



Pennant Walters Ltd

FOEL TRAWSNANT

Design and Access Statement





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EXECUTIVE SUMMARY

This report has been produced for the purpose of describing the approach taken by the Applicant (Pennant Walters Ltd) to the design of the Project, which us for the installation of a 66 kV overhead line and underground cable connection from the approved Foel Trawsnant wind farm, situated within South Wales, to the wider national grid (referred to as the 'Project' from here on).

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

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

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1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1. This Design and Access Statement (DAS) has been prepared by WSP UK Ltd (WSP) on behalf of Pennant Walters Ltd (the Applicant). The DAS forms part of a suite of documents supporting a DNS submission to Planning and Environment Decisions Wales (PEDW) on behalf of the Welsh Government for consent as a Development of National Significance (DNS).
- 1.1.2. The Project is related to the approved Foel Trawsnant Wind Farm' electricity infrastructure. It comprises both 66 kilovolts (kV) overhead lines (OHL) and underground cables (UGC) which will provide the connection between the National Grid and the Foel Trawsnant Wind Farm.
- 1.1.3. This DAS should be read in conjunction with the accompanying Planning Statement, which sets out the planning policy context for how the application's design and access issues have been considered, the Draft Environmental Statement (ES), which sets out an assessment of the likely significant environmental effects of the Project, and Green Infrastructure Statement
- 1.1.4. This DAS has been prepared in line with the Planning (Wales) Act 2015¹ which sets out the requirements regarding the contents of a DAS and reflects the objectives of good design set out in Planning Policy Wales (PPW) (Welsh Government, 2024)² and Technical Advice Note 12: Design (TAN 12) (Welsh Government, 2016)³. The DAS is informed by the guidance in Design and Access Statements in Wales (Welsh Government, 2017)⁴.

1.2 PURPOSE AND STRUCTURE OF THE REPORT

- 1.2.1. This DAS explains the design rationale for the proposed cable route, providing an explanation of the design principles and concepts that have informed the Project (as described in Draft ES), and how access issues have been considered. The DAS is structured as follows:
- **Section 1: Introduction** – provides background information on DASs, the approach to design, and renewable energy policy background;
 - **Section 2: Summary of the Proposal** – provides a summary of the site location, Project, and the DNS regime;
 - **Section 3: Vision** – sets out the vision for the Project;

¹ Welsh Government (2015). Planning (Wales) Act 2015. Available online:

<https://www.legislation.gov.uk/anaw/2015/4/contents>. [Accessed February 2025].

² The Welsh Government (2024). Planning Policy Wales (Edition 12). (Online) Available at:

<https://www.gov.wales/planning-policy-wales> [Accessed February 2025]

³ Welsh Assembly Government (2009). Technical Advice Note 5: Nature Conservation and Planning. (Online) Available at: <https://gov.wales/sites/default/files/publications/2018-09/tan5-nature-conservation.pdf> [Accessed March 2025].

⁴ Welsh Government (2017). Design and Access Statements in Wales. Available online at:

<https://www.gov.wales/sites/default/files/publications/2018-09/design-and-access-statements.pdf> [Accessed March 2025].

- **Section 4: Site and Context Analysis** – sets out the site’s context and the relevant planning policy;
- **Section 5: Design Development** – summarises the factors that were considered in the design process; and
- **Section 6: The Proposal** – shows how the Project responds to PPW’s requirements for good design and highlights how the design process has produced an appropriate scheme in relation to the planning policy context.

1.3 APPROACH TO THE DESIGN

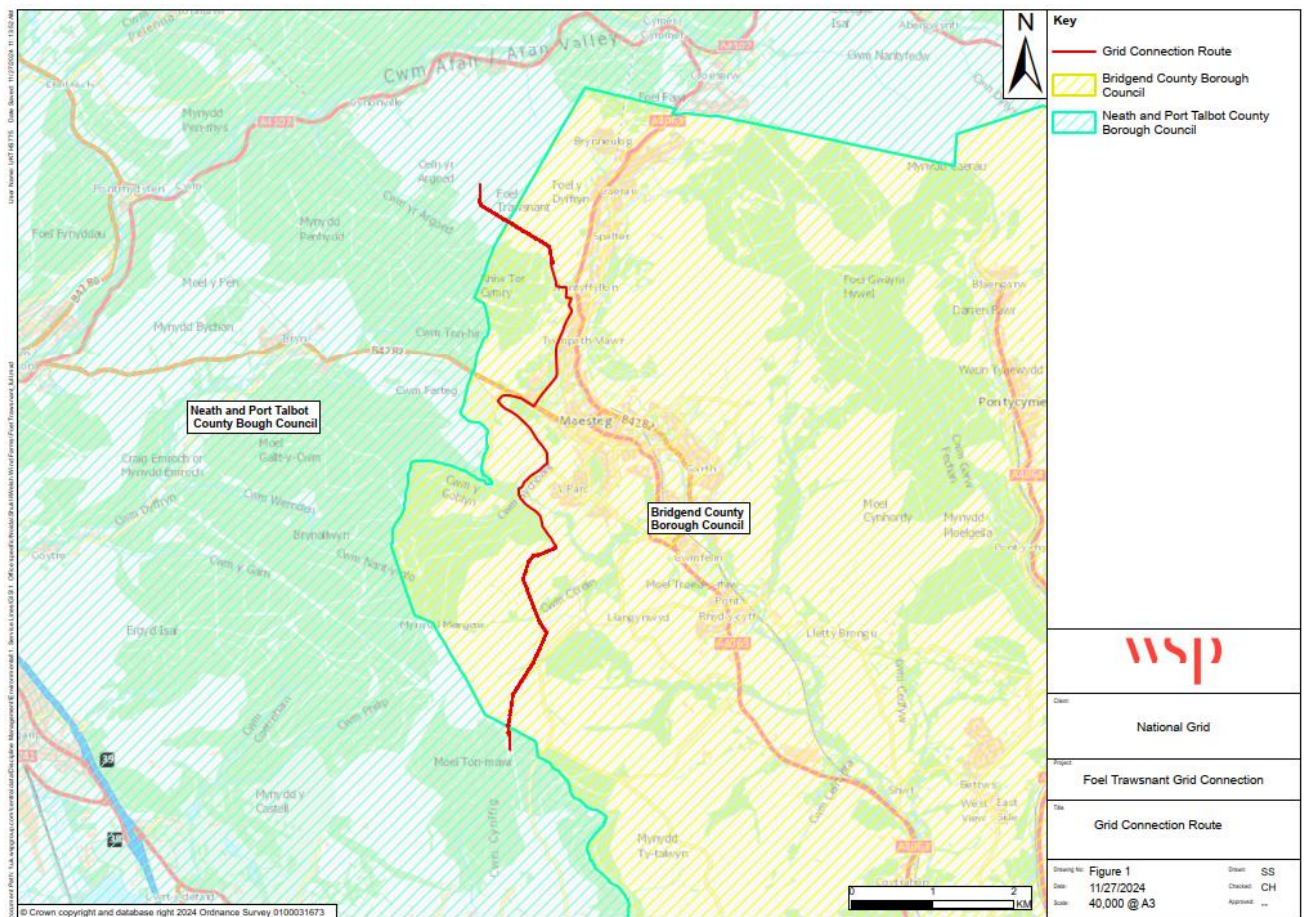
- 1.3.1. The design process involved in formulating the layout of the Project has been led by a combination of engineering requirements and environmental considerations that have been utilised to produce a route that is appropriate in terms of function. The route has also taken into account comments from National Resource Wales (NRW) whilst trying to avoid and reduce detrimental environmental effects.
- 1.3.2. This proposal has also been informed by an Environmental Impact Assessment (EIA) which has considered the likely significant effects on a range of environmental receptors. The findings of the EIA are contained in the Draft Environmental Statement (ES). Where relevant this DAS refers to the finding of the Draft ES.

2 SUMMARY OF THE PROJECT

2.1 THE LOCATION OF THE PROJECT

- 2.1.1. The Project, is situated within the southwest of Wales, to the west of the town Maesteg. The proposed cable route, which begins its northern-most section to the west of the A4063 falls within the bounds of two authoritative boundaries; the majority of the Project falls within the bounds of Bridgend County Borough Council (BCBC), however, the beginning and end points of the Project falls within Neath Port Talbot County Borough Council (NPTCBC).
- 2.1.2. Further information relating to the location and siting of the Project is contained within Section 2 of the Planning Statement (PS) also submitted with this application.
- 2.1.3. For the avoidance of doubt, the proposed cable route is depicted in **Figure 2-1** below.

Figure 2-1 - Site Location and Local Authority Boundaries



2.2 THE PROJECT

- 2.2.1. The Project, which is related to the Foel Trawsant Wind Farm's electricity infrastructure, comprises both 66 kilovolts (kV) overhead lines (OHL) and underground cables (UGC) which will provide the connection between the National Grid and the Foel Trawsant Wind Farm.
- 2.2.2. The main elements of the Project consist of the following:

- 4.6km of Over-Head Line cables;
- 5.1km of Under-Ground Line;
- Wooden H-Poles carrying the OHL;
- Underground cables laid in trenches; and
- Temporary Construction Compound.

2.3 DEVELOPMENTS OF NATIONAL SIGNIFICANCE

- 2.3.1. The Project is considered a DNS according to the Planning (Wales) Act 2015⁵, the Development of National Significance (Wales) (Regulations) 2016 (as amended)⁶.
- 2.3.2. The Project does not fall under the development types set out within Schedule 1 of the EIA regulations.
- 2.3.3. This is further confirmed within recent DNS Procedural Guidance (2024)⁷ which describes ‘the installation of an electric line above ground up to 132kV which is associated with a devolved generation station’ as a DNS according to the regulations, set out above.
- 2.3.4. Regarding the association with a devolved generation station, the England and Wales High Court (Administrative Court) Decisions (2019)⁸, is of relevance stating:
- “iii. Functional interdependence - where one part of a development could not function without another, this may indicate that they constitute a single project (Burridge at [32], [42] and [78])”
- 2.3.5. In relation to the Project, it will provide a Grid Connection between the devolved Foel Trawsnant Wind Farm and the wider national grid, further solidifying the Project as a DNS.

⁵ Welsh Government (2015). Planning (Wales) Act 2015. Available online:

<https://www.legislation.gov.uk/anaw/2015/4/contents>. [Accessed February 2025].

⁶ Welsh Government (2016). The Development of National Significance (Wales) Regulation 2016. Available online: <https://www.legislation.gov.uk/wsi/2016/56/contents>. [Accessed February 2025].

⁷ <https://www.gov.wales/developments-national-significance-dns-guidance#:~:text=Explains%20the%20planning%20application%20process%20for%20developments,of%20national%20significance%20%28defined%20categories%20of%20infrastructure%20developments%29>.

⁸ Wingfield, R (On the Application Of) v Canterbury City Council (2019) EWHC 1975 (Admin). Available at: <https://www.bailii.org/ew/cases/EWHC/Admin/2019/1975.html>

3 OBJECTIVES

3.1 THE OBJECTIVES OF THE PROJECT

- 3.1.1. Underpinning the design of the Project is the need to provide a deliverable grid connection that balance minimising effects on the environment whilst also achieving land owner agreements for the siting of wooden poles, the installation of overhead lines and underground cables.
- 3.1.2. This mean the Project has been designed to:
- ensure the visual impacts on the surrounding area are minimised;
 - ensure the effects on residents are minimised as far as possible, but recognising that the undergrounding stage will cause adverse effects but these will be temporary in nature; and
 - ensure that effects on other environmental considerations, including ecology, the historic environment and the water environment are minimised.

4 SITE AND CONTEXTUAL ANALYSIS

- 4.1.1. The Project covers a total distance of 9.7km, starting at the northern-most section, the cable route begins west of the A4063 as an Overhead Line (OHL) for approximately 1.5 km. to the north of Nant-y-ffyllon, the route then transforms into Underground Cables (UGC); mainly following the existing highway network south for approximately 5.1km. At Sychbant Farm, the highway network ceases; this is where the route transitions back into OHL and continues for approximately 3.1km where it would then connect with the wider national grid.
- 4.1.2. The proposed OHL will cross over approximately 7 Public Rights of Way (PRoW), a further 6 PRoWs have a terminus at the UGL section of the Project. An Outline Public Rights of Way Management Plan (PRoWMP) has been prepared (**ES Appendix 7B**) which details the anticipated temporary impacts on the PRoW network and identifies mitigation measures. The Outline PRoWMP will be developed into a final PRoWMP and agreed with the Local Highway Authorities to ensure appropriate mitigation is implemented to minimise the impact of the Project on the transport network.
- 4.1.3. There are no statutory ecological designations (SSSI, SPA, SAC, AONB etc.) that are situated within the red-line boundary of the Project.
- 4.1.4. In terms of residential receptors, the Project is situated within close proximity of the following settlements:
 - Nant-y-ffyllon approximately 0.10km east of the nearest part of the UGC;
 - Maesteg approximately 0.40km east of the nearest part of the UGC;
 - Garth approximately 1.82km east of the nearest part of the UGC;
 - Llangynwyd approximately 1.85km east of the nearest part of the southern section of the OHL; and
 - Bryn approximately 2.55km west of the nearest part of the UGC.

4.2 NATIONAL POLICY

- 4.2.1. Given the function nature the project (i.e. electrical infrastructure) the design guidance in NPS EN-1 “*Overarching National Policy Statement for Energy (EN-1)*” is considered to be particularly pertinent.
- 4.2.2. Paragraph 4.7.2 of EN-1 explains that “*Applying good design to energy projects should produce sustainable infrastructure sensitive to place, including impacts on heritage, efficient in the use of natural resources, including land-use, and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. **It is acknowledged, however that the nature of energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area***” (bolding our emphasis).
- 4.2.3. Paragraph 4.7.6 goes on to explain “*Whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, land form and vegetation*”.

4.3 THE DEVELOPMENT PLAN

FUTURE WALES

- 4.3.1. Future Wales: The National Plan 2040 (FWNP) was published in February 2021 and sets out the national development framework for development in Wales up to 2040. FWNP sets out national policy and is the highest tier of the development plan against which DNS applications are assessed. Future Wales includes a range of high-level policies which are intended to shape local authority development plans and inform decision-making on applications for DNS.
- 4.3.2. The relevant policies have been discussed within the Planning Statement that has been submitted as part of this application.

LOCAL DEVELOPMENT PLANS

- 4.3.3. As stated previously, the Project falls within the authoritative bounds of two administrative areas:
- Bridgend County Borough Council; and
 - Neath Port Talbot County Borough Council.

BRIDGEND COUNTY BOROUGH COUNCIL REPLACEMENT LOCAL DEVELOPMENT PLAN (RLDP), ADOPTED MARCH 2024

- 4.3.4. BCBC adopted its Replacement Local Development Plan (RLDP) in March 2024. **Table 4-1** summarises the policies considered to be relevant to the LDP.

Table 4-1 – BCBC Local Development Plan Policies

Policy Title	Summary
Policy DNP 1: Development in the Countryside	Policy DNP1 aims to protect the countryside from inappropriate development. The policy states that <i>“all development outside defined settlement boundaries must ensure that the integrity of the countryside is conserved and enhanced”</i> while the policy states that overall, there is a presumption against development in the countryside, renewable energy is listed under point 8, as an acceptable use.
Policy DNP 4: Special Landscape Areas	Policy DNP4 seeks to ensure that the character and quality of the County’s Landscape is protected from inappropriate development.
Policy DNP 5: Local and Regional Nature Conservation Sites	Policy DNP5 seeks to provide protection to locally and regionally important areas of nature conservation, stating the development within or adjacent to highlighted sites <i>“must be compatible with the nature conservation or scientific interest of the area”</i>
Policy DNP 6: Biodiversity, Ecological Networks, Habitats, and Species	Policy DN6 aims to achieve a balance between the need for development, and the need to conserve biodiversity. The policy states that <i>“all development proposals must provide a net benefit for biodiversity and improved ecosystem resilience”</i> .
Policy DNP 7: Trees, Hedgerows, and Development	Policy DNP7 recognises the importance of retaining trees and seeks to ensure that suitable trees are not harmed due to development.

	Where trees are to be replaced a scheme for tree replacement must be agreed prior to the commencement of development, including details of planting and aftercare.
Policy SP 13: Decarbonisation and Renewable Energy	<p>Policy SP13 supports renewable and low-carbon development proposals which contribute to meeting national and local renewables and low-carbon energy and energy efficiency targets.</p> <p>Part “d” of Policy SP13 specifically relates to grid connections. It states proposals will be permitted where: <i>“d) The proposal can facilitate a connection to the grid network”</i></p>
Policy SP 18: Conservation of the Historic Environment	Policy SP18 aims to protect the historic environment within the County Borough, the policy states that <i>“development proposals must protect, conserve, and where appropriate, preserve and enhance historic assets”</i> .

NEATH PORT TALBOT COUNTY BOROUGH (NPTCBC) COUNCIL LOCAL DEVELOPMENT PLAN (LDP), ADOPTED JANUARY 2016

- 4.3.5. NPTCBC adopted its Local Development Plan in January 2016. **Table 4-2** summarises the relevant policies to the Project.

Table 4-2 – NPTC Local Development Plan Policies

Policy Title	Summary
Policy SP 15: Biodiversity and Geodiversity	<p>Policy SP15 aims to conserve, enhance and protect important species, habitats and sites of geological interest.</p> <p>Overall, it is considered that the Project will not result in significant negative impacts to important sites for nature and biodiversity.</p>
Policy EN 2: Special Landscape Area	Policy EN2 highlights Special Landscape Areas which are <i>“protected as far as possible from any development that would harm their distinctive features and characteristics”</i>
Policy SP 18: Renewable and Low Carbon Energy	<p>Policy SP18 aims to accord with national guidance and strategy and seeks to deliver proportionate contributions to meet Wales’ national renewable energy targets and energy efficiency targets.</p> <p>Point (1) of the Policy states that, where appropriate all forms of renewable energy and low-carbon technology will be encouraged.</p> <p>Point (3) of the Policy seeks to ensure that development will not have an unacceptable impact on the environment and amenity of local residents.</p>

5 DESIGN EVOLUTION

5.1 INTRODUCTION

- 5.1.1. This section sets out the process undertaken to evolve the Project. A full description of the approach to the selection of the Site and to deciding on the specific design is set out in Draft **ES Chapter 4: Description of Development**.

5.2 ROUTE SELECTION

- 5.2.1. The Applicant started the route selection process in 2013. Table 5-1 below sets the main iterations

5.3 DESIGN

- 5.3.1. The design of the Project is considered to be the industry standard for this type of overhead line, as the Project is for a low-voltage transmission 66kV. The proposed H-Poles (approx. 10 metres tall) are considered to be the least intrusive to the surrounding areas.
- 5.3.2. The underground cables will be laid in trenches that measure 1.5m depth, and between 600mm to 1.5m wide.

5.4 ROUTE DESIGN ITERATIONS

- 5.4.1. The proposed gird connection route has evolved in response to a number of environmental and technical constraints, as well as achieving land owner agreements for the siting of wooden poles, the installation of overhead lines and underground cables.
- 5.4.2. Table 5-1 identifies the main iterations of the design and the rationale for such changes.

Table 5-1

Design Iteration	Rationale / Summary
Route 1 August 2013	The initial plan was for an overhead connection through the Penhydd and Margam forest blocks heading to south. This reflected a connection offer from Western Power Distribution to Pennant Walters, which at the time was for 132kV connection. The route connected into the existing electricity network south west of Llangynwyd. This route served as the starting point for consideration of the Project.
Route 2 March 2014	This iteration was prepared following feedback from Natural Resources Wales who requested that the northern section of the route (from Foel Trawsnant to the Neath Road) be undergrounded through the Penhydd forest via an existing forest track to minimise effects on forestry operations.
Route 3 2016	No route change – but Western Power Distribution modified their offer from 132kV to 66kV. In addition, the underground route was modified to align with the proposed bellmouth on the Neath Road which would serve the Foel Trawsnant wind farm.

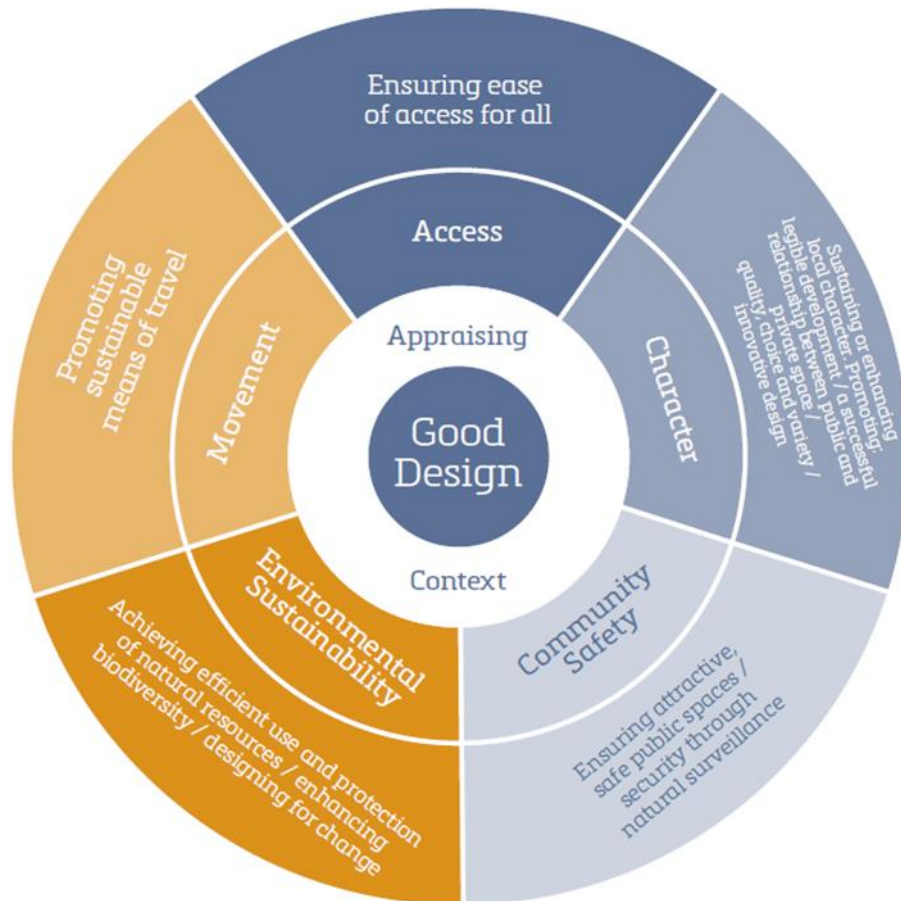
Route 4 2016 to 2018	The southern end of the route, south of the Neath Road, was revised to avoid and minimise effects on sites of archaeological or historic importance, including the Roman Fort and Ancient Monuments.
Route 5 2019	In 2019 a wind farm development “Y Bryn” came forward on the Penhydd and Margam forest blocks (awarded to Coriolis via a competitive tender). To minimise effects on this wind farm the use of the existing track through the Penhydd forest as a connection route was no longer an option. As a result an overhead line connection further east was taken forward, but still within the Penhydd Forest.
Route 6 2019 to 2023	<p>In the northern part of the route, a series of iterative alignments to the east were required to further minimise effects on the “Y Bryn” wind farm and to avoid ongoing or planned forestry operations within Penhydd Forest.</p> <p>In the southern part of the route, similar iterative alignments to the east were required to avoid impacts on the Y Bryn wind farm, and also to avoid ancient woodland and to minimise effects on forests.</p>
Route 7 2023 to 2024	<p>This final iteration introduced the use of undergrounding cables. Whilst this is significantly more expensive, it was considered the most straightforward method to achieve a connection which by this point had taken over a decade to negotiate and design. The resultant route design involved:</p> <ul style="list-style-type: none">■ 350m (approx.) of overhead line from the Foel Trawsnant wind farm site to a location north west of Nantyffyllon at which point it transitions to underground cables laid in roads and lanes, from Kings Terrace heading south.■ Once south of Maesteg the connection reverts back to an overhead line on private land. <p>The alignment of the route at the southern end of the connection has been designed to minimise effects on residential properties whilst also positioning the wood poles as close to field boundaries as possible to minimise effects on agricultural operations. It also reflects agreements reached with landowners.</p>

6 THE PROPOSAL

6.1 INTRODUCTION

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

Figure 6-1 - Objectives of Good Design



- 6.1.2. The five objectives examined in the following sections are:
- **Character** – sustaining or enhancing local character promoting legible design and a successful relationship between public and private spaces;
 - **Access** – ensuring access for all;
 - **Movement** – promoting sustainable means of transport;
 - **Environment Sustainability** – ensuring the efficient and protection of resources; and
 - **Community Safety** – ensuring safe and attractive spaces.
- 6.1.3. At the start of each section the Welsh Government's DAS guidance (2017) requirements are captured. Additionally, in the final section, consideration is given to how the Project responds to the policy context.

6.2 CHARACTER

- 6.2.1. As noted in Section 1.4 EN-1 acknowledges that the nature of energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area. Notwithstanding the above, paragraph 6.2.2 to provides details on the design and construction of the overhead lines, the cable trenches and the temporary construction compound.

OVERHEAD LINE

- 6.2.2. An OHL would be carried on wooden H-poles, consisting of two single wooden poles (most likely Scots Pine) joined by a crossarm with bracing. At the termination points only, two sets of H-poles will be located side-by-side. Terminal ends may be located at the start and end of the underground section of the connection.
- 6.2.3. Whilst the intention is for the route to be as straight as possible, there will be some deviation to avoid environmental features, such as trees or to position the wood poles as close to field boundaries as possible to minimise effects on agricultural operations . At points of deviation, angle poles will be used; these are likely to be H-pole structures. In all locations where the line deviates, there will be the requirement to provide cable stays to the poles. The poles are not typically stayed, and do not require concrete foundations. However, pre-cast kicking blocks will be installed below ground, to provide the poles with adequate structural support.
- 6.2.4. The height of the wooden poles will mostly be 12m above ground level, with a maximum height not exceeding 15m above ground (see **Table 4-1** of Draft **ES Chapter 4: Description of Development**). An assumed minimum clearance to trees from the conductors is 4m from the nearest part of the tree.
- 6.2.5. The poles are designed to carry the conductor wires. It is currently proposed to install a single circuit made up of one conductor per phase. Telemetry and monitoring capabilities, such as fault detection, will be provided by a microwave link. The poles will carry the cross arms onto which the insulators are attached. Poplar conductor wire will be used for all the OHL sections. Span length between poles will be between 90m to 130m. The actual span between poles will be influenced by topography and the surrounding environment.
- 6.2.6. The construction and maintenance of OHL will be in accordance with NGED (2024) Policy Document: OH6/4 .

CABLE TRENCHES

- 6.2.7. Underground cabling work will involve placing cables within ducts; the ducts themselves will be within a trench. An open cut method will be used, where the duct is laid directly into a trench of up to 1.5m depth (see **Appendix 4C** of the Draft ES). The ducts are placed at the bottom of the trench, and the excavation around the cables is then filled with sand before the remaining excavation is backfilled with the excavated material. Cables are jointed at approximately 250m intervals. The joint boxes are generally 1-2m deep and 5m x 3m. Once the cable ducts are laid, the cable will then be pulled through.
- 6.2.8. The creation of trenches, laying of cable ducts and pulling of cable will be in accordance with NGED (2021) Standard Technique: CA6A/7 .

TEMPORARY CONSTRUCTION COMPOUND

- 6.2.9. One temporary construction compound to be located within the northern section of the Site and will comprise an area measuring 20m x 20m. It will be enclosed by appropriate security fencing and contain a single storey welfare unit powered by an on-site generator. The ground surface will mostly be covered by geogrid matting (or similar). The location of the temporary construction compound is shown on **Figure 4-1**.
- 6.2.10. Poles and cables will be stored at the temporary construction compound. Poles will be transported to the works area, and laydown within the Site boundary on the day of installation.
- 6.2.11. A portable welfare facility will temporarily be located along the route as appropriate (i.e. where works are being completed, and when the temporary construction compound is not within a practical distance).

6.3 ACCESS

- 6.3.1. Chapter 12: Traffic and Transport of the EIA Report describes the transport network surrounding the site and the routes to be taken by local construction vehicles. Direct access into the Site for construction will be provided via the existing access track for the consented Foel Trawsnant Wind Farm, travelling northwards from the B4282 road through the forestry and connecting to the proposed construction compound for the Project. Operational access will be provided via the route just described, and also through the existing road network and farmer gates as required.
- 6.3.2. In the normal course of operation there is no requirement to inspect UGCs, although they are regularly tested at the joint bays. During the operation phase for OHL, duties are limited to resilience tree cutting to retain clearance distances and regular inspection. Pole inspections will be carried out in line with company policies and procedures.
- 6.3.3. An outline Construction Traffic Management Plan (CTMP) (**Appendix 7A**) and outline Public Right of Way Management Plan (PRoWMP) (**Appendix 7B**) have been produced to accompany the EIA report. An explanation of these documents is outlined below:
 - Outline CTMP (**Appendix 7A**) - a CTMP sets out details of the impacts of the Project construction traffic on the road network and the mitigation measures and management strategy for the effects. The Outline CTMP will be developed into a full CTMP in consultation and agreement with the relevant local authority officers.
 - Outline PRoWMP (**Appendix 7B**) – a PRoWMP sets out details of the impacts of the Project on the PRoW network and the mitigation measures and management strategy for the effects. The Outline PRoWMP will be developed into a full PRoWMP in consultation and agreement with the relevant local authority officers.

6.4 MOVEMENT

- 6.4.1. The temporary construction compound will only be accessed by construction personnel. The compound itself will be removed following completion of construction, and the land returned to its original use.
- 6.4.2. The opportunity for contractors to travel to the site by public transport is possible but unlikely. Travel by alternative sustainable modes is unlikely to be chosen by contractors, due to the general rural surroundings of south Wales, associated with limited established cycle networks and limited footway

connections to local amenities and establishments. Car-sharing is something that can be promoted to the construction workforce.

6.5 ENVIRONMENTAL SUSTAINABILITY

RENEWABLE ENERGY

- 6.5.1. The Welsh Government has set a target for 100% of energy consumption in 2035 to be provided by renewable sources.
- 6.5.2. The Project will help to ensure environmental sustainability through the distribution of renewable energy thus supporting the move away from fossil fuels.

AGRICULTURAL LAND

- 6.5.3. The H-Poles will only result in a very small permanent land take, which will not result in significant environmental effects in relation to land.
- 6.5.4. The vast majority of the underground cable will be laid in roads thereby having no effect on agricultural land. A small section (250m approx. in the northern section of the route and 300m approx. in the southern section of the route) will be laid through fields. Where soils would be excavated, they would be stored on site in accordance with the Construction Environmental Management Plan (CEMP) (see **Appendix 4A**) which will be updated prior to construction. Excavated materials will then be used to re-fill trenches. Any surplus excavated material, which is expected to be minimal, would be removed from site in HGVs and taken to an appropriate waste recycling or disposal facility.

LANDSCAPE EFFECTS

- 6.5.5. Whilst it is recognised that the Draft ES confirms that significant effects will occur, grid connections by their nature create landscape and visual effects and the role of the decision maker is to consider the extent to which these effects outweigh the positive benefits of the project such that the application could be considered unacceptable. It is considered that given the low height of the H-Poles (with a maximum height 15m) the project is likely to blend into the landscape to a far greater degree than higher voltage connections that require taller and more prominent structures (such as steel lattice pylons).

ECOLOGY

- 6.5.6. Draft **ES Chapter 8: Ecology** examines the likely effects on internationally designated sites. It lists the designations that will need consideration (of which there are only three) and then identifies if there are likely to be any significant effects on them. Given the distance and a lack of pathways from the site it is concluded that significant effects arising from the Project are not likely to occur and the sites are scoped out from further assessment.
- 6.5.7. Draft **ES Chapter 8: Ecology** confirms there are no nationally statutory designated sites that will be adversely affected by the Project. No national statutory designated sites were identified within the zone of influence for potential impact pathways to the Project.

6.6 COMMUNITY SAFETY

- 6.6.1. The Project will be delivered in a safe manner and ensure that the opportunities for crime are minimised through effective design measures, such as appropriate security fencing around the temporary construction compound.
- 6.6.2. An Outline Public Rights of Way Management Plan (PRoWMP) has been prepared (**ES Appendix 7B**) which details the anticipated temporary impacts on the PRoW network and identifies mitigation measures. The Outline PRoWMP will be developed into a final PRoWMP and agreed with the Local Highway Authorities to ensure appropriate mitigation is implemented to minimise the impact of the Project on the transport network and PRoWs.

6.7 RESPONDING TO THE PLANNING POLICY CONTEXT

- 6.7.1. The development has been designed so as to minimise the take up of land, the impact on the landscape and the effects on biodiversity assets. Additionally, through the Draft ES the effects on a range of other environmental receptors have been assessed. The EIA process has helped to ensure that where possible the design of the grid connection has sought to avoid or reduce the environmental impacts. Detailed consideration has therefore been given to the criteria in Policy 18 of Future Wales
- 6.7.2. **Table 5-1** above identifies the main iterations of the design and the rationale for such changes which have been implemented to address policy requirements, including minimising effects of historic assets, forests and ancient woodland, and agricultural operations.

7 CONCLUSION

7.1 SUMMARY OF THE PROJECT DESIGN

- 7.1.1. The Project involves the installation of a 66 kV overhead line and underground cable connection from the approved Foel Trawsnant Wind Farm, situated within South Wales, to the wider national grid.
- 7.1.2. The Project is therefore directly related to the distribution of power from a 'renewable energy' development. As a result it positively contributes to the achievement of the UK and Wales' goal to increase renewable energy generation to help combat the challenges posed by climate change.
- 7.1.3. The design of the Project has been informed by consideration of technical, environmental and policy constraints.
- 7.1.4. The purpose of this DAS has been to demonstrate the key principles that have informed the design evolution of the proposed cable route.
- 7.1.5. The design has been informed by the EIA process. The Draft ES demonstrates that the effects on a range of environmental receptors have been assessed and a range of measures have been proposed to reduce, and avoid, impacts of the Project on the environment where possible.
- 7.1.6. Whilst the Draft ES identified that some significant environmental effects are predicted to occur at a local level, national policy highlights that these are often inherent in the development of grid infrastructure and that the level of effect should be balanced against the environmental benefits arising from the mitigation of climate change.
- 7.1.7. There will be some disruption to public access within the highways during the construction phase, particularly when laying the underground cable, but this will be temporary and once operational the Project will not restrict access with appropriate mitigation measures. The Draft ES states there will be no significant negative effects regarding highways and access as a result of the construction activities proposed. Furthermore, non-significant effects will be further reduced via the adoption of management measures in the form of a CTMP and PRowMP which will be secured by a condition.



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