figure 1.1	Building with Nature Standards	6
Figure 3.1	Summary of the Step-Wise Approach	10
Figure 3.2	Biodiversity and Ecological Resilience Map (source: BCBC Green Infrastructure Assessment)	14

1. Introduction

1.1 Background

- 1.1.1. This draft Green Infrastructure (GI) Statement 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 statement 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).
- 1.1.3. The Proposed Development is predominantly within the administrative boundary of Bridgend County Borough Council (BCBC). Access to the Northern and Southern Array will be achieved via existing access tracks which serve operational wind farms in the area. Starting north at the A4061, the access tracks travel south through the Pen y Cymoedd Wind Farm, then cross the A4107 and traverse the Llynfi Afan Wind Farm. The access track traverses the Rhondda Cynon Taf County Borough Council (RCTCBC) and Neath Port Talbot Council (NPTC) authority areas. The application is to be submitted to Welsh Government, via Planning and Environment Decisions Wales (PEDW), to be considered as a Development of National Significance (DNS).
- 1.1.4. This statement should be read in conjunction with the accompanying draft **Planning Statement**, which sets out the planning policy context for the application, the draft **Design and Access Statement**, which explains the design rationale for the wind farm, and the draft **Environmental Statement (ES)** which sets out an assessment of the likely significant environmental effects of the Proposed Development. A Net Benefit for Biodiversity (NBB) Statement will accompany the final application submission and will set out the biodiversity enhancement measures proposed as part of the Development, together with an explanation of how the Proposed Development will contribute towards the delivery of biodiversity net benefit in accordance with relevant planning policy requirements.
- 1.1.5. This statement has been prepared in line with Planning Policy Wales (PPW) Edition 12, which includes a requirement for a GIS to be submitted with all planning applications (paragraph 6.2.12). It has also been informed by the 'Delivering High Quality Green Infrastructure in Wales' briefing paper published by Building with Nature (BwN) (November 2023). The relationship between the Proposed Development, green infrastructure and biodiversity enhancement will be further considered within the NBB Statement accompanying the final application submission.

1.2 Summary of the Proposed Development

- 1.2.1. The Proposed Development is to construct and operate a wind farm consisting of a maximum of eight wind turbines, each with a three-bladed rotator with a diameter of up to 150m, a hub height of up to 105m and maximum height to blade tip of 180m. The Proposed Development will be located across two land parcels referred to as the 'Northern Array' and 'Southern Array'.
- 1.2.2. Further information in relation to the Proposed Development and its objectives can be found within draft **ES Chapter 4: The Proposed Development**, the accompanying draft **Planning Statement**, and the draft **Design and Access Statement**, as well as in **Section 2** below.

1.3 Purpose and Structure of the Report

- 1.3.1. GI is the network of natural and semi-natural features, green spaces, rivers and lakes that intersperses and connects places. Component elements of green infrastructure can function at different scales and some components, such as trees and woodland, are often universally present and function at all levels.
- 1.3.2. This statement describes how GI has been incorporated into the design of the proposal and how the step-wise approach has been applied. It seeks to demonstrate the multi-functional benefits and sustainable management of natural resources that the Proposed Development can provide. An assessment is included within the statement which utilises the BwN standards. As set out within PPW (paragraph 6.2.14) these standards represent good practice.
- 1.3.3. The statement is structured as follows:
- **Section 1: Introduction** – The introduction provides an overview of the scheme, sets out the purpose of the statement and explains the methodology that has been utilised;
 - **Section 2: Summary of the Proposed Development** – Sets out an overview of the Proposed Development and site location.
 - **Section 3: Context** – Sets out the relevant local, national and regional policy and guidance.
 - **Section 4: Scheme Strategy** – Explains the objectives and design strategy for the scheme, and sets out the GI opportunities across the proposed scheme;
 - **Section 5: Green Infrastructure Assessment** – Uses the Building with Nature Standards Framework to assess the scheme; and
 - **Section 6: Conclusion** - Reaches conclusions on the overall provision and design of Green Infrastructure.

1.4 Approach to Developing the Green Infrastructure Statement

- 1.4.1. This statement follows PPW12 and Natural Resource Wales (NRW) guidance on how to integrate and assess green infrastructure as part of the Proposed Development. The following explains the GI assessment methodology:
1. Policy and guidance context: a thorough review of national, regional and local policy has been carried out in order to ensure that the Proposed Development incorporates best practice and GI priorities;
 2. Green infrastructure assets: Contextual existing GI data sets from NRW's Data Map Wales / LandMap have informed the GI baseline of the proposals;
 3. Scheme development: The Proposed Development seeks to respond to the BCBC aspirations through a number of key objectives and design principles;
 4. Green infrastructure assessment: The BwN Standards Framework 2.0 has been used to assess the proposed GI. The twelve standards shown at **Figure 1.1** provide a pathway for and recognition of early and sustained engagement in the design, implementation and long-term stewardship of high-quality GI. They focus on opportunities to put existing and planned-for habitat and wildlife at the centre of development. Each standard is defined by its purpose and key characteristics, which are presented in the form of questions. Within the assessment, the questions are used to advise how the design meets each of the Standards. Please note that the Proposed

Development is not pursuing official BwN Accreditation, the BwN Standards Framework has been used as good practice to assess the GI priorities and opportunities.

Figure 1.1 Building with Nature Standards

Building with Nature Overview Introduction How Building with Nature Accreditation works Scope of Building with Nature - What can it assess and when should it be used? Introduction to the Building with Nature Standards
CORE Standards Standard 1 Optimises Multifunctionality and Connectivity Standard 2 Positively Responds to the Climate Emergency Standard 3 Maximises Environmental Net Gains Standard 4 Champions a Context Driven Approach Standard 5 Creates Distinctive Places Standard 6 Secures Effective Place-keeping
WELLBEING Standards Standard 7 Brings Nature Closer to People Standard 8 Supports Equitable and Inclusive Places
WATER Standards Standard 9 Delivers Climate Resilient Water Management Standard 10 Brings Water Closer to People
WILDLIFE Standards Standard 11 Delivers Wildlife Enhancement Standard 12 Underpins Nature's Recovery

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. Together, the Northern and Southern Arrays form the ‘Wind Farm Site’. This Site lies within the BCBC administrative area.
- 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. The Forestry access track traverses the Rhondda Cynon Taf County Borough Council (RCTCBC) and Neath Port Talbot Council (NPTC) authority areas as shown in ES Figure 1.1 and Figure 1.2. Together, the Wind Farm Site and the Forestry access track comprise the application site boundary.

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. For the purposes of the ES, it is assumed that the wind farm will be decommissioned.
- 2.2.3. The Proposed Development will also include:
- Two substations including transformer housing;
 - 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. A full description is provided in draft ES Chapter 4: Description of the Proposed Development. The layout of the Wind Farm Site is contained in submitted ES **Figure 1.2 Site Layout**.

- 2.2.5. The Proposed Development will require two grid connection points and individual substations within each parcel. The Northern Array will connect to the 66kv Overhead line that runs adjacent to the western extents of the parcel. The Southern Array will connect to the 66kv Overhead line that traverses the centre of the parcel. It is envisaged that each PoC will be achieved via a short overhead line. Both connections have been identified through discussions with National Grid Electricity Network (NGED) and form part of the EIA assessment.
- 2.2.6. Traffic related to the Proposed Development would travel on the A465 and A4601 before using the Forestry access tracks to access the Northern and Southern arrays. Access will be achieved via existing access tracks which serve the operational Pen y Cymoedd Wind Farm and the Llynfi Afan Wind Farm. The Proposed Development would require the access tracks to be upgraded to facilitate the movements of Abnormal Indivisible Loads (AILs). At this stage, surveys, assessment and design in relation to the access track are ongoing. The identification of the required upgrades along the route, together with an assessment of environmental effects will be presented in the final ES.

3. Context

3.1 Policy and Guidance

- 3.1.1. Relevant national, regional and local planning policy and guidance has been summarised below. Further details of all of the applicable policy is set out within the draft Planning Statement, which should be read alongside this document.

National Planning Policy

Future Wales – the National Plan 2040 (February 2021)¹

- 3.1.2. Future Wales is the national development framework, setting the direction for development in Wales to 2040. It is a development plan with a strategy for addressing key national priorities through the planning system, including sustaining and developing a vibrant economy, achieving decarbonisation and climate-resilience, developing strong ecosystems and improving the health and well-being of communities.
- 3.1.3. Policy 9 ‘Resilient Ecological Networks and Green Infrastructure’ is considered to be of particular relevance to this statement. This policy seeks to ensure that “*action towards securing the maintenance and enhancement of biodiversity (to provide a net benefit), the resilience of ecosystems and green infrastructure assets must be demonstrated as part of development proposals through innovative, nature based approaches to site planning and the design of the built environment*”.

Planning Policy Wales (February 2024)²

- 3.1.4. Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales.
- 3.1.5. The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales.
- 3.1.6. The most recent edition of PPW, Edition 12, was published in February 2024. Key updates were in relation to green infrastructure (GI), securing net benefit for biodiversity, strengthening protection of Sites of Special Scientific Interest (SSSI) and promoting new tree planting. Further information in relation to these changes are provided below:
- Green Infrastructure – text around GI assessments was strengthened, with additional responsibilities on Local Planning Authorities to adopt a strategic and proactive approach to GI. Paragraph 6.2.12 of PPW12 states that a proportionate GI Statement should be submitted with all planning applications. This should highlight any baseline data considered and surveys and assessments undertaken, including habitats and species surveys,

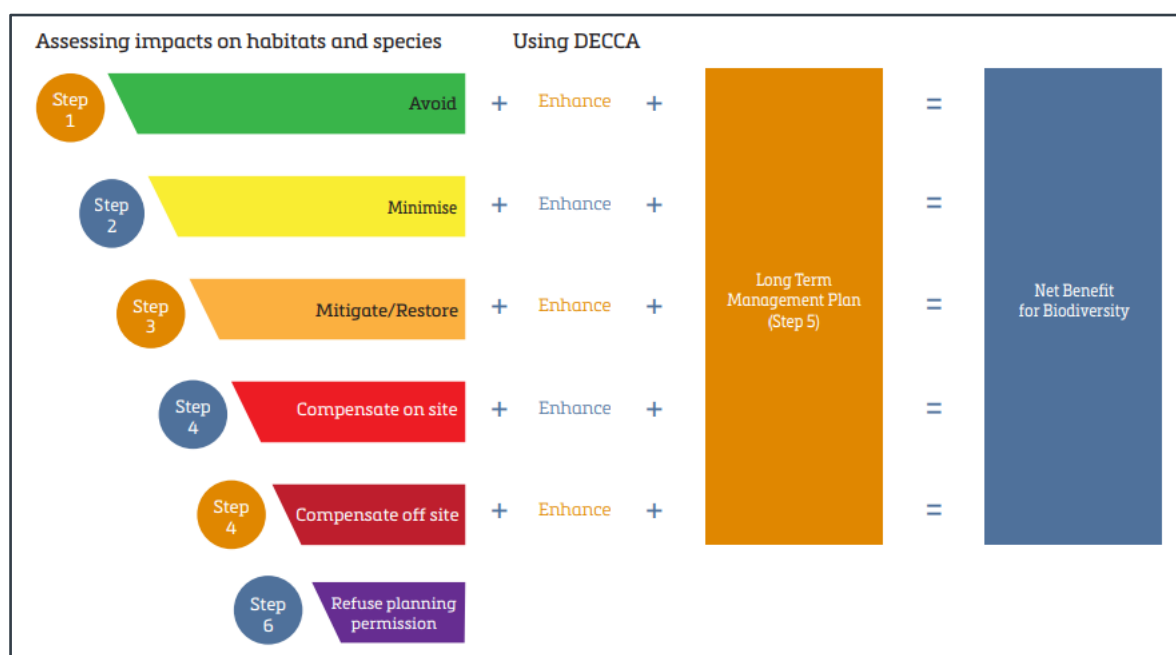
¹ Welsh Government (2021). Future Wales The National Plan 2040. (Online) Available at: <https://www.gov.wales/sites/default/files/publications/2021-02/future-wales-the-national-plan-2040.pdf> (Accessed July 2026).

² Welsh Government (2024) Planning Policy Wales Edition 12. (Online) Available at: <https://www.gov.wales/sites/default/files/publications/2024-07/planning-policy-wales-edition-12.pdf> (Accessed July 2026).

arboricultural surveys, sustainable drainage statements, landscape and ecological management plans, open space assessments and green space provision and active travel links;

- **Net Benefit for Biodiversity and the Step-wise Approach** – PPW12 sets out a requirement for development to provide a net benefit for biodiversity and improve, or enable the improvement, of the resilience of ecosystems, through the application of the step-wise approach. It states the need to consider enhancement and long-term management at each step. Paragraph 6.4.14 confirms that this can be secured through attaching planning conditions and/or other obligations to a planning permission. The use of GIS as a means of demonstrating the step-wise approach is explicit. A diagram which provides a summary of the step-wise approach using DECCA is set out at Figure 12 of PPW12 and has been included at **Figure 3.1**.
- **Protection for SSSIs** – PPW12 strengthens the protection given to SSSI's, and states that development in a SSSI must be avoided, unless it is necessary for the management of the site. There is also a presumption against development not within an SSSI, but likely to damage a SSSI. Paragraph 6.4.27 advises that development will only be acceptable in wholly exceptional circumstances and where it is considered appropriate, is not likely to damage the SSSI and there is broad and clear agreement for mitigation and enhancement as part of a development;
- **Trees and Woodland** – additional text has been included relating to trees, woodlands and hedgerows and in particular the compensation that should be provided for any losses. Paragraph 6.4.42 states that planning authorities must first follow the step-wise approach where trees and hedgerows are removed as part of a proposed scheme. Where loss is unavoidable compensation will be required through replacement planting.

Figure 3.1 Summary of the Step-Wise Approach



Source: PPW 12

Nature Conservation and Planning Technical Advice Note (TAN) (September 2009)³

- 3.1.7. The Nature Conservation and Planning TAN provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation.
- 3.1.8. In terms of GI, it states that development policies and supplementary planning guidance should promote opportunities for the incorporation of wildlife and geological features within the design of the development.
- 3.1.9. This TAN sets out the key principles of planning for nature conservation, provides advice about the preparation and review of development plans, including the relevant statutory requirements, and addresses nature conservation in development control procedures.
- 3.1.10. It also deals with the conservation of internally, nationally and locally designated sites and habitats and also the conservation of protected and priority species.

Regional Planning Policy

- 3.1.11. There are no relevant policy documents at the regional level. The South Central Area Statement⁴ prepared by Natural Resources Wales provides a regional framework for the sustainable management of natural resources across Bridgend, Rhondda Cynon Taf, Merthyr Tydfil, the Vale of Glamorgan and Cardiff. The Statement does not have policy status but provides guidance which can be considered relevant to GI.
- 3.1.12. The statement is subdivided into the themes of 'Building Resilient Ecosystems', 'Connecting People with Nature', 'Working with Water', 'Improving our Health' and 'Improving Our Air Quality.' It recognises the role that healthy ecosystems play in delivering wider benefits including biodiversity enhancement, carbon sequestration, flood mitigation, water regulation, recreation and community well-being. It also emphasises the need for a place-based approach to natural resource management that protects and restores environmental assets whilst maximising the multiple benefits they provide to people and nature.

Local Planning Policy

Bridgend County Borough Council

Bridgend County Borough Council Replacement Local Development Plan (BCBC) (2024)⁵

- 3.1.13. BCBC adopted its replacement Local Development Plan (LDP) in March 2024, setting the planning framework for development up to 2033. This new plan supersedes the 2006–2021 LDP and now forms the statutory development plan for Bridgend County Borough. It establishes the policies and land use allocations that will guide decision-making and shape the future growth and development of the area through to 2033.
- 3.1.14. The Proposed Development is predominantly within the administrative boundary of BCBC. As such, BCBC will be considered the lead Local Planning Authority (LPA). However, access to the

³ Welsh Government (2009). TAN 5: Nature Conservation and Planning. (Online). Available at: <https://www.gov.wales/sites/default/files/publications/2018-09/tan5-nature-conservation.pdf> (Accessed July 2026).

⁴ Natural Resources Wales (N.D) South Central Wales Area Statement. (Online) Available at: <https://naturalresources.wales/about-us/what-we-do/strategies-plans-and-policies/area-statements/south-central-wales-area-statement/?lang=en> (Accessed July 2026).

⁵ Bridgend County Borough Council (2024). Local Development Plan 2018-2033. (Online) Available at: <https://www.bridgend.gov.uk/media/izcfqp1f/written-statement.pdf> (Accessed July 2026).

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.

3.1.15. The policies of greatest relevance to this statement are set out in **Table 3.1**.

Table 3.1 Bridgend County Borough Council Replacement Local Development Plan Policies up to 2033

Adopted LDP Policy	Policy Summary
SP3: Good Design and Sustainable Placemaking	Policy SP3 requires all development to deliver high-quality design and adopt a sustainable placemaking approach, creating attractive, healthy and well-connected places that respond positively to their natural, historic and built context. Proposals must demonstrate good design principles through appropriate scale, layout, materials and density, while promoting active travel, efficient land use, community safety and environmental protection. The policy also emphasises biodiversity enhancement, sustainable resource use, climate resilience, and the provision of necessary infrastructure, ensuring that development supports both existing communities and future needs without adversely affecting amenity or environmental quality.
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.
PLA9: Development Affecting Public Rights of Way	Policy PLA9 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.
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.
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	Policy DNP7 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.
SP18: Conservation of Historic Environment	Policy SP18 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.

BCBC Trees and Development SPG 07 (2009)⁶

3.1.16. The BCBC Trees and Development SPG was adopted in January 2008. The SPG has three main aims. They include:

- To make clear the Local Planning Authority's expectations for the design of development.
- To encourage, as a consequence, development of a high standard that will result in a benefit in environmental and landscape terms.
- To reduce the need for revision of the design of proposals, and thus to increase the speed of the determination of planning applications.

SPG 19 Biodiversity and Development: A Green Infrastructure Approach (2014)⁷

3.1.17. The Bridgend biodiversity and development SPG was adopted in July 2014. It was prepared to expand upon the Council's existing planning policies on biodiversity and green infrastructure contained within the adopted Local Plan. It promotes the integration of green infrastructure and biodiversity considerations from the earliest stages of design. The guidance seeks to protect and enhance ecological networks, apply the mitigation hierarchy, maximise ecosystem service benefits and secure the long-term management of green infrastructure assets.

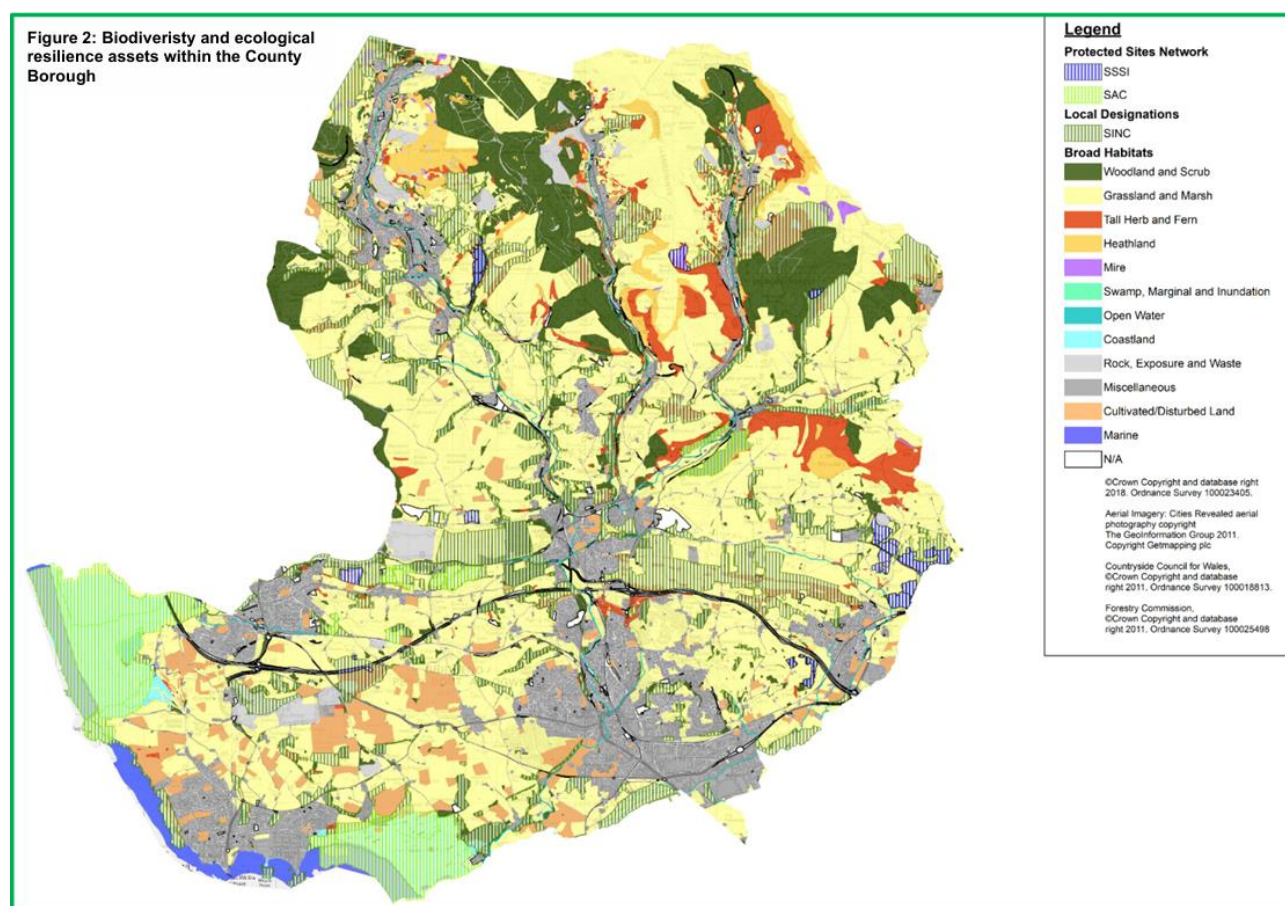
⁶ Bridgend County Borough Council (2008) SPG 07 Trees and Development. (Online) Available at: <https://www.bridgend.gov.uk/media/tizdj1c2/spg-07-trees-and-development.pdf> (Accessed July 2026).

⁷ Bridgend County Borough Council (2014) SPG 19 Biodiversity & Development A Green Infrastructure Approach. (Online) Available at: <https://www.bridgend.gov.uk/media/a3fou4rh/spg-19-biodiversity-and-development.pdf> (Accessed July 2026).

Green Infrastructure Assessment (2022)⁸

- 3.1.18. The BCBC GI assessment was prepared as evidence for the RLDP and provides a county-wide assessment of GI assets, functions and opportunities. It identifies GI as a multifunctional network on natural and semi-natural features and forms part of the evidence base underpinning policy DNP8 of the RLDP (Green Infrastructure).
- 3.1.19. The assessment promotes a green infrastructure-led approach to development, requiring the protection, maintenance and enhancement of existing green infrastructure assets, ecological connectivity and ecosystem services. The assessment emphasises the importance of maintaining and enhancing ecological networks and ecosystem services and ensuring that development contributes positively to the extent, quality and multifunctionality of the wider green infrastructure network.
- 3.1.20. A map of the existing urban green infrastructure assets within the County Borough is provided at the assessment as Figure 1. None are identified within the Wind Farm Site.
- 3.1.21. Figure 2 provides a map of the ecological assets in the County Borough. An extract of this map is provided as **Figure 3.2** below:

Figure 3.2 Biodiversity and Ecological Resilience Map (source: BCBC Green Infrastructure Assessment)



⁸ Bridgend County Borough Council (2022) Green Infrastructure Assessment 2022. (Online) Available at: [sd72-green-infrastructure-assessment-2022.pdf](https://www.bridgend.gov.uk/media/1000000/sd72-green-infrastructure-assessment-2022.pdf) (Accessed July 2026).

- 3.1.22. This identifies areas of heathland, grassland and marsh and tall herb and fern within Wind Farm Site. The GI Assessment has been considered as part of this GI Statement and the Proposed Development.

Rhondda Cynon Taf County Borough Council

Rhondda Cynon Taf Revised Local Development Plan 2006 - 2021⁹

- 3.1.23. 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 County 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.
- 3.1.24. As stated above the access track for the Proposed Development traverses partly through RCT and is located in the Northern Strategy Area.
- 3.1.25. The policies of greatest relevance to this statement are set out in **Table 3.2**.

Table 3.2 Rhondda Cynon Taf County Borough Council 2006 - 2021

Adopted LDP Policy	Policy Summary
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.

⁹ Rhondda Cynon Taf County Borough Council (2011). Local Development Plan up to 2021. (Online) Available at: <https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/RelateddocumentsLDP20062021/AdoptedLocalDevelopmentPlan.pdf> (Accessed July 2026).

Supplementary Planning Guidance: Nature Conservation¹⁰

- 3.1.26. This SPG provides guidance to ensure development protects and enhances biodiversity, geological features and wider ecosystem services as part of the planning process. It emphasises that biodiversity considerations are a material factor for most sites and should be addressed early through appropriate surveys and design. Development should avoid harm to designated sites, protected habitats and species, maintain and enhance ecological networks and connectivity, and follow a mitigation hierarchy where impacts cannot be avoided. Proposals are expected to demonstrate no net loss of biodiversity where possible, incorporate mitigation, compensation and enhancement measures, and secure long-term management through planning conditions or obligations.

Supplementary Planning Guidance: The Historic Built Environment¹¹

- 3.1.27. This SPG seeks to ensure that development preserves or enhances the character, appearance, significance and setting of heritage assets, including listed buildings, conservation areas, archaeological remains, historic parks and gardens, and historic landscapes. The SPG requires heritage considerations to be integrated into the design process and that proposals demonstrate an appropriate understanding of, and response to, the historic environment.

Neath Port Talbot Council

The Neath Port Talbot Local Development Plan (LDP) 2011 - 2026¹²

- 3.1.28. 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.
- 3.1.29. As stated above the access track for the Proposed Development traverses through NPTCBC. Relevant policies to the proposed access track are therefore listed below:

Table 3.3 Neath Port Talbot Local Development Plan (LDP) 2011 - 2026

Adopted LDP Policy	Policy Summary
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

¹⁰ Rhondda Cynon Taf (2011). Supplementary Planning Guidance: Nature Conservation. (Online) Available at: <https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/RelateddocumentsSupplementaryplanningGuidanc/NatureConservationSPG.pdf> (Accessed July 2026).

¹¹ Rhondda Cynon Taf (2011) Supplementary Planning Guidance: The Historic Built Environment. (Online) Available at: <https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/RelateddocumentsSupplementaryplanningGuidanc/TheHistoricBuiltEnvironmentSPG.pdf> (Accessed July 2026).

¹² Neath Port Talbot County Borough Council (2016). Local Development Plan (2011-2026). (Online) Available at: https://media.npt.gov.uk/media/ca2fbumd/ldp_written_statement_jan16.pdf?v=20240823155047 (Accessed July 2026).

	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.
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.

Supplementary Planning Guidance: Biodiversity and Geodiversity¹³

- 3.1.30. This SPG seeks to provide information and guidance setting out the expectations on all development proposals to protect, conserve, enhance and manage important habitats, species and sites of geological interest. The SPG sets out a basic framework for dealing with biodiversity and geodiversity in the planning process in Neath Port Talbot.

Supplementary Planning Guidance: The Historic Environment¹⁴

- 3.1.31. This SPG gives an overview of the historic environment of Neath Port Talbot and outlines the planning policy protections that are in place to safeguard and conserve as far as possible the historic assets of the County Borough.

3.2 Green Infrastructure Assets

- 3.2.1. A summary of the Wind Farm Site and surroundings and the GI assets is set out below.

Site and Surroundings

- 3.2.2. The Wind Farm Site is located across two land parcels of semi-improved grassland, marshy grassland and heathland. The location of the two land parcels include Pwll-yr-lwrch (Northern Array) and Cynhordy (Southern Array).
- 3.2.3. 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

¹³ Neath Port Talbot County Borough Council (2018) Biodiversity and Geodiversity Supplementary Planning Guidance. Available online: https://media.npt.gov.uk/media/nqpnpgge/spg_biodiversity_geodiversity_may18.pdf?v=20241209172432 (Accessed July 2026).

¹⁴ Neath Port Talbot County Borough Council (2019) The Historic Environment Supplementary Planning Guidance. Available online: https://media.npt.gov.uk/media/zasgszo5/spg_historic_environment_april19.pdf?v=20241209172433 (Accessed July 2026).

will utilise these tracks to connect the land parcels (Northern and Southern Array) and provide access to the wider public highway.

- 3.2.4. Public Rights of Way (PRoW), footpath MAE/4/2 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.
- 3.2.5. An extensive number of PRoW across the BCBC, NPTC and RCTCBC areas interact with the Forestry access track.

National Landscape Character

- 3.2.6. The Proposed Development is located within NRW's National Landscape Character Areas (NLCA) 37: South Wales Valleys. This covers an extensive upland area dissected by deep, urbanised valleys. The key characteristics of this NLCA 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.*
- *Contrast of urban valley activity next to quiet uplands - e.g., busy roads, new developments, traffic noise, night lighting, versus 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 identity - 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."*

LANDMAP

- 3.2.7. LANDMAP is an all-Wales landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated in a nationally consistent data set. The five LANDMAP spatial datasets are called the Geological Landscape, Landscape Habitats, Visual and Sensory, Historic Landscape and Cultural Landscape.
- 3.2.8. An assessment of the effects of the Proposed Development on LANDMAP Aspect Areas is set out within Section 6.9 of **Draft ES Chapter 6: Landscape and Visual Impact Assessment**. The selection of LANDMAP Aspect Areas included in the LVIA has been carried out in accordance with the methodology provided in Using LANDMAP in Landscape and Visual Impact Assessments.
- 3.2.9. The Wind Farm Site is not within any national landscape designations. There are a number of SLAs within proximity of the Wind Farm Site. **ES Figure 6.9** shows the relevant national and local landscape designations.

Biodiversity

- 3.2.10. PPW 12 (paragraph 6.12.13) states that GI Statements should highlight any baseline data considered and surveys and assessments undertaken. The baseline biodiversity conditions are described in draft **ES Chapter 8: Biodiversity**. These have been informed by the following surveys:
- Preliminary Ecological Appraisal (PEA) completed in 2025;
 - Daytime Bat Walkover (DBW) undertaken as part of the PEA;
 - Bat activity surveys using automated static detectors, completed over 10 nights during Autumn 2025 (mid-August to October), Spring 2026 (April to May) and Summer 2026 (June to mid-August);
 - A water vole presence/absence survey of all watercourses within the Northern and Southern Arrays. The first survey visit was completed on 20-21 May 2026, with the second visit yet to be undertaken;
 - Great crested newt (GCN) Habitat Suitability Index (HSI) assessments undertaken during the PEA for all waterbodies within 500 m of the Northern and Southern Arrays; and
 - Great crested newt (GCN) environmental DNA (eDNA) surveys undertaken in April 2026 for all waterbodies identified through the HSI assessment as having a below-average (or better) suitability score, or where access was not obtained during the PEA.
- 3.2.11. Additional ecological surveys are currently being undertaken and will inform the assessment presented within the Final ES. Further details are provided in Section 8.13 of draft ES Chapter 8: Biodiversity. Ecological baseline surveys identified no statutory designated sites within the Wind Farm Site, although a number of internationally, nationally and locally designated sites occur in the surrounding area, including a Site of Importance for Nature Conservation (SINC), a non-statutory designation of local or regional ecological value, which partially overlaps a small area of the Southern Array. A SINC is crossed by the Forestry access track.
- 3.2.12. **Table 3.4** below summarises these designations and their key attributes:

Table 3.4 Statutory and Non-Statutory Designations

Designation	Approximate Distance from the Northern and Southern Array and Key Attributes	Nature Conservation Importance
International Sites		
Cefn Cribwr Grasslands SAC	8.8km south of the Northern array and 6km south-west of the Southern Array. Designated for Molinia meadow habitat, with marsh fritillary butterfly also present as a qualifying feature	International
Blackmill Woodlands SAC	7.7km south-west of the Northern Array and 4.3km south-east of the Southern Array. The site is designated for the presence of Annex I old sessile oak woodland habitat.	International
Limestone Coast of South West Wales SAC	29km west of the Northern Array and 30.8km west of the Southern Array. The site is designated for its Annex I habitats of vegetated sea cliffs and fixed coastal ("grey") dunes, together with the Annex II species greater horseshoe bat and early gentian. Additional qualifying features include European dry heath, calcareous grassland, sea cave habitats and petalwort.	International
National Sites		
Cwm Du Woodlands SSSI	1.2km south of the Northern Array and 0.4km west of the Southern Array An ancient sessile oak woodland with locally abundant alder and a rich ground flora.	National
Cwm Cyffog SSSI	4.7km southwest of the Northern Array and 1.7km east of the Southern Array. An upland blanket mire characterised by purple moor-grass and a range of bog-moss species, supporting locally rare white beak-sedge.	National
Coedymwstwr Woodland SSSI	12.9km southeast of the Northern Array and 9.7km southeast of the Southern Array. A limestone mixed deciduous woodland with a rich ground flora and cave systems known to support bats.	National

Designation	Approximate Distance from the Northern and Southern Array and Key Attributes	Nature Conservation Importance
Local Sites		
Frog Pond Wood LNR	10.3km south of the Northern Array and 8.6km southwest of the Southern Array. A mixed oak and ash woodland with associated pond and wetland habitats, supporting pipistrelle bats.	Local
Tremains Wood LNR	12.79km south of the Northern Array and 9.5km south of the Southern Array. A lowland mixed broadleaved woodland with pipistrelle bats present.	Local
Glyncornel LNR	11.6km east of the Northern Array and 9.5km east of the Southern Array Supports woodland and flower-rich meadow habitats and is used by foraging bats.	Local
Craig-y-parciau Woodland LNR	12.9km south of the Northern Array and 9.9km southeast of the Southern Array. An oak and ash woodland on the steep slopes of the Ogmere River valley, Daubenton's bats are known to be present within the Site.	Local
Naint-y-Fforest SINC	Present within and adjacent to the Southern Array. Mix of woodland and open landscape characteristics, with a range of biodiversity.	Local

3.2.13.

A total of 78 Ancient Woodland Inventory (AWI) parcels were identified within 2 km of the Northern and Southern array, the nearest of which is located approximately 440 m west of the Southern Array boundary. Given the separation distance, the absence of habitat loss and the inclusion of embedded mitigation measures to control air quality effects, significant effects on AWI parcels have been scoped out. In relation to Priority Habitats, the Northern Array is primarily characterised by acid grassland and heathland, whilst the Southern Array is dominated by improved grassland with areas of bracken, scrub, marshy grassland and woodland. Extended Phase 1 habitat survey data identifies four potential Priority Habitats within the Northern Array and none within the Southern Array. Following desk study review and habitat surveys, the Wind Farm Site was considered suitable to support a range of protected and notable species and species groups, including bats, badger, Section 7 mammals (including hedgehog and brown hare), water vole, birds, common amphibians, great crested newt, common reptiles, terrestrial invertebrates, notable plant species and invasive non-native species (INNS).

- 3.2.14. An assessment of the effects of the Proposed Development on Priority Habitats and protected and notable species is provided in draft **ES Chapter 8: Biodiversity**.
- 3.2.15. In addition, in terms of ornithology, the baseline conditions are described in draft **ES Chapter 9: Ornithology**. These were informed by the following surveys:
- Initial ornithological scoping surveys and desk study completed in September 2024 to identify target species and inform survey requirements;
 - Vantage Point (VP) surveys undertaken between October 2024 and September 2026 to record bird flight activity and inform collision risk assessment;
 - Breeding raptor surveys completed between March and July in 2025 and 2026 for goshawk, red kite, peregrine and kestrel;
 - Nightjar surveys completed in June and July 2025 and July 2026 within suitable habitat on and adjacent to the Proposed Development;
 - General breeding bird surveys undertaken between March and July 2026 across the Proposed Development and a 100 m buffer;
 - Winter bird walkover surveys completed monthly between October 2024 and March 2025 and between October 2025 and March 2026 to record wintering and passage bird species; and
 - Desk study and field survey data used to inform the identification of target species, breeding and wintering bird assemblages, and the assessment of potential effects on ornithological receptors.
- 3.2.16. Additional ornithology surveys are currently being undertaken and will inform the assessment presented within the Final ES. Further details are provided in **Section 9.21** of draft **ES Chapter 9: Ornithology**.
- 3.2.17. There are no internationally designated sites for ornithological interest within 20 km of the Proposed Development, although two ornithological SSSIs are located within 10 km (Mynydd Ty-Isaf and Eglwys Nunydd Reservoir) and two ornithological SINCs within 2 km (Lletty Brongu and Tylacoch South). Desk study records identified 1,101 records of target and secondary bird species within 2 km of the Northern and Southern Array. Ornithological surveys recorded a range of notable breeding, wintering and passage species, including golden plover, nightjar, goshawk, hen harrier, red kite, peregrine, curlew and kestrel. The arrays supports open grassland and grass-heath bird assemblages, while adjacent woodland, scrub and clear-fell habitats support a distinct assemblage including nightjar and a range of woodland species. Draft **ES Chapter 9: Ornithology** sets out an assessment of effects with respect to ornithology.
- 3.2.18. In addition to the ecological aspects of the Proposed Development, consideration has been given to historic environment impacts (draft **ES Chapter 7: Historic Environment**) and landscape impacts (draft **ES Chapter 6: LVIA**), with surveys undertaken and embedded measures included to reduce impacts. Consideration has been given to sustainable drainage with detailed drainage design to be delivered in accordance with the Drainage Strategy (included within the Flood Consequence Assessment (**Appendix 10A**)). Additionally, consideration has been given to public access and recreation (draft **ES Chapter 15: Socio-economics**).

Historic Environment

- 3.2.19. There are no designated assets within either the Northern or Southern Array. The existing access tracks cross the western boundary of the Rhonnda registered historic landscape (Cadw: HLW (MGI) 5) and traverse through the boundary of the Clawdd Mawr, Mynydd Caerau scheduled monument (Cadw: GM231). There are no further designated historic assets (world heritage sites,

listed buildings, registered historic parks and gardens, conservation areas) recorded within the Array boundary.

3.2.20. A total of 186 designated heritage assets are recorded within the 5km Study Area, comprising: 21 scheduled monuments; two registered historic landscapes; two registered historic parks and gardens; two kitchen gardens; five conservation areas; one grade I listed building, 11 grade II* listed building and 142 grade II listed buildings.

3.2.21. Fifty-three non-designated historic assets have been identified within the Northern and Southern Arrays through HER and NMRW records, LiDAR analysis and a Wind Farm Site walkover survey undertaken by WSP in June 2026. These are listed in **Table 3.5** below:

Table 3.5 Non-Designated Assets within the Wind Farm Site (GGAT HER)

WSP Ref.	Name	Type	Period	Array
B1	Mynydd Bach, Cairn II	Cairn	Bronze Age	Northern
B2	Mynydd Bach, Cairn III	Cairn	Bronze Age	Northern
B3	Mynydd Bach, Cairn I	Cairn	Bronze Age	Northern
B9	Parish boundary	Boundary	Medieval	Southern
B12	Moel Cynhordy platform house	Domestic Dwelling	Medieval	Southern
B14	Pant y Ffald long hut	Domestic Dwelling	Medieval	Northern
B18	Mynydd Bach, Marker Cairn	Marker Cairn	Modern	Northern
B38	Mynydd Bach, Quarry IX	Quarry	Post Medieval	Northern
B44	Pant y Ffald, Sheep Fold I	Sheepfold	Post Medieval	Northern
B80	Trial level	Coal Mining	Post Medieval	Northern
B83	Mynydd Bach, Structure IV	Coal Mining	Post Medieval	Northern
B87	Mynydd Bach, Spoil Heap XXII	Coal Mining	Post Medieval	Northern
B92	Mynydd Bach, Quarry III	Quarry	Post Medieval	Northern
B95	Mynydd Bach, Shelter I	Shelter	Post Medieval	Northern
B97	Mynydd Bach, Quarry XIV	Quarry	Post Medieval	Northern
B138	Pant y Ffald, Wall	Wall	Post Medieval	Northern
B148	Mynydd Bach, Structure I	Sheepfold	Post Medieval	Northern
B150	Mynydd Bach, Quarry I	Quarry	Post Medieval	Northern
B168	Mynydd Bach, Shelter II	Shelter	Post Medieval	Northern

B171	Mynydd Bach, Spoil Heap XIX	Coal Mining	Post Medieval	Northern
B175	Mynydd Bach, Quarry IV	Quarry	Post Medieval	Northern
B186	Mynydd Bach, Quarry XII	Quarry	Post Medieval	Northern
B190	Mynydd Bach, Structure III	Shelter	Post Medieval	Northern
B217	Mynydd Bach, Shelter IV	Shelter	Post Medieval	Northern
B219	Mynydd Bach, Building II	Coal Mining	Post Medieval	Northern
B236	Mynydd Bach, Quarry II	Quarry	Post Medieval	Northern
B237	Mynydd Bach, Spoil Heap XXI	Coal Mining	Post Medieval	Northern
B244	Llynfi and Ogmore Railway	Railway	Post Medieval	Northern
B352	Mynydd Bach, Quarry VI	Quarry	Post Medieval	Northern
B362	New Mountain Level, Garw Valley	Coal Mining	Post Medieval	Southern
WSP1	Possible Quarry Pit	Quarry	Post Medieval	Northern
WSP2	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Northern
WSP3	Drystone Wall	Field Boundary	Post Medieval	Northern
WSP4	Possible continuation of medieval boundary B11	Lordship Boundary	Medieval (Possible)	Northern
WSP5	Possible continuation of medieval boundary B9	Parish Boundary	Medieval (Possible)	Northern
WSP6	Relic Agricultural Equipment	Equipment	Modern	Southern
WSP7	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP8	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP9	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP10	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP11	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP12	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP13	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP14	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP15	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern

WSP16	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP17	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP18	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP19	Possible Quarry Pit/ Mining Activity	Quarry / Coal Mining	Post Medieval	Southern
WSP20	Poss Tithe field boundary (marked on the corner)	Field Boundary	Post Medieval	Southern
WSP21	Possible boundary or cropmark associated with possible medieval platform house B12.	Boundary (Possible)	Medieval (Possible)	Southern
WSP22	Unknown feature of unknown date, earthwork curvilinear	Earthwork	Undated	Southern
WSP23	Undated Structure	Structure	Undated	Southern

3.2.22. In terms of archaeology, the baseline assessment indicates low archaeological potential for Roman remains and low potential for palaeoenvironmental remains. Prehistoric and medieval remains are considered to have low to medium archaeological potential due to known archaeological features within and surrounding the Northern and Southern Array. Post-medieval and modern remains have high archaeological potential, reflecting the historic use for agriculture, quarrying and mining activities. Any remains encountered are likely to comprise former mine workings, associated infrastructure, agricultural features or isolated artefacts, generally of low to medium archaeological significance.

3.2.23. The assessment in draft **ES Chapter 7: Historic Environment** concludes that the Proposed Development would not give rise to any significant effects on historic environment receptors during either the construction or operational phases.

Water Environment

3.2.24. The Northern and Southern Array comprise two upland parcels. Ground levels vary e, with the Northern Array reaching approximately 425 m AOD and the Southern Array falling from around 348 m AOD in the north to approximately 147 m AOD in the south.

3.2.25. The Proposed Development is located within an upland hydrological setting, where surface water drainage generally follows local topography towards ordinary watercourses and downstream valley catchments.

3.2.26. The watercourses within and adjacent the Arrays are generally characteristic of upland headwater systems, comprising narrow channels, localised sinuosity and variable flows influenced by rainfall, runoff and topography.

3.2.27. Within the Northern Array, the principal watercourses are Nant Gwyn Bach and Nant Cwm-du. Nant Gwyn Bach intersects the northern boundary of the array, while Nant Cwm-du rises within the eastern part of the Northern Array and flows southwards following the local topographic gradient. Minor unnamed tributaries of Nant Cwm-du are also present and are considered likely to represent small headwater drainage features.

- 3.2.28. Within the Southern Array, the principal watercourse is Nant Cedfyw, which rises within the central part of the array and flows southwards. Other watercourses within the wider Study Area include Nant Cwm-du to the west, Garw Fechan to the east, and the Afon Garw further east of the Southern Array.
- 3.2.29. No statutory main rivers are located within the Northern and Southern Array. The nearest statutory main river is the Afon Garw, located approximately 640 m east of the Southern Array and situated approximately 198 m below the elevation of the Northern and Southern Array.
- 3.2.30. A qualitative Flood Consequences Assessment (FCA) (**ES Appendix 10A**) has been undertaken to consider flood risk from all potential sources. The assessment considers flood risk to the Proposed Development, as well as the potential for the Proposed Development to increase flood risk downstream.
- 3.2.31. The FCA identifies that the majority of the Northern and Southern Array lies within Flood Zone 1 and is therefore at a generally low risk of flooding. The principal flood risk relates to localised surface water and ordinary watercourse flow routes within parts of the Arrays, associated with drainage corridors and lower-lying areas. Flood risk from fluvial, coastal, groundwater, public sewer, reservoir and canal sources is considered low or negligible.
- 3.2.32. Further information can be found in draft **ES Chapter 10:Water Environment**.

4. Scheme Strategy

4.1 Objectives and design strategy

4.1.1. 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 the residential and environmental amenity of features are protected.

The Proposed Development

4.1.2. The Proposed Development is a wind farm consisting of a maximum of eight wind turbines, each with a three-bladed maximum height to blade tip of 180m. **Table 4.1** provides the grid references for each turbine:

Table 4.1 Proposed Turbine Locations

Turbine ID	Easting	Northing
1	286850	193130
2	287420	192958
3	286684	192694
4	287410	192540
5	289446	189945
6	288914	190378
7	288694	189428
8	288422	189842

4.1.3. The application also comprises associated infrastructure including access improvements, new and improved internal wind farm tracks, crane pads, temporary construction compound, laydown and storage areas and grid connection infrastructure, including an on-site substation.

4.1.4. 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. For the purposes of the ES assessment, it is assumed that the wind farm would be decommissioned.

- 4.1.5. The layout of the Proposed Development has been chosen because it balances high productivity with the environmental sensitivities present.
- 4.1.6. Further information in relation to the design evolution of the proposed development is provided in the draft **Environmental Statement** and draft **Design and Access Statement** which accompanies the application.

Embedded environmental measures

- 4.1.7. A number of embedded environmental measures are proposed as part of the development, in order to reduce the environmental effects. These are detailed within the draft ES which accompanies this submission. A number of measures of key relevance to this statement have been summarised below:

Biodiversity

- **Construction Environmental Management Plan (CEMP):** An outline CEMP supports the submission and will be implemented during the entirety of the construction stage to ensure that construction activities for the Proposed Development are carried out in accordance with legislation and best practice for minimising the effects of construction on the environment and local communities. The CEMP can be secured by way of a suitably worded pre-commencement planning condition attached to the planning permission. An Outline CEMP forms part of the ES.
- **Habitat Management Plan (HMP):** An Outline HMP will be produced to accompany the final application submission and will set out measures for the restoration, enhancement and long-term management of habitats within the Proposed Development, delivering biodiversity benefits and supporting the maintenance and enhancement of ecological features.
- **Invasive Non-Native Species (INNS):** Biosecurity measures, including hygiene procedures, and an **INNS Management Plan** will be implemented to prevent the introduction and spread of invasive species during construction. The plan will be secured by DNS condition.
- **Bats and trees:** The infrastructure layout has been designed to avoid trees identified as having bat roost potential, with all such trees located outside the Zone of Influence of predicted impact pathways. This mitigation is embedded within the design of the Proposed Development and secured through the approved layout and DNS consent.
- **Surface water and water quality:** Good practice construction measures will be implemented to minimise the release of sediment and pollutants to surrounding watercourses and habitats during construction. These measures will be secured through an **Outline Construction Environmental Management Plan (CEMP)** and **Construction Method Statement (CMS)** by DNS condition.
- **Habitat reinstatement and enhancement:** Areas subject to temporary habitat loss will be reinstated and re-vegetated following construction. Long-term habitat restoration and enhancement measures will be set out within the **Habitat Management Plan (HMP)**. These measures will be secured through the **Outline CEMP** and **HMP** by DNS condition.
- **Habitat Retention:** The layout has been designed to avoid habitats of high ecological value wherever practicable. This mitigation is embedded within the design of the Proposed Development and secured through the approved layout and DNS consent.

- General species protection: Pre-construction surveys and species protection measures will be undertaken to minimise the risk of injury, mortality and disturbance. Measures will include controlled vehicle movements, provision of escape routes from excavations, restrictions on night-time working, and sensitive lighting design. These measures will be secured through the **Outline CEMP** by DNS condition.
- Operational bat protection: A minimum 200 m stand-off distance will be maintained between turbine blade tips and key bat commuting and foraging features, including woodland, treelines and suitable waterbodies, reducing collision and barotrauma risk. This mitigation is embedded within the design of the Proposed Development and secured through the approved layout and DNS consent.

Ornithology

- Breeding birds: Habitat loss has been minimised through the project design. Additional mitigation includes seasonal vegetation clearance outside the breeding season, use of defined working areas, ECoW supervision, and exclusion zones around active nests where required. These measures will be secured through the **Construction Environmental Management Plan (CEMP)** and **Construction Method Statement (CMS)** by DNS condition.
- Protected bird species (including Schedule 1 species, Nightjar and Golden Plover): Construction activities will be programmed and managed to minimise disturbance through timing restrictions, controlled lighting, and the use of protection zones and visual/noise screening where necessary. These measures will be secured through the **CEMP** by DNS condition.
- Bird collision risk: A **Collision Mitigation and Monitoring Strategy (CMMS)** will be implemented during operation to monitor collision rates and identify any requirement for additional mitigation measures, such as turbine curtailment or feathering. The CMMS will be secured by DNS condition.
- Nightjar: A minimum 50 m stand-off distance will be maintained between turbine blade tips and woodland and other features that may encourage commuting Nightjar to enter the collision risk zone. This measure is embedded within the design of the Proposed Development and will be secured through the approved layout and DNS consent.
- Bird habitat management and enhancement: An **Outline Habitat Management Plan (oHMP)** will accompany the final application submission and will set out the long-term management and enhancement of habitats to support bird populations and wider biodiversity objectives. The final Habitat Management Plan (HMP) will be secured by DNS condition.
- Operational maintenance: Maintenance activities will, where practicable, avoid sensitive breeding periods and be undertaken in accordance with the **CMMS**. The **HMP** will also provide long-term habitat enhancement measures for potentially displaced birds. These measures will be secured through the **CMMS and HMP**, secured by DNS condition.

Water Environment

- Watercourses and aquatic habitats: The layout has been designed to avoid direct effects on watercourses where practicable, with crossings minimised and designed to maintain flow conveyance, hydrological connectivity and water quality. Construction drainage and pollution prevention measures, including sediment control and buffer strips, will be implemented. These measures will be secured through the **Outline**

CEMP, Watercourse Crossing Schedule and, where required, **Ordinary Watercourse Consents**.

- Water Framework Directive (WFD) water bodies: Existing drainage pathways will be retained where practicable and SuDS-based drainage measures will be implemented to control runoff rates, sediment and water quality. These measures will be secured through the **WFD Assessment, Outline Drainage Strategy/detailed drainage design** and **Outline CEMP**.
- Flood risk: The extent of impermeable surfaces will be minimised where practicable and drainage infrastructure will be designed in accordance with SuDS principles to attenuate runoff, maintain natural drainage patterns and avoid increasing flood risk. These measures will be secured through the **Flood Consequences Assessment (FCA), Outline Drainage Strategy, CEMP** and **SAB approval**, where required.
- Groundwater: Pollution prevention, fuel and chemical storage controls, spill response procedures and appropriate management of dewatering activities will be implemented to protect groundwater resources. These measures will be secured through the **Outline CEMP**, including groundwater management measures, and any required **environmental permits**.
- Private Water Supplies (PWS) and abstractions: Further assessment of hydrologically connected supplies and abstractions will be undertaken where required, with monitoring and mitigation measures implemented as necessary. These measures will be secured through a **Private Water Supply Risk Assessment (PWSRA), PWS Monitoring and Method Statement, CEMP** and consultation with the relevant authority.
- Peat, soils and Groundwater Dependent Terrestrial Ecosystems (GWDTEs): The design seeks to avoid peat, peaty soils and sensitive wet habitats where practicable. Appropriate drainage, cross-drainage and soil management measures will be implemented to maintain hydrological connectivity and minimise soil degradation. These measures will be secured through a **Soil and Peat Management Plan, GWDTE Assessment, Outline Drainage Strategy** and **CEMP**.
- Operational water environment protection: Permanent drainage infrastructure will be designed and maintained to manage runoff, protect water quality and maintain existing hydrological connectivity. These measures will be secured through the **Outline Drainage Strategy/detailed drainage design, Operational Drainage Maintenance Plan** and, where required, **SAB approval**.
- Operational maintenance activities: Pollution prevention controls, spill response procedures and ongoing drainage inspections will be implemented during operation and maintenance activities to protect water environment receptors. These measures will be secured through **Operational Environmental Management Procedures** and a **Drainage Inspection and Maintenance Plan**.

Historic Environment

- Archaeology: Impacts on known and previously unknown archaeological remains will be mitigated through a programme of archaeological investigation, recording and, where necessary, further archaeological works to ensure that any loss of or disturbance to archaeological remains is appropriately documented. The scope of any additional works will be agreed in consultation with Heneb and secured through a DNS planning condition.

5. Green Infrastructure Assessment

5.1 Demonstrating the Step-wise Approach

- 5.1.1. PPW12 (paragraph 6.2.12) states that the GIS must be used for demonstrating how the step-wise approach (illustrated in **Figure 3.1**) has been applied.
- 5.1.2. Full details of the approach to mitigation and enhancement are provided in **draft ES Chapter 8: Biodiversity** and **draft ES Chapter 9: Ornithology** and the various supporting documents which have been produced. A number of the proposed embedded environmental measures have also been summarised in **Section 4** of this statement above.
- 5.1.3. A Net Benefit for Biodiversity (NBB) Statement will accompany the final application submission and will demonstrate how the Proposed Development complies with national and local biodiversity policy requirements. The Statement will describe the embedded mitigation, habitat management and enhancement measures proposed as part of the Development and will apply the biodiversity step-wise approach of avoidance, minimisation, mitigation and enhancement. The final NBB Statement will identify the biodiversity benefits to be delivered through the Proposed Development and the mechanisms through which these will be secured and managed over the lifetime of the Development.
- 5.1.4. The key aspects of the step-wise approach and a summary of the embedded mitigation and management measures identified to date are set out in **Table 5.1** below.

Table 5.1 Application of the step-wise approach

Assessing Impacts on Habitats and Species Through the Step-Wise Approach	Measures Proposed for Implementation
Step 1 – Avoid	■ The Proposed Development has been designed to avoid environmentally sensitive features wherever practicable through the iterative site selection and layout design process. No statutory designated sites are located within the Wind Farm Site, and all such designations have been avoided. Ongoing ecological surveys and assessment will inform the final ES. At this stage irreplaceable habitats are avoided. If identified, the Proposed Development will seek to avoid impacts on irreplaceable habitats through further design refinement in accordance with the step-wise approach. ■ Infrastructure has been sited to minimise direct impacts on environmentally sensitive features, including watercourses, habitats of higher ecological value, protected species habitat, trees with bat roost potential, key ornithological receptors, and a Site of Importance for Nature Conservation (SINC), a non-statutory designation of local ecological value that partially overlaps a small area of the Southern Array. ■ Appropriate stand-off distances have been incorporated into the design, including separation distances between turbines and features used by bats and breeding birds.

Assessing Impacts on Habitats and Species Through the Step-Wise Approach	Measures Proposed for Implementation
Step 2 – Minimise	■ The layout has been refined to minimise habitat loss and fragmentation where practicable. ■ Construction activities will be undertaken in accordance with an Construction Environmental Management Plan (CEMP), including measures to minimise pollution, sediment release, disturbance to habitats and impacts on protected species. ■ Vegetation clearance, construction timing restrictions, ecological supervision and species protection measures will be implemented where required to minimise effects on ecological receptors. ■ Biosecurity measures will be implemented to minimise the risk of introducing or spreading Invasive Non-Native Species (INNS).
Step 3 – Mitigate / Restore	■ Temporary construction areas will be reinstated and re-vegetated following completion of works. ■ Measures to protect water quality, hydrological connectivity and aquatic habitats will be implemented during construction via an approved CEMP. ■ Additional ecological surveys are ongoing and will inform the final biodiversity assessment presented in the ES. Any species-specific mitigation measures identified through this process will be incorporated into the Proposed Development where required. ■ An Outline Habitat Management Plan (HMP) will be prepared with the application to support habitat restoration and enhancement measures. A final Plan which will be approved by the relevant local planning authorities will be implemented, secured by planning condition.
Step 4 – Compensate	■ The requirement for any compensatory habitat provision will be informed by the findings of the ongoing ecological work and presented, where necessary, within the final ES documentation. ■ At this stage, mitigation and enhancement measures are expected to be delivered primarily within the application boundary.
Step 5 – Long Term Management Plan and Additional Measures	■ An Outline Habitat Management Plan (HMP) will accompany the final submission and will set out proposals for the long-term management, restoration and enhancement of habitats. A final Plan which will be approved by the relevant local planning authorities will be implemented, secured by planning condition. ■ A Construction Environmental Management Plan (CEMP) and associated method statements will be implemented during construction, secured by planning condition. ■ Ecological monitoring and management measures will be incorporated where required to ensure mitigation remains effective throughout the lifetime of the Proposed Development. ■ Implementation of a Collision Mitigation and Monitoring Strategy (CMMS) to monitor potential collision effects on birds during operation

Assessing Impacts on Habitats and Species Through the Step-Wise Approach	Measures Proposed for Implementation
	and to identify whether any additional mitigation measures are required. The CMMS will set out the proposed monitoring approach, reporting requirements and any adaptive management measures considered necessary in response to monitoring results. ■ A Net Benefit for Biodiversity (NBB) Statement will accompany the final submission and will set out the biodiversity enhancement measures and demonstrate how the Proposed Development accords with relevant policy requirements.

- 5.1.5. In summary, through the application of the step-wise approach and the implementation of embedded mitigation, habitat restoration and long-term management measures, the Proposed Development is anticipated to deliver biodiversity enhancements. The extent of these benefits and the mechanisms for their delivery will be confirmed within the NBB Statement accompanying the final application submission.

5.2 DECCA Framework

- 5.2.1. The DECCA Framework sets out the approach to net benefit through five key attributes;

- Diversity;
- Extent;
- Condition;
- Connectivity; and
- Adaptation.

- 5.2.2. Although the requirements for the GI Statement set out in PPW12 do not explicitly reference the DECCA Framework, the approaches described in draft ES Chapters 8 and 9 and supporting documentation and how they apply to the DECCA Framework are summarised below.

Diversity

- 5.2.3. The Proposed Development has been informed by the application of the biodiversity step-wise approach, seeking to avoid impacts where practicable and minimise impacts where avoidance is not possible. Embedded mitigation measures and the habitat enhancement proposals currently under development have the potential to support and maintain habitat and species diversity.

Extent

- 5.2.4. Measures to avoid the loss of sensitive habitats have informed the design process, including the siting of infrastructure away from key ecological features where practicable and the use of existing infrastructure and access routes where feasible. At present, no irreplaceable habitats have been identified that would be directly affected by the Proposed Development. Opportunities for habitat restoration and enhancement will be further developed through the final biodiversity proposals accompanying the application submission.

Condition

- 5.2.5. Embedded mitigation and proposed habitat management measures have the potential to maintain and enhance the condition of habitats. The protection and enhancement of habitats and ecological features may also contribute to improvements in habitat quality and ecological resilience over the long term.

Connectivity

- 5.2.6. The Proposed Development has sought to retain and avoid fragmentation of key habitats and ecological features where practicable. Habitat restoration and enhancement measures currently being developed may provide opportunities to maintain and strengthen ecological connectivity on-site and between the it and the surrounding landscape.

Adaptation

- 5.2.7. The biodiversity step-wise approach has been applied throughout the design process to avoid and minimise habitat loss and to identify appropriate mitigation measures where required. Measures to maintain and enhance habitat extent, condition and connectivity have the potential to increase the resilience of ecological receptors to environmental change. Longer-term habitat management proposals will be developed as part of the final biodiversity strategy.

5.3 Building with Nature Framework

- 5.3.1. PPW12 establishes the submission of proportionate GIS with planning applications and refers to the BwN Standards as good practice.
- 5.3.2. As set out within the BwN briefing 'Delivering High Quality Green Infrastructure in Wales', BwN is for all those engaged in placemaking who want to create better places for nature and people to thrive. It is an evidence-based framework of 12 quality standards that collectively define what good GI looks like. Its purpose is to help create resilient, healthy places where wildlife thrives, where people want to live, and which respond positively in a changing climate.
- 5.3.3. The assessment of the Proposed Development through the BwN Standards Framework offers a means of recognising and valuing the proposed GI. The six Core Standards create a solid foundation for the delivery of high-quality GI through design, planning and development. The Standards in the Wellbeing, Water and Wildlife themes build on this foundation. Each of the standards are set out in the tables below, with explanatory text and references to the supporting evidence which demonstrate how the standard is being met.

Table 5.2 BwN Core Standards

BwN Standard	Evidence	Assessment
Standard 1: Optimises Multifunctionality and Connectivity – the green infrastructure optimises multifunctionality and connectivity within the boundary of the project and links with the existing and planned for green infrastructure in the surrounding area	Planning Statement Design and Access Statement Environmental Statement: - Chapter 3: Alternatives - Chapter 4: Proposed Development - Chapter 8: Biodiversity - Chapter 9: Ornithology	The Proposed Development is to construct and operate a wind farm of up to eight turbines. The turbines will provide a source of renewable energy that will support the needs of Wales and contribute to meeting Climate Change objectives and thereby BWN Standard 2. The scale of the Proposed Development will
Standard 2: Positively Responds to the Climate Emergency – the green infrastructure is designed to be		

BwN Standard	Evidence	Assessment
climate resilient by incorporating mitigation and adaptations that respond to the impacts of climate change. The green infrastructure is designed to promote low carbon behaviours and contributes to achieving zero carbon development by optimising carbon sequestration and demonstrating low carbon approaches to design, construction and long-term maintenance	Outline CEMP	go some way to meeting national energy priorities and help ensure that Wales moves towards net zero carbon in 2050. It also has the potential to reduce the levels of CO₂ emitted into the atmosphere by replacing that generated through fossil fuels. In terms of its GI contribution, the development has been designed to make the most effective use of the land for wind power generation. As such, it is proposed to be located in an elevated area where there is excellent wind resource. In order to reduce the impact upon local amenity, it has also been purposefully located away from houses. Therefore, by way of the nature of the Proposed Development, there is limited opportunity for multifunctional GI provision. However, the approach undertaken to desktop study and surveys, design, and assessment outlined in the ES, show how the use proposed can exist within, and support the use of, multifunctional GI. Wind farm development requires extensive areas of largely undeveloped land and, although infrastructure will be introduced, the majority of the land will remain undeveloped during operation. This enables habitat management, restoration and biodiversity enhancement measures to be integrated alongside renewable energy generation, supporting the principles of PPW and BWN standards. An assessment of the wider context also formed a key part of the site selection process. Further details regarding the site selection process and the factors considered are set out within the draft Design and Access Statement.
Standard 3: Maximises Environmental Net Gains – the green infrastructure is designed to actively mitigate any unavoidable harmful environmental impacts of development on soil and air quality and to minimise light and noise pollution. In addition, it delivers environmental net gains, including improving air and water quality and wherever possible includes quiet spaces for people and wildlife.		
Standard 4: Champions a Context Driven Approach – the green infrastructure positively responds to the local context, including the physical environment, such as landscape and urban character and social, economic and environmental priorities, including the evidenced needs and strengths of existing and future local communities.		
Standard 5: Creates Distinctive Places – the green infrastructure is integral to the project and is designed to reinforce local distinctiveness and / or create a distinctive sense of place.		
Standard 6: Secures Effective Place-keeping – the green infrastructure is subject to management arrangements that demonstrate a commitment to effectively implement, establish and maintain features at all stages of the development process. This should include details of funding, governance, maintenance, monitoring, remediation and, where appropriate, community involvement and stewardship.		

BwN Standard	Evidence	Assessment
		The Applicant is committed to preparing an Outline Habitat Management Plan (oHMP), which will accompany the final application submission responding to the existing site context thereby supporting environmental net gain consistent with BWN Standard 3 and Standard 4. The oHMP will set out the objectives for biodiversity protection, habitat restoration, enhancement and long-term management measures, together with proposals for monitoring where appropriate. The oHMP will provide the framework for the long-term management of habitats and species associated with the Proposed Development and will be refined in consultation with the relevant stakeholders following determination of the application. The final Habitat Management Plan can be secured via a suitably worded DNS planning condition. In addition, an outline CEMP supports this submission and will be implemented during the entirety of the construction stage. This will ensure that construction activities for the Proposed Development are carried out in accordance with legislation and best practice for minimising the effects of construction on the environment and local communities.

Table 5.3 BwN Wellbeing Standards

BwN Standard	Evidence	Assessment
Standard 7: Brings Nature Closer to People – The green infrastructure is close to where people live, work, learn, play and / or visit and is designed to optimise use and enjoyment for everyone across the year, to maximise health and wellbeing outcomes and to promote active living for existing and future communities.	Planning Statement Design and Access Statement Environmental Statement: - Chapter 12: Traffic and Transport - Chapter 16: Socio Economics	As set out above, one of the features that makes a site suitable for wind farm development is that it is located away from residential development and other potential sensitive receptors. As such, the development has not been designed specifically to

BwN Standard	Evidence	Assessment
Standard 8: Supports Equitable and Inclusive Places – the green infrastructure is designed to encourage and enable everyone, including those from vulnerable or excluded groups, to use and enjoy it, help reduce health inequalities and to build a shared sense of community and belonging.		encourage everyone to use it and enjoy it. Notwithstanding this, a network of Public Rights of Way (PRoW) crosses the Northern and Southern Array and an area of Open Access Land (OAL) overlaps part of the Northern Array, providing public access. With the implementation of the mitigation measures set out in the Outline PRoW Management Plan (PRoWMP) (Appendix 12A), including the management of PRoWs during construction where required, together with the retention of the existing PRoW network and OAL during operation, any effects on users would be limited to temporary disruption during construction and localised changes to recreational experience during operation. In addition, the applicant is conscious of the role of the Proposed Development within the community and wants to ensure that it shares some of the financial benefits of having the wind farm in the area. This will be implemented by a Community Benefit Fund, the mechanism of which will be confirmed post consent, should the application be permitted.

Table 5.4 BwN Water Standards

BwN Standard	Evidence	Assessment
Standard 9: Delivers Climate Resilient Water Management – the green infrastructure is integral to sustainable drainage using above ground features to manage flood risk, maintain the natural water cycle and improve water quality within the boundary of the project and at a catchment scale. The green infrastructure is designed to be drought resistant and wherever	Planning Statement Design and Access Statement Environmental Statement: Chapter 10: Water Environment Flood Consequences Assessment & outline	The application is supported by a FCA & outline drainage statement which assesses the potential for flood risk impacts associated with the Proposed Development. It also includes the proposed outline surface water drainage strategy, which will be agreed in consultation with BCBC. This has been prepared

possible, includes measures for the retention and the reuse of rainwater.	drainage statement Appendix 10A to the ES	taking account of the baseline hydrology conditions across the Proposed Development, which were established by desk-based information sources as well as phase 1 habitat survey work and a phase 1 soil and peat survey. A range of embedded mitigation measures are proposed to avoid or minimise effects on the water environment during both construction and operation. During construction, the layout has been designed to avoid direct effects on watercourses where practicable. Construction drainage will incorporate source control measures, silt management, buffer strips, temporary interception drainage and restrictions on working during heavy rainfall. Existing drainage pathways will be retained where practicable, with SuDS and pollution prevention measures used to manage runoff, sediment and water quality. Measures to manage flood risk, protect groundwater resources, maintain hydrological connectivity and safeguard private water supplies will also be implemented through the Outline CEMP, Outline Drainage Strategy, Flood Consequences Assessment, Soil and Peat Management Plan and other supporting management plans where required. During operation, permanent drainage infrastructure will be designed and maintained in accordance with SuDS principles to manage runoff, maintain existing hydrological connectivity, protect water quality and avoid increasing flood risk elsewhere. Ongoing pollution prevention measures and drainage maintenance procedures will further protect water environment receptors throughout the operational lifetime of the Proposed Development. The FCA concludes that the Proposed Development, together with proposed flood risk management measures, would not be subject to an unacceptable
Standard 10: Brings Water Closer to People – the green infrastructure is designed to integrate water, including areas of standing water, flowing water, seasonal and ephemeral features, to bring additional amenity and wildlife benefits.		

level of risk, nor would there be potential increased flood risk elsewhere.

Table 5.5 BwN Wildlife Standards

BwN Standard	Evidence	Assessment
Standard 11: Delivers Wildlife Enhancement – the green infrastructure optimises long term and climate resilient net benefits for nature, by retaining and enhancing existing ecological assets and creating locally relevant new habitats within the boundary of the project. Wildlife measures are secured at all stages of implementation and where applicable, across multiple phases of development.	Planning Statement Design and Access Statement Environmental Statement: - Chapter 8: Biodiversity; - Chapter 9: Ornithology Outline CEMP	A range of surveys have been undertaken in order to establish the biodiversity baseline, with additional survey work and assessment ongoing. The surveys completed to date are outlined in Section 3.2 of this statement.
Standard 12: Underpins Nature's Recovery – the green infrastructure creates effective links with existing and planned for ecological features and networks beyond the boundary of the project to support the creation and restoration of resilient ecological networks in the wider landscape.		In terms of biodiversity enhancement, an Outline Habitat Management Plan (oHMP) and Net Benefit for Biodiversity (NBB) Statement will be prepared and submitted with the final application. These documents will set out the objectives for biodiversity protection, mitigation, monitoring, habitat restoration and enhancement measures, as appropriate, identify opportunities to link habitats on-site with those off-site and will explain how the Proposed Development contributes towards the delivery of biodiversity net benefit in accordance with relevant planning policy requirements. The HMP can be secured via a suitably worded planning condition. The Proposed Development therefore accords with BWN Standard 11 and 12. An Ecological Construction Method Statement (ECMS) will be prepared to set out the measures required to protect important ecological features during construction. The ECMS, together with the Construction Environmental Management Plan (CEMP), will ensure appropriate environmental management measures are implemented throughout construction and can be secured through suitably worded DNS planning conditions.

6. Conclusion

6.1 Summary of the Green Infrastructure Statement

- 6.1.1. Through the approach undertaken to desktop studies and surveys, the design, and the assessment of the Proposed Development outlined within the draft ES, and other supporting documents with the application, it is demonstrated how the proposed use can exist within, and support the use of, GI. In particular, the supporting draft DAS sets out the clear context for the Proposed Development, and how the design has evolved as a result of the consideration of the surrounding environment.
- 6.1.2. As set out in **Section 4** of this Statement, the step-wise approach has been applied to ensure that habitat loss is avoided where practicable, minimised where avoidance is not possible, and that impacts on protected and priority species are appropriately mitigated where necessary. Embedded mitigation measures have been identified through the assessment process and, where required, will be secured through mechanisms such as the Outline Habitat Management Plan (oHMP), Construction Environmental Management Plan (CEMP), Collision Mitigation and Monitoring Strategy (CMMS) and Ecological Construction Method Statement (ECMS). A Net Benefit for Biodiversity (NBB) Statement will accompany the final application submission and will set out the proposed biodiversity enhancement measures and demonstrate how the Proposed Development contributes to the delivery of biodiversity net benefit. As such, the Proposed Development is considered to comply with the requirements set out in PPW12 in respect of GI.

