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1 Introduction

1.1 Definition of Landscape

1.1.1 **Landscape** was defined at the European Landscape Convention (Florence, 2000): “*The landscape is part of the land, as perceived by local people or visitors, which evolves through time as a result of being acted upon by natural forces and human beings.*” ([The European Landscape Convention - Council of Europe Landscape Convention \(coe.int\)](#))

1.1.2 **Landscape** was also defined by Swanwick and Land Use Consultants, 2002:2, as follows:

“Landscape is about the relationship between people and place. It provides the setting for our day-to-day lives. The term does not mean just special or designated landscapes, and it does not only apply to the countryside. Landscape can mean a small patch of urban wasteland as much as a mountain range, and an urban park as much as an expanse of lowland plain. It results from the way that different components of our environment – both natural (the influences of geology, soils, climate, flora and fauna) and cultural (the historical and current impact of land use, settlement, enclosure and other human interventions) – interact together and are perceived by us. People’s perceptions turn land into the concept of landscape.”

1.2 Professional Standards and Guidance

1.2.1 The Landscape and Visual Appraisal (LVA) has been carried out by a senior member of the landscape team and reviewed by a Chartered member of the Landscape Institute (LI) at Stantec UK Limited (Stantec), a Registered Practice of the LI and a corporate member of the Institute of Environmental Management and Assessment (IEMA).

1.2.2 Stantec’s methodology for LVA is based on professional experience of landscape assessment and the **Guidelines for Landscape and Visual Impact Assessment** (Landscape Institute / Institute of Environmental Management and Assessment, 3rd Edition, 2013). In addition, the LVA methodology considers the principles set out in the following Landscape Institute technical notes and guidance:

- LI Technical Information Note 08/2015: **Landscape Character Assessment** (LI, February 2016) https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2016/01/Landscape-Character-Assessment-TIN-08_15-20160216.pdf;
- LI Technical Guidance Note 02/21: **Assessing Landscape Value Outside National Designations** (LI, February 2021) <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2021/05/tgn-02-21-assessing-landscape-value-outside-national-designations.pdf>; and
- LI Technical Guidance Note 06/19 **Visual Representation of development proposals** (LI, September 2019) https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI_TGN-06-19_Visual_Representation.pdf and the supporting Technical Information Notes: TIN 07/19 Visual Representation Glossary, TIN 08/19 Camera Auto Settings, and TIN 09/19 Earth Curvature.

1.3 Approach to the Appraisal

1.3.1 The **Guidelines for Landscape and Visual Impact Assessment**, (Landscape Institute / Institute of Environmental Management and Assessment, 3rd Edition, 2013) (**GLVIA3**) notes in paragraph 2.23, page 21, that the appraisal of landscape or townscape and visual effects aims to be as objective as possible; however, professional judgements are required to be made:

'Professional judgement is a very important part of LVIA. Whilst there is some scope for quantitative measurement of some relatively objective matters, for example the number of trees lost to construction... much of the assessment must rely on qualitative judgements, for example about what effect the introduction of a new development of land use change may have on visual amenity, or about the significance of change in the character in the landscape and whether it is positive or negative.'

- 1.3.2 In accordance with guidance, the LVA considers the effects on landscape, including landscape character and features (landscape receptors), and people's views / visual amenity (visual receptors) as separate assessment components. The LVA identifies and assesses the negative and positive effects (type of effects) arising from the Proposed Development on these receptors.
- 1.3.3 The appraisal of landscape and visual effects makes comparison with the **baseline year of 2025**, and the appraisal periods comprise: i) during the enabling and construction period; and ii) at operation (on completion of the development) and 15 years following (once proposed landscape mitigation is assumed to have established to provide its function). Baseline conditions for the site are unlikely to change materially as the plant and activity at the Site will remain operational.

2 Scope of Assessment

2.1 Potential Landscape and Visual Effects

2.1.1 Potential Landscape and visual effects arising from the Proposed Development are those upon the following receptors:

- a. Landscape features;
- b. Landscape character; and
- c. People's views and visual amenity.

2.1.2 The LVA considers the effects on Landscape (including Landscape character and features) and people's views / visual amenity as separate assessment components.

2.2 Study Area

2.2.1 The **initial study area** for the LVA was based upon, and informed by, a computer-generated **Zone of Theoretical Visibility (ZTV)** initially prepared for **up to 5km** from the site, and which establishes the theoretical 'worst-case' extent to which the Proposed Development would be visible. In reality, other built form and features, such as street trees, would provide additional filtering or reduction of views.

2.2.2 Professional experience of other assessments and site appraisals for this type of development has shown that notable effects on Landscape and visual receptors would not typically be experienced beyond **3km** from the site. This is the result of the existing surrounding context such as intervening landform, vegetation, and in this instance, existing electrical infrastructure.

2.2.3 ZTV analysis has been undertaken for the Proposed Development which considers built form and vegetation. This is referred to as a Digital Surface Model (DSM) ZTV. Further detail on the methodology for the ZTV analysis is set out in **Section 4.1** below. The analysis shows the increased visibility of the additional towers and OHL in addition to the theoretical visibility potentially experienced as a result of the substation elements. Figure L4a illustrates that the proposed towers would result in wider visibility of electrical infrastructure than is currently experienced. Figure L4b illustrates that the substation elements would be visible largely to the northeast, southeast and southwest.

2.2.4 Therefore, the **study area** for the LVA extends to **3km radius** from the Site. The spatial scope, together with a review of potential visual receptors, guided the selection of view locations that are included within the visual impact assessment for the LVA.

2.3 Selection of Landscape Receptors for Landscape Effects Assessment

2.3.1 Landscape receptors assessed in the LVA are set out in **Section 3** of the LVA. Landscape receptors typically include the following:

- National Landscape Character Areas;
- Regional and local Landscape character areas (including LANDMAP in Wales);
- Long Distance Walking Routes (LDWR) Public Rights of Way (PRoW), and National Cycle Network (NCN) routes;
- Character and Landscape Features of the Site including:
 - Character of the Site;

- Green Infrastructure provision;
- Landform;
- Existing vegetation including tree, woodland and hedgerows;
- Field pattern / field boundaries; and
- Existing infrastructure.

2.4 Selection of Visual Receptors for Visual Effects Assessment

Key Views

- 2.4.1 Key Views are those strategic views, panoramas or contained views which are identified as being important views across the landscape; these being views from parks and other public spaces that take in important or defining landmark features within townscapes or landscapes, and which help to define key characteristics of that townscape or landscape location.
- 2.4.2 Key Views may be protected and designated through local planning policy; for example, London View Management Framework 2012 (<https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/supplementary-planning-guidance/london-view-management>), or Bristol City Council's Supplementary Planning Document 1: Tall Buildings, 2005 (<https://www.bristol.gov.uk/documents/20182/34520/SPD1%20-%20tallbuildings.pdf/2a44c0d4-fb3b-4da3-ae6e-c1bf96999481>).
- 2.4.3 Where there are no published Key Views, a local planning authority may identify local Key Views relevant to a Site or Proposed Development through the planning application consultation process; for example, views of landmarks within an historic town core which is visible in long distance views from outside of the town / city or which is a notable local landmark in the urban area. Where this occurs, the nature and source of the Key View is set out in the LVA.

Visual Receptors and View Locations

- 2.4.4 Visual receptors are always people and their views at particular places will for example comprise people using public rights of way, public open spaces, public realm areas or other outdoor recreational facilities; people who may be visiting, living or working within the study area; and people travelling by roads and rail.
- 2.4.5 View locations for the purpose of the LVA, which are selected to represent typical visual receptor's views (i.e. to be characteristic, or be representative examples of people's views), and which are likely to be subject to visual effects of a Proposed Development, are generally agreed with the local planning authority through the planning application consultation process.
- 2.4.6 The selected view locations will typically include one, some, or all of the following types of views, from publicly accessible locations:
- **Representative views** (for example representing views of users of a particular footpath);
 - **Specific views** (for example a Key View, or an important view from a specific visitor attraction);
 - **Illustrative views** (chosen to demonstrate a particular effect/specific issue); and
 - **Sequential views** (for example, transient views which occur when travelling along key routes or designated Scenic Routes).

- 2.4.7 The view locations and visual receptors selected for the visual assessment, are set out in **Section 5** of the LVA. **Figure L4a and 4b: Zone of Theoretical Visibility** within **Appendix A: Figures** shows the location of the visual receptors considered within the LVA.

3 Methodology and Definitions

3.1 Baseline Data Collection and Review

Desktop Study

- 3.1.1 The initial step in LVA, is to establish the baseline landscape and visual conditions. Background data is collected and reviewed to establish the baseline landscape and landscape character receptors and potential visual receptors. The data may include: the nature of the topography, landscape planning designations and published sources of landscape character.
- 3.1.2 Typical information sources include:
- Ordnance Survey OpenData for mapping.
 - 1:25,000 OS Explorer, for example via Bing Maps, for a general map overview of the Site and surrounding area, as well as to review the Public Rights of Way network (bridleways, footpaths, byways, other routes), including names and locations of Long-Distance Route or National Trails, and for Open Access Land area locations and boundaries.
 - Google Earth Pro for aerial photography and Google Street View.
 - [MAGIC \(defra.gov.uk\)](https://magic.defra.gov.uk/) for an initial review of statutory and non-statutory designations.
 - <https://www.sustrans.org.uk/> for routes on the National Cycle Network.
 - Future Wales: The National Plan 2040 [Future Wales: the national plan 2040 | GOV.WALES](https://gov.wales/future-wales-the-national-plan-2040/)
 - Planning Policy Wales (Edition 12, February 2024) [Planning Policy Wales - Edition 12](https://gov.wales/planning-policy-wales-edition-12/)
 - Historic Wales [Historic Wales \(arcgis.com\)](https://historicwales.arcgis.com/).
 - Local authority websites for Local Plans and Development Frameworks, including Area Action Plans if relevant;
 - [Natural Resources Wales / LANDMAP - the Welsh landscape baseline](https://naturalresources.wales/landmap/) for information on the spatial aspects of the Welsh landscape, typically used for LVIA;
 - Regional or local landscape character assessments and relevant supplementary design or planning guidance (SPD or SPG); and
 - Relevant Conservation Area appraisals.

Site Appraisal and Photographic Record

- 3.1.3 Where project timings make it possible, representative baseline photographs are taken during winter months to inform a 'worst-case' visual baseline. Given the project timing in this instance however, photography was undertaken during the summer months. This results in the assessor utilising their experience and professional judgement to understand the existing conditions and formulate an opinion on what winter visibility would likely be from the representative view locations.
- 3.1.4 The Site and surrounding area were visited to undertake a visual survey and collect the photographic record of the visual baseline to represent people's views from the selected locations; this was undertaken in June 2024. This exercise also enables the LVA assessor to:

- Determine the extent of visibility of existing built structures, vegetation and landform;
- Determine the visibility of the Proposed Development, utilising the results from the ZTV plan to guide the field work;
- Gain further understanding of the components which create the landscape character; and
- Carry out the appraisal of landscape and visual effects.

3.2 Appraisal Stages

- 3.2.1 A two-stage appraisal process was adopted for the LVA, in accordance with the Landscape Institute/Institute of Environmental Management and Assessment guidelines. Firstly, the sensitivity of receptors was appraised. Secondly the magnitude of effects likely to result from the Proposed Development was appraised.

3.3 Types of Effect - Definitions

- 3.3.1 The principal sources of change to landscape receptors and people's views and visual amenity, arise from the introduction of new built form, or changes to landscape character.
- 3.3.2 Changes may be **beneficial** or **adverse**; and some changes may initially be adverse, but over time gradually improve. Beneficial effects have a **positive influence** on the receptor (enhancement); alternatively, adverse effects have a **negative influence** on the receptor (degradation). It is possible that the type of effect may be judged to be **neutral**, for example: where the development proposals result in a change to the receptor, but that change, on balance, is considered to be in keeping with the receptor; such that the baseline situation is maintained and does not lead to either enhancement or degradation of that baseline.
- 3.3.3 Changes may also be **direct**, or **indirect**. Direct effects are those which result directly from the development; whereas indirect, or secondary, effects may arise as a consequential change resulting from the development, for example: changes to offsite and downstream vegetation, as a result of alterations to a drainage regime.

3.4 Methodology for the Appraisal of Landscape Effects

- 3.4.1 The appraisal of landscape effects considers how the Proposed Development would affect the landscape features or components of the environment (the 'landscape fabric', for example: topography, trees, woodland and hedgerows, field patterns, watercourses, and green infrastructure features including field boundary treatments), and the key characteristics which contribute to its distinctive character (the 'landscape character').
- 3.4.2 A methodical consideration of each effect upon each identified landscape receptor is undertaken in the LVA, in order to determine:
- a. the **sensitivity** of the landscape receptor; and
 - b. the **magnitude** of the landscape effect.

Sensitivity of Landscape Receptors

- 3.4.3 The assessment of **landscape receptor sensitivity** combines judgements on the **value** attributed to the landscape receptor and the '**susceptibility to change**' of the receptor to the specific type of development proposed.
- 3.4.4 For example, a landscape with consistent, intact and well-defined, distinctive attributes is generally considered to be of higher quality, value and sensitivity; than a landscape where the presence of inappropriate or discordant features are detractors within its inherent character.

Value of Landscape Receptors

- 3.4.5 Landscapes may be valued at community, local, national or international levels. Existing designations are taken as an initial indicator for value.
- 3.4.6 The value of landscapes or landscape receptors without designation are considered through reference to the factors set out in **Table 3.1**. This list is with reference to Table 1 within the Landscape Institutes **TGN 02/21: 'Assessing landscape value outside national designations'**.

Table 3.1: Other Factors Which May Influence Landscape Value

Attribute	Criteria
Landscape Quality / Condition	Intactness or physical condition of the urban environment or of the individual components which contribute to landscape character.
Distinctiveness / Sense of Place	Sense of identity related to aesthetic and perceptual qualities which create distinctiveness.
Rarity	Rarity of landscape character areas, types or features.
Representativeness	Particular characteristic/feature/element considered an important example.
Cultural Interest	The presence of archaeological, historic or cultural heritage interest which contributes positively to the landscape.
Natural Heritage	Landscape with clear evidence of ecological, geological, geomorphological or physiographic interest which contributes positively to the landscape
Recreation	Evidence that the landscape experience forms an important part of recreational activity, e.g. as established in guidebooks.
Functional	Landscape which performs a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape
Perceptual (Scenic Quality)	General appeal of the landscape to the senses (primarily visual).
Perceptual (wildness and tranquillity)	Landscape with a strong perceptual value notably wildness, tranquillity and/or dark skies
Associations	Relevant associations with notable figures, such as writers or artists, or events in history that contribute to landscape value.

- 3.4.7 Where appropriate, key individual components of the landscape, including particular landscape features, notable aesthetic and perceptual qualities, are considered in the LVA in terms of importance in their own right; including whether or not they can realistically be replaced. They may also be judged on their contribution to the overall character and value of the wider landscape. For example, an ancient woodland may have high value in its own right, but also be important because it forms part of a vista which contributes positively to the landscape character.
- 3.4.8 An example of how value can be described at each end of the continuum of low to high is provided in **Table 3.2** for landscape receptors.

Table 3.2: Defining Landscape Value

Criteria Level	Description
High	An area possessing a particularly distinctive sense of place and character, and / or attributes which make a particular contribution to the landscape or townscape character. Indicators: • Designations and/or conservation interests: national/regional importance. Valued for its contribution. • Key characteristics and features: features which are dominant within the landscape and are fundamental to defining the distinct character of an area. Highly valued for its character. • Important characteristics and features recognised as forming intrinsic part of nationally and regionally designated landscapes. • Distinctive individual or rare features. Landscape character that has a clear sense of place. • Highly valued for its scenic quality. • Landscape in good condition: distinct landscape structure with strong pattern and some intact features. • Few detractors or uncharacteristic features present. • Contributes to a national landscape designation and / or a designated heritage asset / character area or settlement, or form part of the Green Infrastructure Network. • Valued for contribution to recreational activity and / or part of a long distance footpath. • Important cultural or historic associations.
Medium	An area with a clearly defined sense of place and character, and / or attributes which contribute to the landscape or landscape character. Indicators: • Designations and/or conservation interests: local or regional importance (e.g. Conservation Areas, Special Landscape Areas/Features) or may be undesignated • Key characteristics and features: regionally or locally important and notable features that are intact and contribute to the overall character of an area and / or provide some scenic quality. • Features protected by local policy. • Condition: landscape exhibits recognizable structure and characteristic patterns and in moderate condition. • Some detracting features present.
Low	An area with a weak sense of place or poorly defined character, and / or attributes which make a contribution to the landscape or landscape character. Indicators: • Undesignated. • Key characteristics and features: features that are uncharacteristic, disjointed or weak character and / or detract from the character of an area. • Condition: degraded structure with fragmented pattern and poor legibility of character. In poor condition. • Absence of distinctive individual or rare features. Character that has a poor sense of place, scenic qualities and / or cultural interest. • Contains a high level of discordant or detracting features with a strong influence on the landscape.

Susceptibility to Change – Landscape Receptors

- 3.4.9 The assessment of susceptibility of landscape receptors to change, which is anticipated to arise from the type of development, which is being proposed, is based upon the criteria in **Table 3.3**. Note that these are provided for guidance and are not intended to be absolute.

Table 3.3: Landscape Receptor Susceptibility to Change – Guidance Criteria

Criteria Level	Description
High	Little ability to accommodate the Proposed Development without undue consequences for the maintenance of the baseline landscape and/or the achievement of landscape planning policies and strategies.
Medium	Some ability to accommodate the Proposed Development without undue consequences for the maintenance of the baseline landscape and/or the achievement of landscape planning policies and strategies.
Low	Substantial ability to accommodate the Proposed Development without undue consequences for the maintenance of the baseline landscape and/or the achievement of landscape planning policies and strategies.

Sensitivity of Landscape Receptors

- 3.4.10 By judging the combination of the landscape receptor's value and susceptibility to change, and with reference to the following typical scales set out in **Table 3.4**, the LVA assessor makes an overall assessment of sensitivity of each landscape receptor.

Table 3.4: Scales of Landscape Receptor Sensitivity

Criteria Level	Description
High	An area possessing a particularly distinctive sense of place and character, and / or attributes which make a particular contribution to the landscape or landscape character, for example: • in good condition; • highly valued for its scenic quality; • highly valued for its landscape character; • an area with a low tolerance to change of the type proposed; • an area with high quality materials in the public realm; • cultural heritage features or walks with cultural associations; • valued for contribution to recreational activity; • important cultural or historic associations; • irreplaceable features or character; • part of a long distance footpath.
Medium	An area with a clearly defined sense of place and character, and / or attributes which contribute to the landscape or landscape character, such as: • in moderate condition; • some scenic quality valued at a local or regional level; • landscape character intact and valued at a local or regional level; • an area with partial tolerance to change of the type proposed; • may be undesignated landscape.
Low	An area with a weak sense of place or poorly defined character, and / or attributes which contribute to the landscape or landscape character, such as: • in poor condition; • no particular scenic qualities; • disjointed landscape character; • contains a high level of discordant features; • no cultural interest; • an area that is tolerant of substantial change of the type proposed; • undesignated landscape; • a degraded landscape; • strongly influenced by detracting land uses and buildings.

Magnitude of Landscape Effects

- 3.4.11 The **magnitude** of a landscape effect is assessed in terms of its **size or scale**, the **geographical extent** of the area influenced and its **duration** and **degree of reversibility**.
- 3.4.12 The size or scale of change is described on a scale of large to no change. In the landscape this relates to the loss of features or addition of elements in the landscape, which are likely to result from the Proposed Development which considers:
- a. The extent/proportion of landscape features that are lost or landscape elements added;
 - b. The contribution of features / elements to landscape character and the degree to which aesthetic/perceptual aspects are altered; and
 - c. Whether the effect is likely to change the key characteristics of the landscape, which are critical to its distinctive character.
- 3.4.13 The geographical area over which the effects would be felt are considered. For example, moderate loss of landscape features over a large geographical area or a major addition affecting a localised area. It is considered on a scale ranging from effects on the wider landscape to effects on a site level.
- 3.4.14 The duration and degree of reversibility is also considered as a factor contributing to the magnitude of effect. Duration is considered as:
- Short-term: Less than 1 year.
 - Medium-term: 1-5 years.
 - Long-term: More than 5 years.
- 3.4.15 Reversibility is a judgement about the prospects and practicality of the effect being reversed, typically, in a generation. Permanent effects are those which cannot be realistically reversed, whereas reversible effects can be wholly or largely reversed. e.g. development (such as wind turbines) with a limited life permission and high potential for removal and/or the land to be reinstated, or construction activities which are temporary. Partially reversible effects may also occur for example when the proposals would provide something similar to the baseline, or the introduction of elements which are representative of baseline features / characteristics.
- 3.4.16 The criteria in **Table 3.5** are used to determine the **magnitude of change** of landscape effects, based on the degree of change that will occur as a result of the Proposed Development and in relation to the **type of the effect**:

Table 3.5: Landscape Effects: Criteria for Magnitude of Change and Type of Effect

Criteria Level	Description
Major adverse landscape effect	The proposals will result in a total change in the key characteristics of landscape character; will introduce elements totally uncharacteristic to the attributes of the receiving landscape such as its massing, scale, pattern and features; and/or will destroy or permanently degrade the integrity of landscape character; or is in total conflict with established planning objectives for landscape and visual elements of regeneration and enhancement of the urban environment; and/or result in a substantial or total loss, or alteration of key features / characteristics.
Moderate adverse landscape effect	The proposals will result in a partial change in the key characteristics of landscape character; will introduce elements uncharacteristic to, out of scale or at odds with the attributes of the receiving landscape, such as its massing, scale, pattern and features; and/or will result in partial loss, or alteration of key features/ characteristics; or is in conflict with established planning objectives for landscape and visual elements of regeneration and enhancement of the urban environment.
Slight adverse landscape effect	The proposals will result in little change in the key characteristics of landscape character and will introduce elements that do not quite fit with the attributes of the receiving landscape such as its massing, scale, pattern and features; and/or will result in a minor loss or alteration of features / characteristics; and/or contribute to degrading the landscape character.
Negligible adverse landscape effect	The proposals will result in a just discernible change to landscape character / features / characteristics, which is not quite in keeping with the existing landscape and landscape character.
No change	The proposals will not cause any change to the landscape character / features / characteristics.
Neutral effect	As a result of the proposals, there will be a change to the landscape features / characteristics, but the change will be entirely in keeping with the existing landscape character or landscape features such that the existing character or features are maintained ; and that change does not cause degradation or enhancement of the character.
Negligible landscape benefit	The proposals will result in a just discernible improvement to the landscape character / features / characteristics, such as massing, scale, pattern or features.
Slight landscape benefit	The proposals will achieve a degree of fit with the landscape character / features / characteristics and provides some enhancement to the condition or character of the landscape.
Moderate landscape benefit	The proposals will achieve a good fit with the landscape character / features / characteristics, such as massing, scale, and pattern; or would noticeably improve the condition or character of the landscape and enhance characteristic features through the use of local materials; and/or support established planning objectives for landscape and visual elements of regeneration and enhancement of the urban environment.
Major landscape benefit	The proposals will totally accord with the landscape character / features / characteristics, including scale, pattern, massing; or would restore, recreate or permanently enhance the condition or character of the landscape and enhance characteristic features through the use of local materials; and/or delivers established planning objectives for landscape and visual elements of regeneration and enhancement of the urban environment.

3.5 Methodology for the Assessment of Effects on People's Views and Visual Amenity

- 3.5.1 The assessment of visual effects considers how the Proposed Development would affect people's views and their visual amenity.
- 3.5.2 A methodical consideration of each visual effect upon each identified visual receptor is undertaken in the LVA, to determine the:
- a. **sensitivity** of the visual receptor; and
 - b. **magnitude** of the visual effect.
- 3.5.3 The following terminology is used to describe the approximate distance between the visual receptor's location and the Proposed Development:
- Short distance: under 0.5km;
 - Medium distance: 0.5km – 2km;
 - Long distance: beyond 2km.
- 3.5.4 The type of view, and the number of viewers likely to experience the view, is described in LVA using the following terms. Definitions of these terms are set out in the **Glossary**, at the end of this document.
- Glimpsed (i.e. in passing) / Filtered / Oblique / Framed / Open Views; and
 - Few / Moderate / Many Viewers.
- 3.5.5 No private views or view locations are assessed in the LVA. However, where appropriate, view locations for the LVA will be selected from publicly accessible locations within or at the edge of main settlements, property groupings or other buildings, which are likely to be affected by the Proposed Development.

Sensitivity of Visual Receptors

- 3.5.6 The assessment of visual receptor **sensitivity** combines judgements on the **value** attributed to the visual receptor and the '**susceptibility to change**' of the visual receptor to the specific type of development proposed.

Value of People's Views

- 3.5.7 The value assigned to people's views will have regard to a number of factors, which may include:
- a. Recognition of the Key View, the view or view location through planning designations or heritage asset designations; and
 - b. The popularity of the viewpoint, its appearance in guidebooks, literature or art, on tourist maps, and/or the facilities provided to enable the enjoyment of the view.
- 3.5.8 The criteria used for the assessment of the value of views is summarised in **Table 3.6**. Note that these are provided for guidance and are not intended to be absolute.

Table 3.6: Value of Views – Guidance Criteria

Criteria Level	Description
High	Published or identified Key Views or views from landscapes or locations of national importance, or views from highly popular visitor attractions where the view forms an important part of the experience, or views with important cultural associations.
Medium	Published or identified Key Views or views from landscapes or locations of regional/district importance or views from moderately popular visitor attractions where the view forms part of the experience, or views with local cultural associations.
Low	Typical views from landscapes or locations with no designations, which are not particularly popular as a view location and with minimal or no cultural associations.

Visual Receptors' Susceptibility to Change

3.5.9 People's susceptibility to a change in their views is a function of:

- The **occupation or activity** of the viewer at a given location; and
- The **extent** to which a person's **attention or interest may therefore be focussed** on a particular view and the **visual amenity** experienced.

3.5.10 The typical range of visual receptors' susceptibility to change which is used for the LVA is set out in **Table 3.7**.

Table 3.7: Typical Range of Visual Receptors' Susceptibility to Change

Criteria Level	Description
High	- Residents; - People engaged in outdoor recreation, including users of public rights of way, whose attention is likely to be focussed on the visual environment of the landscape and on particular views; - Visitors to heritage assets, landmarks or other attractions where views of the surroundings are an important part of the experience; - Communities where Key Views contribute to the landscape setting enjoyed by residents; and - Travellers on scenic routes.
Medium	- Travellers on road, rail or other transport routes, where the view is moderately important to the quality of the journey; - People using local parks, open spaces, public realm, or walking on streets or local public rights of way, with moderate interest in their visual environment.
Low	- People engaged in outdoor sport or recreation, which does not involve appreciation of, or focus upon, views; - People at their place of work, where the landscape setting is not important to the quality of working life; and - Travellers, where the view is fleeting and incidental to the journey, for example on motorways or on high-speed railway lines.

Scale of Sensitivity of Visual Receptors

3.5.11 By judging the combination of the value of the view and the visual receptor's susceptibility to change, and with reference to the typical scales set out in **Table 3.8**, the LVA assessor makes an overall assessment of sensitivity of each visual receptor.

Table 3.8: Scales of Visual Receptor Sensitivity

Criteria Level	Description
High	The view is likely to a nationally or regionally important or protected view (Key View). The view or its composition may: • Include landmark features; • Have high amenity value; • Be of an attractive composition and contain features of notable visual interest; • Be enjoyed by a large number of recreational users and visitors; • Be experienced by residents; • Include views of important heritage assets, such as World Heritage Sites or Listed Buildings or Registered Historic Parks and Gardens; • By a publicised view in guidebooks; • Be a 'designed' view, such as a designed vista in an historic landscape.
Medium	The view is likely to be a locally designated view or may be undesignated but considered to be locally important. The view or its composition may: • Include some features of value or interest; • Be incidental or intentional to the viewer, with some amenity value; • Be of a generally attractive composition with little sign of neglect or degradation; • Provide views of heritage assets, but which are not best represented by the particular view; • Be from within local parks or open space, the public realm, streets or on local public rights of way.
Low	The view is likely to be undesignated. The view or its composition may also: • Not include any landmark features; • Have low amenity value; • Have few or no features which are visually attractive, and have a weak or poor composition with discordant or incongruous features that may contribute to a sense of degradation or poor quality; • Be incidental to the viewer, with little or no amenity value; • Be fleeting to a viewer in motion.

Type of Visual Effects in Rural Environments

3.5.12 Indicators of the **type** of visual effect in the rural environment include the dominance of new built form in the view and the effects of the new scale and mass in the view, how the visual composition will change, and whether there would be new skyline features or focal interest. Whether a visual effect in the rural environment is beneficial or adverse is a subjective judgement, and therefore to assist the LVA assessor in making their judgement of the type of visual effect, the LVA is based upon identified criteria, as follows.

3.5.13 The LVA considers that **beneficial** visual changes which would be likely to arise as a result of Proposed Development may include, but are not limited to, the following visual changes:

- Creation of a new focal points and landmarks within the view;
- Respects the scale of the existing landscape;
- Elements within the Site placed sensitively to avoid significant visual change where possible;

- Provision of new planting within the Site boundary where possible.
- 3.5.14 Visual changes which are considered to be **adverse**, may include, but are not limited to, the following factors:
- Amplification of existing adverse visual effects;
 - The addition of new elements within the view; at times from sensitive locations, albeit similar in nature to existing;
 - Loss of vegetation to provide for the various elements associated with the Proposed Development.
- 3.5.15 Professional experience has shown that, in most cases, Proposed Development in rural environments is likely to result in a combination of beneficial and adverse visual effects within the same view composition. Therefore, this LVA takes the approach of detailing the specific beneficial and adverse visual changes which are predicted to occur, in the Visual Effects Table; with a balanced view being taken by the LVA assessor to determine whether the overall type of effect is **adverse** or **beneficial**.

Magnitude of Visual Effects

- 3.5.16 The **magnitude** of a visual effect is assessed in terms of its **size or scale**, the **geographical extent** of the area influenced and its **duration** and **degree of reversibility**.
- 3.5.17 The size or scale of change is described on a scale of large to no change. This relates to the degree of contrast to, or integration with, the visual composition, which is likely to result from the Proposed Development; and is influenced by the relative time over which a view is experienced, and whether it is a full, partial or glimpsed view.
- 3.5.18 The geographical extent of change to views, considers the orientation of the Proposed Development in relation to the receptor, and the distance between the Proposed Development and the receptor. It is considered on a scale of large across a widespread area, to small across a local area.
- 3.5.19 The duration and degree of reversibility is also considered as a factor contributing to the magnitude of effect. Duration is considered as:
- Short-term: Less than 1 year.
 - Medium-term: 1-10 years.
 - Long-term: More than 10 years.
- 3.5.20 Reversibility is a judgement about the prospects and practicality of the effect being reversed, typically, in a generation. Permanent effects are those which cannot be realistically reversed, whereas reversible effects can be wholly or largely reversed. e.g. development (such as wind turbines) with a limited life permission and high potential for removal and/or the land to be reinstated, or construction activities which are temporary. Partially reversible effects may also occur for example when the proposals would provide something similar to the baseline, or the introduction of elements which are representative of baseline features / characteristics.
- 3.5.21 The typical criteria which are used to assess the type and magnitude of visual effects, based on the degree of change to the view or composition, are set out in **Table 3.9**.

Table 3.9: Visual Effects – Magnitude and Type of Change – Typical Criteria

Criteria Level	Description
Major adverse visual effect	The proposals will cause a dominant or complete change or contrast to the view, resulting from the loss or addition of features in the view and will substantially degrade the appreciation or composition of the view.
Moderate adverse visual effect	The proposals will cause a clearly noticeable change or contrast to the view, which would have some effect on the composition, resulting from the loss or addition of features in the view and will noticeably degrade the appreciation or composition of the view.
Slight adverse visual effect	The proposals will cause a perceptible change or contrast to the view, but which would not materially degrade the composition or the appreciation of the view.
Negligible adverse visual effect	The proposals will cause a barely perceptible change or contrast to the view, which would not degrade the composition or the appreciation of the view.
No change	The proposals will maintain the existing view and cause no change to that view.
Neutral	There will be a change to the composition of the view, but the change will be entirely in keeping with the existing features of the view and maintain the composition and quality of the existing baseline view and does not enhance or degrade the baseline view.
Negligible beneficial visual effect	The proposals will cause a barely perceptible change or contrast to the view, which would not enhance the composition or the appreciation of the view.
Slight beneficial visual effect	The proposals will cause a perceptible change or contrast to the view, but which would not materially enhance the composition or the appreciation of the view.
Moderate beneficial visual effect	The proposals will cause a clearly noticeable change or contrast to the view, which would have some effect on the composition, resulting from the loss or addition of features in the view and will noticeably enhance the appreciation or composition of the view.
Major beneficial visual effect	The proposals will cause a dominant or complete change or contrast to the view, resulting from the loss or addition of features in the view and will substantially alter enhance the appreciation or composition of the view.

Judgement on Level of Landscape and Visual Effects

- 3.5.22 The level of effect regarding landscape and visual receptors varies with the location, landscape, and type of proposed development.
- 3.5.23 The level of effect is a matter of professional judgment, which is informed by the combination of receptor sensitivity and the magnitude of effect as set out below in **Table 3.10**.

Table 3.10: Levels of Landscape and Visual Effects Matrix

	Magnitude of Effect					
		Major Effect	Moderate Effect	Slight Effect	Negligible Effect	No Change
Sensitivity	Very High Sensitivity*	Substantial	Substantial or Major to Substantial	Major	Moderate	No Change
	High Sensitivity	Substantial or Major to Substantial	Major	Moderate	Minor	No Change
	Medium Sensitivity	Major	Moderate	Minor	Negligible	No Change
	Low Sensitivity	Moderate	Minor	Minor	Negligible	No Change

*A 'Very High' level of sensitivity is only applicable to international landscape designations or views from those international landscape designations, i.e. World Heritage Sites that meet UNESCO criteria.

3.6 Definitions of Landscape and Visual Mitigation Measures

- 3.6.1 **Primary mitigation measures** are defined as those which have been developed through the iterative design process, and which have become integrated or **embedded into the scheme design**.
- 3.6.2 **Standard construction and operational management practices** are defined as those which would be required to be adopted for the avoidance of, and reduction of, adverse environmental effects as part of the standard construction process, such as the implementation of tree protection fencing around retained trees. These standard practices for construction are therefore **not** considered to form part of the embedded mitigation; and instead, are expected to be detailed in a Construction and Environmental Management Plan (CEMP), to be prepared at a relevant time.
- 3.6.3 Embedded (primary) mitigation measures are described within Section 5 of the LVA.
- 3.6.4 **Secondary, or further mitigation and enhancement** measures are those which would be proposed in order to address adverse effects which remain after the embedded (primary) mitigation has been incorporated into the scheme.
- 3.6.5 In cases where the maximum achievable mitigation within the Site boundaries has already been included in the embedded (primary) mitigation measures, there may be no further (secondary) landscape mitigation measures proposed in the LVA. This can occur where the Site is located within a dense urban environment, and it is considered that off-site further landscape mitigation would not be feasible and therefore could not provide certainty of further reduction of adverse effects.

4 Technical Methodologies

4.1 Zone of Theoretical Visibility

- 4.1.1 A ZTV analysis is a computer-generated tool to identify the 'theoretical' extent of visibility for the Proposed Development.
- 4.1.2 The ZTV shows theoretical visibility only and so it is important to fully understand that its accuracy is limited to the digital information that it has been based upon and the algorithm used in its calculation. It is stressed that the ZTV remains only as a tool in the landscape and visual impact assessment of the Proposed Development. A ZTV alone cannot indicate the potential visual effect, nor show the likely level of effect that the Proposed Development will have.
- 4.1.3 However, it does guide an appreciation of the potential and maximum visibility of the Proposed Development, that can then be used to focus the visual assessment process on those areas affected and avoids those areas which will not be affected.
- 4.1.4 A ZTV analysis was undertaken, based upon the final development parameters as presented on the Planning Application drawings. **Figure L4a** was produced by generating points set at 62m height for proposed pylons 4YV165A and 4YV166A, 18m height for tower 4YV165B, and 15.5m height for the gantries. Heights for existing pylons were set at 53m for 4YV164, 48m for 4YV165, 50m for 4YV167, and 59m for 4YV168. **Figure L4b** was produced by generating points set at 12m height for busbars, 8m height for the 132kV gantries, and 7m height for the control room.
- 4.1.5 The ZTV calculation is performed using ESRI ArcGIS Pro 3.4.3, under the Viewshed analysis tool via the 3D Analyst or Spatial Analyst ArcMap extensions. This is then saved to the ESRI Geodatabase of the Project.
- 4.1.6 The ZTV computer software processes landform data and other selected features influencing the extent of visibility, for example, woodland and settlements, in order to identify the theoretical extent of the area from which the Proposed Development is likely to be visible. For this ZTV analysis a Digital Surface Model (DSM) dataset was considered. A Digital Surface Model (DSM) ZTV includes heights of objects, such as principal areas of woodland and settlements as well as the terrain surface. Using the DSM allows for a more pragmatic approach to analysing where the potential and maximum visibility of the Proposed Development will occur, due to having a live screening effect from both the buildings and vegetation contained within the DSM. This ZTV is considered a realistic worst case, however important to note that other features, such as hedgerows or street trees, which have not been included are likely to provide additional filtering of views.
- 4.1.7 The viewer height of the ZTV was set at 1.6m above ground level. This is higher than the camera height recommended for photograph visualisations and compensates for potential inaccuracies in digital terrain data and to ensure that the 'worst case' is represented.

Limitations and Assumptions

- The ZTV analysis remains only as a tool in the landscape and visual impact assessment of the Project. A ZTV alone cannot indicate the potential visual effect, nor show the likely effects that the Proposed Development will have.
- Digital Terrain Modelling (DTM) to produce a ZTV has not been included in this appraisal as its 'bare earth' nature did not provide an accurate overview of actual visibility on the ground given the subtle variations in topography across the Site, and blanket visibility of the proposed towers in particular was not informative of actual conditions.

- DSM has been based on DataMap Wales DSM LIDAR data (1 metre resolution).
- The ZTV analysis has been clipped to a 3km area.

4.2 Viewpoint Photography

- 4.2.1 The requirements for baseline photography collation and presentation are included within Landscape Institute Visual Representation of Development Proposals Technical Guidance Note 06/19 (TGN 06/19) (Landscape Institute, 2019), and this has been considered.
- 4.2.2 Baseline photography was undertaken in June 2024. While it is acknowledged that summer photography does not present 'worst case' conditions visually, the author has used professional judgement to inform worst case scenarios with regards to conditions.

Equipment

- 4.2.3 A good quality camera and lens are essential to the production of photographs for landscape and visual assessment work.
- 4.2.4 High-resolution digital photographs were captured using a Canon EOS 6D Mark II Full Frame Digital SLR, using a Canon EF 50mm f/1.8 STM which is a fixed focal-length lens. The camera was fixed to a tripod (typically 1.65m above the ground), mounted on a Vanguard Alta Pro 263AP and utilized a Manfrotto MA 454 Micro Positioning Plate to remove parallax errors. Once stitched and cropped appropriately this method provides a more accurate method of producing panoramas.

Methodology

- 4.2.5 Consultation was sought with the local planning authority (LPA) on the location of the provisional view locations prior to the data capture, however no response was received.
- 4.2.6 At each location, the centre of the camera was positioned at a height of 1.6m above the ground to simulate average viewing height. Each view was taken with a lens that provides an approximate 40-degree field of view in landscape format. At each location the desired view angle was captured. Photography was captured on site with a 50% overlap between each individual shot to reduce distortion with image blending.

Presentation

- 4.2.7 All photography has been presented to showcase a 90° Horizontal Field of View (HFOV) x ~27° Vertical Field of View (VFOV) on an A1 length, A3 height sheet with an image size of 820mm x 250mm, in cylindrical projection.
- 4.2.8 Each photo sheet identifies key existing features visible in the view along the top of the image alongside the approximate extent of the Proposed Development that could be theoretically visible to aid interpretation by the reader.

4.3 Visualisations

- 4.3.1 The requirements for visualisations are included within Landscape Institute Visual Representation of Development Proposals Technical Guidance Note 06/19 (TGN 06/19) (Landscape Institute, 2019), and this has been considered.
- 4.3.2 The visualisations have been undertaken by Stantec, and visualisations prepared for four discrete locations which were judged to illustrate a broadly representative geographical spread. These were: VL1a, VL3a, VL5 and VL7.
- 4.3.3 For this project visualisations have been produced as follows:

- Type 3, massing image identifies the location of the proposals, the size and scale and degree of visibility. The methodology aligns with TGN 06/19 Type 3 Photo massing output.

4.3.4 Visualisations are presented on **Figure L6, Appendix A**.

Methodology

4.3.5 The production of visualisation includes the following tasks:

- Preparation of a base CAD file containing all view locations and reference elements (using aerial imagery), and creation of camera positions in 3DS Max for each view location.
- Lighting system (Daylight) set up in 3DS Max.
- Cameras are adjusted to best match each photographic panorama against imported reference elements.
- Lighting system adjusted to match shadows visible on each photographic panorama.
- Receipt of 3D design information added to 3DS Max Software.
- Each view is rendered as an image with the 3DS camera matched with a representative 3D model, at the same size, scale, resolution and aspect ratio as the digital photography.
- This gives a series of 3D rendered images ready for compositing with the photos of the existing baseline site.
- Non-visible areas of the rendered 3D model are masked in the image using Photoshop.
- High-resolution render processed for each view – producing a raster image (alpha separated).
- Final colour balancing/clean-ups carried out and image is exported from Photoshop.
- Images imported into InDesign using predefined drawing templates for each view location.
- Final heights for vegetation within the visualisations were set at: 10-11m for woodland and individual trees, and approximately 5m for scrub. This is broadly representative of 15 years growth, aside from scrub which would be maintained at 5m height on the landscape bund for safety / screening purposes.
- Massing of the elements within the Proposed Development were based on Drawings PDD-101256-LAY-050 – 059.

4.3.6 As recommended within TGN 06/19, **Table 4.1** below sets out the technical methodology checklist for Type 3 outputs.

Table 4.1 Technical Methodology Checklist – Type 3

Technical Methodology	Response
Methodology	Non-Verifiable
Photography	

Technical Methodology	Response
Method used to establish the camera location (e.g. handheld GPS/GNSS, GNSS/RTK, survey point, visual reference)	Visual Reference on site and on aerial imagery
Likely level of accuracy of location (m, cm etc.)	<1m
If lenses other than 50mm have been used, explain why a different lens is appropriate	50mm lens used on full frame DSLR camera
Written description of procedures for image capture and processing	No
If panoramas used: make and type of Pano head and equipment used to level head	Vanguard Alta Pro 263AP and a Manfrotto MA 454 Micro Positioning Plate
If working outside the UK, geographic co-ordinate system (GCS) used (e.g. WGS-84)	OSGB36
3D Model / Visualisation	
Source of topographic height data and its resolution	Combination LiDAR + OS Terrain 2m and 5m and Google Earth Pro
How have the model and the camera locations been placed in the software?	Based on Photograph GPS coordinates, Google Earth Pro, and aligned with features in the photograph
Elements in the view used as target points to check the horizontal alignment	Existing buildings, telegraph poles, pylons, gantries, Trees, and various fixed points
Elements in the view used as target points to check the vertical alignment	Existing buildings, telegraph poles, pylons, gantries, Trees, and various fixed points
3D Modelling / Rendering Software	Autodesk 3ds Max 2025
Any limitations in the overall methodology for preparation of the visualisations?	Photograph GPS coordinates are used as a guide as they are not accurate especially in elevation
Visualisation Type	Photomontage/Photowire - Type 3 TGN 06-19
Projection	Cylindrical
Enlargement factor for intended sheet size	100% @ A3
Date and time of captured photography	June 2024
Make and model of camera, and its sensor format	Canon EOS 6D Mark II Full Frame Digital SLR, using a Canon EF 50mm f/1.8 STM in landscape orientation
Make and focal length of the camera lens(es) used	50mm
Horizontal Field of View (HfOV) of photograph / visual	90°
Direction of View: bearing from North (0°) or Compass Direction	No
Camera location grid coordinates: eastings & northings to relevant accuracy; height of ground in metres Above Ordnance Datum (mAOD)	Grid coordinates included on each sheet
Distance to the nearest site boundary, or key development feature, as most appropriate	No
Height of the camera lens above ground level and, if above 1.65m or below 1.5m, why?	1.6m
Additional imagery	
Baseline photograph	Yes
A composite view generated by overlaying multiple layers of image data: the photograph, 3D model of terrain (LiDAR DTM) and / or 3D model of LiDAR	Yes

Technical Methodology	Response
DSM, 3D model of proposed development, 3D model of landscape mitigation. This can explain how the photomontage has been generated.	
A photograph of the tripod location to confirm the camera / tripod location	Yes

5 LVA Standard Glossary and Abbreviations

5.1 Glossary

5.1.1 Standard terms used in the LVA, and this Methodology document are set out in **Table 5.1**.

Table 5.1: LVA Glossary

Term	Standard Definition
Baseline Conditions	The environment as it appears (or would appear) at the Baseline year, prior to the implementation of the Proposed Development together with any known or foreseeable future changes that will take place before completion of the project.
Baseline Information	Collection of background information on the environmental setting of a Proposed Development.
Characteristics	Key features, or combinations of, which contribute to distinctive landscape or landscape character.
Committed Development	Development projects that are either under construction or which have valid planning permission/consents.
Conservation Area	Land awarded protection status for an area with defined heritage assets and historic environment.
Cumulative effects	Additional or combined changes caused by the Proposed Development in conjunction with other developments (associated with or separate to it), or actions that occurred in the past, present or are likely to occur in the foreseeable future.
Data Collection or Desktop Studies	The gathering and analysis of existing data from the public domain, scientific and commercial databases, and available project sources, in order to identify environmental constraints and opportunities.
Direct Effect	An effect that is directly attributable to the Proposed Development.
Development	Any proposal that results in a change to the landscape/townscape and/or visual environment.
Enhancement	Proposals that seek to improve the landscape or townscape resource and the visual composition and amenity of views, over and above the baseline conditions.
Heritage	The historic environment and including valued assets and qualities such as historic buildings and cultural traditions.

Key Characteristics	Features or components which are particularly important to the current character of the landscape or townscape, and which define an area's particular / distinctive sense of place.
Landscape	An area, as perceived by people, the character of which is the result of action and interaction of natural and/or human factors.
Landscape or Townscape Character	A distinct and recognisable pattern of features that occurs consistently in a particular type of landscape or townscape and which makes one landscape or townscape different from another. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement, built form and layout, scale, mass and legibility. It creates the particular sense of place of different areas of the landscape or townscape.
Landscape or Townscape Elements	Proposed components of the landscape / townscape delivered as part of mitigation to avoid reduce or offset adverse environmental impacts of a project
Landscape or Townscape Effects	Effects on the landscape or townscape as a resource in its own right.
Landscape or Townscape Features	Components of the existing baseline condition which contribute to the overall character of the place, and urban environment. These are the 'townscape fabric', for example: scale and massing, urban grain, legibility, appearance, public realm and open spaces, and green infrastructure features including street trees.
Landscape or Townscape Quality (condition)	A measure of the physical state of the landscape or townscape. It may include the extent to which typical character is represented in the individual areas, the intactness of the landscape or townscape and the condition of individual features.
Landscape or Townscape Receptors	Defined aspects of the landscape or townscape resource that have the potential to be affected by a proposal.
Landscape or Townscape Value	The relative value that is attached to different landscapes or townscapes by society. A landscape or townscape may be valued by different stakeholders for a variety of reasons.
Listed Buildings	A building with historic, artistic, or architectural interest, which has been listed on the statutory list of buildings.
Magnitude	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible, partially reversible, or irreversible and the length of its duration. It is presented in terms of being major, moderate, slight, or negligible. Magnitude is defined for LVA in Appendix B.
Mitigation Measures	Action taken to avoid reduce or offset adverse environmental impacts of a project.

Indirect Effects	Effects that result indirectly from the proposed project as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects.
Receptor	Physical resource or user group that would experience an effect, either negative or positive from the Proposed Development.
Residual Effects	Effects that would remain following the implementation of the mitigation measures.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change of development proposed and the value related to that receptor.
Scoping	Scoping is the process of determining what issues are to be addressed and setting out a methodology in which to address them in a structured manner appropriate to the plan or programme. Scoping is carried out in consultation with the appropriate bodies.
Significance	A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic. This assessment considers the sensitivity of the receptor and the magnitude of change which is likely to occur in the receiving environment. The combined effect of these creates the significance level.
Study Area	Area surrounding and including the Proposed Development, where there is reasonable potential for environmental impacts arising from the Proposed Development. Study areas are defined for each topic of the EIA.
Susceptibility	The ability of a defined landscape or townscape or visual receptor to accommodate the specific Proposed Development without undue negative consequences.
Townscape	The landscape within the built-up area, including the buildings, the relationship between them, the different types of urban open spaces, including green spaces and the relationship between buildings and open spaces. Also defined as the character and composition of the built environment including the buildings and the relationships between them, the different types of urban open space, including green spaces, and the relationship between buildings and open spaces.
Views - Glimpsed	A view which is seen or perceived briefly or partially, for example when the viewer is moving.
Views - Filtered	A view which is partially obscured by another object, for example a view through a tree canopy.

Views - Oblique	A view which is not seen or experienced in a direct way or angle; for example a view which is at a different angle to the main direction of the viewer's travel and therefore requires the head to be turned to perceive the view and is not the main focus for that person.
Views - Framed	A view that is restricted and bordered by objects located at the sides of the view; for example a view along a street which is bordered at both sides by buildings.
Views - Open	A view with no restrictions, not closed or blocked or framed.
Visual Amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting, or travelling through an area.
Visual Effects	Effects on specific views and on the general visual amenity experienced by people.
Visual Receptor	Individuals and/or defined groups of people who have the potential to be affected by a proposal. Typically represented by a selected viewpoint location.
Zone of Theoretical Visibility (ZTV)	A map, digitally produced, identifying areas of land within which a development is theoretically visible (worst-case).

5.2 Abbreviations

5.2.1 Standard abbreviations typically used in the LVA and this Methodology document may include the following:

- AIA – Arboricultural Impact Assessment
- AOD – Above Ordnance Datum
- AONB – Area of Outstanding Natural Beauty
- BS – British Standard
- CA – Conservation Area
- CEMP - Construction Environmental Management Plan
- CTVEA – Cumulative Townscape and Visual Effects Assessment
- CROW Act – The Countryside and Rights of Way Act 2000
- DAS – Design and Access Statement

- EIA – Environmental Impact Assessment
- ES – Environmental Statement
- EU - European Union
- GI – Green Infrastructure
- GIS – Geographical Information Systems
- GLVIA3 – Guidelines for Landscape and Visual Impact Assessment, Landscape Institute (3rd edition, 2012)
- IEMA - Institute of Environmental Management & Assessment
- LAP – Local Area for Play
- LCA – Landscape Character Area
- LCT – Landscape Character Type
- LDP – Local Development Plan
- LI – Landscape Institute
- LPA – Local Planning Authority
- LVA – Landscape and Visual Appraisal
- LWS – Local wildlife site
- MAGIC – English Government's online mapping tool
- NCA – National Character Area
- NNR – National Nature Reserve
- NPPF – National Planning Policy Framework
- NTS – Non-Technical Summary
- PROW - Public Rights of Way
- RHPG – Register of Parks and Gardens of Special Historic Interest
- RSA – Regional Scenic Area
- SAC – Special Area of Conservation
- SAM – Scheduled Ancient Monument
- SLA – Special Landscape Area
- SPA – Special Protection Area
- SPG – Supplementary Planning Guidance

- SSSI – Site of Special Scientific Interest
- TCA – Townscape Character Area
- TPO – Tree Preservation Order
- ZTV – Zone of Theoretical Visibility

Embedded Mitigation Measures

Embedded Mitigation:	▪ Enhancement / reinforcement of a number of existing hedgerows across the Site to retain field boundary patterns in perpetuity where possible, enhance visual screening opportunities, and enhance the existing green infrastructure network; ▪ Proposed native hedgerow planting to introduce new habitat connections where hedgerows are lost to construction wherever possible and suitable; ▪ Proposed native hedgerow planting along the northern and southern cutting of the proposed access track to compensate for the loss of field boundary hedgerows, provide additional visual screening, and provide amenity value; ▪ Seeding areas with species rich grassland where land would no longer be viable for agricultural use to increase amenity and ecological value, with particular focus on purple moor grass and rush pasture; ▪ Planting of woodland blocks southeast and directly west of the substation compound to provide visual screening from nearby properties and enhance key characteristics of the local landscape character; ▪ Planting of individual trees to the east of the substation to break up views towards the substation from sensitive receptors at Bancycapel; ▪ Creation of SuDS ponds south of the proposed access road to provide amenity value and potentially increase Net Benefit for Biodiversity (NBB); ▪ Provision of a 3m landscape bund which effectively wraps around the south-eastern corner of the substation compound planted with scrub up to an additional 5m to provide screening in views from the property to the southeast and from the A484; and ▪ Scrub planting throughout the Proposed Development, including along and between the landscape bund, to aid visual screening, provide additional green network connections, and enhance NBB.
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BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Landscape Designations					
Carmarthenshire Bay and Estuaries Special Landscape Area (SLA)	SLAs are a non-statutory designation applied by the local planning authority to define areas of high landscape importance within their administrative boundary. Landscapes designated as an SLA may be unique, exceptional or distinctive to the local authority area. Carmarthenshire Bay and Estuary SLA lies approximately 1.5km west of the Site. The SLA contains distinct landscapes which contribute to the creation of a high-quality landscape. These distinct landscapes are listed by Carmarthenshire Council as: “Coastal Hills: Marros-Pendine, Llanybri, Llansaint and Pembrey Coastal Hills; Coastal slopes: Marros to Wharley Point and St. Ishmael’s coastal slopes; Estuary slopes: the slopes above the estuaries, i.e. the slopes on either side of the Taf and Tywi rivers where they are within the estuary; River estuaries: the rivers channels, and associated mudflats at low tide; Coastal grazing marsh: West Marsh, East Marsh south of Laugharne, south of Kidwelly; Sandy beaches: Pendine and part of Cefn Sidan; Sand dunes: Pendine and part of Cefn Sidan; Salt marsh: This occurs in several areas within the estuaries, and near the coast e.g. Pembrey Saltings; Settlements: Pendine, Laugharne, Llandsteffan and Ferryside.”	Value of SLA: High Susceptibility to Change: High OVERALL SENSITIVITY: HIGH	During Construction: There would be no direct impacts on the SLA as a result of the Proposed Development. Any indirect effects which may arise during the construction phase of works, such as experiential aspects, would be minimal given the overall distance and intervening topography. The most likely elements of the Proposed Development to be experienced from the SLA would be the additional 400kV towers which are expected to be approximately 62m tall. However, these towers would not appear unusual given the existing towers and overhead lines (OHL) adjacent to the Site and which pass through the SLA itself to the west.	During Construction: Size/Scale: No Change Geographical Extent: N/A Duration/Reversibility: N/A OVERALL MAGNITUDE: No Change to any landscape characteristics related to the SLA.	No Change
			On Completion (Year 1): Following completion of the Proposed Development there would be no impact on the qualities or characteristics of the SLA as a result.	On Completion (Year 1): Size/Scale: No Change Geographical Extent: N/A Duration/Reversibility: N/A OVERALL MAGNITUDE: No Change.	No Change
			15 Years After Planting: There is not predicted to be any change from the impacts experienced upon completion of the Proposed Development by year 15.	15yrs After Planting: Size/Scale: No Change Geographical Extent: N/A Duration/Reversibility: N/A OVERALL MAGNITUDE: No Change.	No Change

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
National Landscape Character Areas (Published Sources)					
National Landscape Character Area (NLCA) 33: Gwendraeth Vales	The Site lies within the western extents of this NCLA, with relevant key characteristics such as: “Small valleys with minor streams cross the landscape, feeding the Gwendraeth, Lougher and Tywi Rivers; - Exposed land on the limestone and sandstone ridges; - Patchwork of medium sized pasture fields enclosed by thick hedges; - Linear settlements linked by a network of roads.” The NCLA is further described as “an area of rolling hills, ridges and minor valleys, comprising the area between the coastal and valley parts of the Tywi, the South Wales Valleys and the Black Mountain part of the Brecon Beacons. The countryside setting... (is a) complex network of small geometric fields surrounded by lush, high hedgerows and small copses. Seasonally waterlogged soils in the valleys support rushy grazing of poor agricultural quality while well drained coarse loamy and sandy soils across much of the character area are used for sheep and dairy pasture.” The majority of the Site lies within this NLCA, with only the northern tip of the Site lying within NLCA 45.	Value of NCA: Medium Susceptibility to Change: Medium OVERALL SENSITIVITY: MEDIUM	During Construction: The majority of the Proposed Development lies within this extensive NLCA, and it would represent a very small, localised change to part of it within its western extents. Short term construction activity would include: - Erection of up to two new 400kV towers circa 62m tall; - Substation comprising a number of vertical structures up to 15m high; - Control buildings; - A construction compound directly south of the exiting access road within existing agricultural land which would include plant and material storage areas, an assembly area, welfare compound and parking area, and a soil storage area; - An electrified security fence, typically 3.4m high; - An access road approximately 5.5m wide with adjacent hardstanding within which the substation equipment would be housed; - Planting of the mitigation proposals outlined in Section 6 of the LVIA; - Typical construction activity such as movement of tall plant, hoardings and task lighting. This would occur across a number of agricultural fields, resulting in a localised change to key characteristics associated with the NLCA such as medium sized pasture fields enclosed by thick hedges. This localised change would not however result in impacts across the wider NLCA and would therefore not intrinsically change its overall character.	During Construction: Size/Scale: Small Geographical Extent: Adjacent landscape level. Duration/Reversibility: Short term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Slight	Minor adverse
			On Completion (Year 1): Following completion of the Proposed Development there is predicted to be a localised change to the existing baseline character of the NLCA as a result of the substation and its related components. This localised change would not permanently alter the key characteristics associated with the wider NLCA, and although some elements associated with it would be visible across the wider area, these elements would not appear unusual given the nature of the existing high voltage towers and OHL. The proposed mitigation planting would, at this stage, not be suitably established to provide screening capabilities.	On Completion (Year 1): Size/Scale: Small Geographical Extent: Adjacent landscape level. Duration/Reversibility: Medium to long term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Slight	Minor adverse
			15 Years After Planting: Following successful establishment of the mitigation proposals outlined in Section 6 of the LVIA, the larger elements associated with the proposed development, i.e. the 400kV towers, OHL, and to a lesser extent the substation and associated buildings, would still be visible from some areas within the wider landscape, and would consequently have some experiential impacts on the characteristics of the NLCA. The mitigation proposals would however allow parts of the Proposed Development to integrate with the surrounding landscape to a degree and would provide additional biodiversity value to current baseline conditions.	15yrs After Planting: Size/Scale: Small Geographical Extent: Adjacent landscape level. Duration/Reversibility: Long term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Negligible	Negligible adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
National Landscape Character Area (NLCA) 45: Taf, Tywi and Gwendraeth Estuaries	This NLCA lies directly west of the Site, and includes the estuaries of all three rivers as they feed into Carmarthen Bay, broadly forming a star shape. The River Tywi is the central estuary of these three, and the relevant key characteristics are as follows: • <i>“Extensive sand dune systems – define the coastal edge, internationally important for biodiversity including much of southern Britain’s dune alder dominated woodland;</i> • <i>Extensive estuary marshes – grazed by livestock, including horses and ponies;</i> • <i>Rolling hills – between the estuaries, with pasture used for dairy and sheep farming;</i> • <i>Drainage and enclosure pattern – on coastal marshes fields are divided by drainage ditches or fences in a rectilinear pattern. Inland there are medium size irregular fields bounded by hedgerows, many of which are unmanaged;</i> • <i>Settlement pattern – scattered, usually linear and located along the coast, roads or watercourses;</i> • <i>Openness – open and exposed estuaries and coastline contrasting with the more intimate rolling pastures and woodlands of the river valleys.”</i> Only the very northern extents of the Site lie within this NLCA.	Value of NLCA: High Susceptibility to Change: Medium OVERALL SENSITIVITY: HIGH	<u>During Construction:</u> The area of the Site which lies within this NLCA is predominantly the area proposed to accommodate the access track and the construction compound during the construction phase of works. The short term construction of the access track, which would result in the movement of large vehicles and plant, and the introduction of the temporary construction compound, hoardings and task lighting, would result in the loss of field boundary hedgerow and agricultural land over a localised area within the NLCA, and would therefore not result in noticeable impacts overall on its key characteristics. The NLCA is largely concentrated around the estuaries of its associated rivers and valleys, and the Proposed Development, although incurring direct impacts, would not alter the character of those features in any noticeable way.	<u>During Construction:</u> Size/Scale: Very small Geographical Extent: Site level Duration/Reversibility: Short term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Negligible	Minor adverse
			<u>On Completion (Year 1):</u> Following completion of the Proposed Development, in this case largely centred around the access track, there would be direct changes to the localised area within the NLCA. This would include the removal of roadside vegetation and field boundary treatments, and the introduction of a permanent access track to allow for maintenance etc. of the substation. The direct impacts associated with the Proposed Development would not incur any noticeable change overall on the NLCA, and its key characteristics would remain unaffected. The proposed mitigation planting would, at this stage, not be suitably established to provide the predicted screening capabilities.	<u>On Completion:</u> Size/Scale: Very small Geographical Extent: Site level Duration/Reversibility: Long term/Permanent OVERALL MAGNITUDE: Negligible	Minor adverse
			<u>15 Years After Planting:</u> At year 15, following the successful establishment of the mitigation proposals outlined in Section 6 of the LVIA, the access track would appear integrated into its surroundings, and would not be regarded as an unusual addition to the landscape. This would largely be the result of the proposals for hedgerows along the northern edge of the access track, which would be in keeping with the local vernacular, and would provide screening of views towards the track on the approach from the existing access track to the north. Impacts would therefore be reduced from the construction and year 1 phases of the works.	<u>15yrs After Planting:</u> Size/Scale: Very small Geographical Extent: Site level Duration/Reversibility: Long term/Permanent OVERALL MAGNITUDE: Negligible	Negligible adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Visual and Sensory Layer: CRMRTVS960 Middleton Hills (LANDMAP)	Key characteristics of CRMRTVS960 Middleton Hills which are applicable to the Site and surrounding area include: “Rolling hills between the Tywi Valley and the Gwendraeth Fach; - areas of woodland and fairly strong field boundaries on medium sized fields, with some hedgerow trees; - well settled with mainly scattered settlement. Value: Moderate. Overall, this is not considered to be an area of high scenic quality; Condition: Good. Generally, well managed improved agricultural land; Overall Evaluation: Moderate.” Elements labelled for conservation across this Layer include: - The semi-natural habitats associated with the landscape, for instance hedgerows, trees and woodlands. This Layer covers an extensive area from south of Bancycafel east as far as Llanarthne.	Value of Layer: Medium Susceptibility to Change: Medium OVERALL SENSITIVITY: MEDIUM	During Construction: The majority of the Proposed Development lies within this relatively extensive Visual and Sensory Layer, and it would represent a very small, localised change to part of it within its south-western extents. Short term construction activity would include: - Erection of up to two new 400kV towers circa 62m tall; - Substation comprising a number of vertical structures up to 15m high (gantry); - Control buildings; - A construction compound directly south of the exiting access road within existing agricultural land which would include plant and material storage areas, an assembly area, welfare compound and parking area, and a soil storage area; - An electrified security fence, typically 3.4m high; - Part of an access road approximately 5.5m wide with adjacent hardstanding within which the substation equipment would be housed; - Planting of the majority of mitigation proposals outlined in Section 6 of the LVIA; - Typical construction activity such as movement of tall plant, hoardings and task lighting. Overall, these changes would represent a barely noticeable change to the wider Layer, and impacts would remain localised within an area which already contains similar infrastructure, i.e. 400kV pylons and OHL.	During Construction: Size/Scale: Small Geographical Extent: Adjacent landscape level. Duration/Reversibility: Short term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Slight	Minor adverse
			On Completion (Year 1): Following completion of the Proposed Development, impacts on the Visual and Sensory Layer would remain localised and direct. Overall however the footprint of the substation and related elements which lie within the Layer would be small in relation to its wider extents. The removal of the short-term elements associated with the construction phase would reduce impacts slightly during operation in the first year. The proposed mitigation planting would, at this stage, not be suitably established to provide fully effective screening capabilities, however the proposals would provide some level of screening for the residential properties to the southwest.	On Completion: Size/Scale: Small Geographical Extent: Adjacent landscape level. Duration/Reversibility: Long term/Partially permanent/Partially reversible. OVERALL MAGNITUDE: Negligible	Negligible adverse
			15 Years After Planting: By year 15 of operation, the material impacts on the character of the Visual and Sensory Layer would remain similar to those experienced at year one of operation, that being the introduction of the additional towers, substation, related maintenance building and other above ground components. The mitigation proposals outlined in Section 6 of the LVIA, including woodland, scrub, hedgerows with hedgerow trees and earthworks, once successfully established would provide some softening of these components in views from the surrounding area lessening impacts to a noticeable degree.	15yrs After Planting: Size/Scale: Small Geographical Extent: Adjacent landscape level. Duration/Reversibility: Long term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Indistinct	Negligible adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Visual and Sensory Layer: CRMRTVS936 Llansaint Coastal Hills (LANDMAP)	Key characteristics of CRMRTVS936 Llansaint Coastal Hills which are applicable to the Site and surrounding area include: • <i>“Rolling hills overlooking the coast and the Tywi Estuary;</i> • <i>Dominated by improved agricultural land, some arable (maize);</i> • <i>Strong field boundaries, relatively few trees compared to other parts of the county creating a feeling of exposure, some trees are wind sculpted;</i> • <i>Scattered rural farms and fairly busy country roads.</i> • Value: <i>High. Views towards the coast and estuary in places, as well as the hill top settlement of Llansaint give the area a distinctive character;</i> • Condition: <i>Unassessed;</i> • Overall Evaluation: <i>High. An attractive rhythmically rolling rural landscape, little interrupts it other than the pylons.”</i> Elements labelled for conservation across this layer include: • Field boundaries and traditional buildings that are important within the landscape; • Coastal and estuary views; and • Conserve the appearance of Llansaint by keeping skylines uncluttered. This layer extends from west of Idole in the north to Kidwelly in the south, covering an extensive area that reaches west towards the banks of the River Tywi, and inland to Llandyfaelog.	Value of Layer: High Susceptibility to Change: Medium OVERALL SENSITIVITY: HIGH	During Construction: This Layer would effectively be impacted by the introduction of the proposed temporary construction compound and permanent access track which would provide access to the substation compound for maintenance purposes. The proposed access road would lie south of and parallel with the existing access track, with the temporary construction compound lying between the two. Construction activities would entail the following: • Removal of roadside vegetation and removal of field boundary treatments to provide adequate safe passage of vehicles; • Installation of the construction compound within land to the south of the proposed access track; • Potential area within fields to the north for OHL enabling works; • Construction of temporary hoarding and task lighting where required. The construction works would result in relatively small-scale, localised change within the Layer which would not noticeably alter the key characteristics associated with it. The impacts of construction would be temporary aside from the permanent addition of the access track which would be utilised for maintenance purposes during operation.	During Construction: Size/Scale: Very small Geographical Extent: Site level Duration/Reversibility: Short term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Negligible	Negligible adverse
			On Completion: Following completion of the construction works and subsequent removal of temporary hoardings and large vehicles/plant, impacts would reduce. Any impacts would remain localised within the Site, with little discernible effect on the key characteristics of the wider Llansaint Coastal Hills Visual and Sensory Layer. The proposed mitigation planting would, at this stage, not be suitably established to provide effective screening capabilities, however the proposals would provide some level of screening for the residential properties to the southwest.	On Completion: Size/Scale: Very small Geographical Extent: Site level Duration/Reversibility: Long term/Permanent OVERALL MAGNITUDE: Negligible	Negligible adverse
			15 Years After Planting: The proposed access track would remain a permanent feature of the Site, however the mitigation proposals outlined in Section 6 of the LVIA would be well established and would retain properties associated with the Layers key characteristics while allowing the access track to integrate with its surroundings to a larger degree. The change would remain noticeable locally; however, it would be indiscernible across the wider Llansaint Coastal Hills Visual and Sensory Layer.	15yrs After Planting: Size/Scale: Very small Geographical Extent: Site level Duration/Reversibility: Long term/Permanent OVERALL MAGNITUDE: Negligible	Negligible adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Visual and Sensory Layer: CRMRTVS400 Gwendraeth Fach (LANDMAP)	Key characteristics of CRMRTVS400 Gwendraeth Fach which are applicable to the Site and surrounding area include: “A gentle shallow valley, scenically attractive and rural in character, where agriculture is the dominant land use, with some woodlands; - Sparsely settled away from the B roads that cross this valley rather than run along it, with small settlements on these roads e.g. Ponantwn; and - The southern side of the valley abuts the craggy limestone ridge with its quarries. Value: Moderate; Condition: Unassessed Overall Evaluation: Moderate. An attractive river valley agricultural landscape, not spoilt but not remarkable in any way, moderate towards high but considered to be of local importance rather than regional.” Elements labelled for conservation across this layer include: - The quiet nature of the area in contrast to the busier Gwendraeth Fawr; - Ensure the quiet qualities of this area are not adversely affected by the nearby quarrying operations; - Conserve field boundaries and traditional buildings and settlements; and - Enhance the woodlands in this area through appropriate management. This Layer extends from north of Kidwelly northeast as far as Gwendraeth Fach.	Value of Layer: Medium Susceptibility to Change: Medium OVERALL SENSITIVITY: MEDIUM	During Construction: This Layer lies directly east and south of the areas proposed for construction activity (the southern extents of the RLB lies within the Layer, however no construction activity would be undertaken within it, and therefore any effects would be indirect). Construction within the Site footprint would be visible from limited areas on the opposite valley side, but overall, there would be no direct effects, and any change would be highly localised within the wider landscape associated with this Layer.	During Construction: Size/Scale: Very small Geographical Extent: Site level Duration/Reversibility: Short term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Negligible	Negligible adverse
			On Completion: Following completion, the introduction of the Proposed Development would incur a barely perceptible change to the characteristics associated with the Layer, with any change being experiential and indirect to a very small area within the wider Visual and Sensory Layer. Effects are predicted to be similar to those experienced during construction.	On Completion: Size/Scale: Very small Geographical Extent: Site level Duration/Reversibility: Long term/Permanent OVERALL MAGNITUDE: Negligible	Negligible adverse
			15 Years After Planting: Effects are predicted to remain negligible at year 15 as the mitigation proposals would not noticeably alter the experiential change incurred by the Proposed Development.	15yrs After Planting: Size/Scale: Very small Geographical Extent: Site level Duration/Reversibility: Long term/Permanent OVERALL MAGNITUDE: Negligible	Negligible adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Landscape Habitat Layer: CRMRTLH042 Llansaint North (LANDMAP)	Key characteristics of CRMRTLH042 Llansaint North which are applicable to the Site and surrounding area include: “A rolling landscape of improved agricultural land between Carmarthen and Kidwelly; - Steep slopes bordering the Twyi and Gwendraeth Estuaries; - Riparian habitat, occasional woodlands and field boundaries form the focus of biodiversity interest. Value: Moderate; Condition: Unassessed; Overall Evaluation: Moderate. Largely improved agricultural land with a low proportion of semi-natural habitat.” Management recommendations for this Layer include: - The Local Biodiversity Action Plan for Carmarthenshire should be consulted as it details actions to safeguard specific ecological receptors including habitats and species. This Habitat Layer comprises an extensive area from Carmarthen in the north to south of Kidwelly in the south, and from the banks of the River Tywi in the west to just west of Llanddarog in the east.	Value of Layer: Medium Susceptibility to Change: Medium OVERALL SENSITIVITY: MEDIUM	During Construction: The Site lies entirely within the Llansaint North Habitat Layer, with the Site footprint representing a very small area in comparison. All construction activity would be undertaken within this Layer, which includes: - Erection of up to two new 400kV towers circa 62m tall; - Substation comprising a number of vertical structures up to 15m high (gantry); - Control buildings; - A construction compound directly south of the exiting access road within existing agricultural land which would include plant and material storage areas, an assembly area, welfare compound and parking area, and a soil storage area; - An electrified security fence, typically 3.4m high; - Part of an access road approximately 5.5m wide with adjacent hardstanding within which the substation equipment would be housed; - Planting of the mitigation proposals outlined in Section 6 of the LVIA; - Typical construction activity such as movement of tall plant, hoardings and task lighting. The introduction of enabling and construction activity within the Site footprint would result in very localised impacts on some of the key characteristics such as field boundaries and agricultural land following the loss of these features, however these impacts would not be noticeably detrimental overall.	During Construction: Size/Scale: Very small Geographical Extent: Adjacent landscape level. Duration/Reversibility: Short term/Partially reversible/Partially permanent OVERALL MAGNITUDE: Negligible	Negligible adverse
			On Completion (Year 1): Upon completion of the Proposed Development, impacts would remain very localised within the wider footprint of the Llansaint North Habitat Layer, and the changes would remain indistinct overall. The removal of construction vehicles/compounds and temporary hoarding would reduce any impacts to Site level from adjacent landscape level; however the mitigation proposals would not yet be fully established.	On Completion (Year 1): Size/Scale: Very small Geographical Extent: Site level. Duration/Reversibility: Long term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Negligible	Negligible adverse
			15 Years After Planting: Although the mitigation proposals are predicted to be successfully established by year 15 of operation, within the wider footprint of the Llansaint North Habitat Layer, on balance, impacts are predicted to remain the same as those experienced during year one overall.	15yrs After Planting: Size/Scale: Very small Geographical Extent: Site level. Duration/Reversibility: Long term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Negligible	Negligible adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Historic Landscape Layer: CRMRTL39492 Llandyfaelog, Llangydeyrn (LANDMAP)	Key characteristics of CRMRTL39492 Llandyfaelog, Llangydeyrn which are applicable to the Site and surrounding area include: • <i>"A large area of medium and large irregular field enclosures;</i> • <i>Mainly dispersed farmsteads with the small, nucleated settlement of Llandyfaelog and a collection of cottages at Cloigyn.</i> • Value: Outstanding. This area is a very good example of a Carmarthenshire agricultural landscape and is a major contributor to the overall historic landscape; • Integrity: Outstanding. Landscape is complete with little modern development/intrusion to hinder the visibility of the overall landscape and its patterns; • Survival: Outstanding. Most landscape elements survive. • Condition: Outstanding. The majority of elements survive in very good condition. • Rarity: High. Although this type of landscape can be paralleled elsewhere in Carmarthenshire, it includes some elements of national importance and some rare components. It is a good example of a Carmarthenshire lowland agricultural landscape. • Overall: Outstanding. This area scores highly in all evaluation categories."	Value of Layer: High Susceptibility to Change: Medium OVERALL SENSITIVITY: HIGH	During Construction: The Site lies entirely within the Llandyfaelog, Llangydeyrn Historic Landscape Layer. The Layer is relatively extensive, stretching south of Llandyfaelog northeast towards Llanddarog in a narrow ribbon of land. Enabling and construction activity likely to take place within this layer includes: • Erection of up to two new 400kV towers circa 62m tall; • Substation comprising a number of vertical structures up to 15m high (gantry); • Control buildings; • A construction compound directly south of the exiting access road within existing agricultural land which would include plant and material storage areas, an assembly area, welfare compound and parking area, and a soil storage area; • An electrified security fence, typically 3.4m high; • Part of an access road approximately 5.5m wide with adjacent hardstanding within which the substation equipment would be housed; • Planting of the mitigation proposals outlined in Section 6 of the LVIA; • Typical construction activity such as movement of tall plant, hoardings and task lighting. Given that the Proposed Development would incur change over a relatively small, localised area within the wider Historic Landscape Layer, impacts are not predicted to result in substantial effects. Given the existing presence of 400kV towers and OHL, this would also lessen impacts to a degree, although a number of key characteristics such as field patterns, agricultural character with little modern intrusion would be affected in the short term.	During Construction: Size/Scale: Small Geographical Extent: Adjacent landscape level. Duration/Reversibility: Short term/Partially reversible/Partially permanent OVERALL MAGNITUDE: Negligible	Minor adverse
			On Completion (Year 1): Following completion of the Proposed Development, it would represent a localised change within the footprint of the wider Historic Landscape Layer which would be barely discernible. The additional elements associated with the substation would bring change to intrinsic key characteristics of the Layer; however overall impacts would be limited.	On Completion (Year 1): Size/Scale: Small Geographical Extent: Site level Duration/Reversibility: Long term/Partially reversible/Partially permanent. OVERALL MAGNITUDE: Negligible	Negligible adverse
			15 Years After Planting: Following successful establishment of the mitigation measures outlined in Section 6 of the LVIA, the Proposed Development would integrate further within the existing landscape, however the above-ground elements associated with the substation would remain at odds with the key characteristics associated with the Historic Landscape Layer. Overall however, these impacts would remain limited across the wider landscape.	15yrs After Planting: Size/Scale: Small Geographical Extent: Site level Duration/Reversibility: Long term/Partially reversible/Partially permanent. OVERALL MAGNITUDE: Negligible	Negligible adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Landscape Character of the Site, Green Infrastructure Network Contribution, and Landscape Features Within the Site					
Landscape Character of the Site	The Site largely comprises medium scale agricultural land bounded by a mixture of formal and informal hedgerows with hedgerow trees. This type of agricultural land is typical within the 3km study area, with settlement largely comprising scattered farmsteads with hamlets and villages such as Bancycafel, Idole and Llandyfaelog also present. This raised plateau affords occasional views across the surrounding generally open, largely unspoilt landscape which has a high degree of scenic quality. An access track (C2074) bounds the north of the Site, while the A484 bounds the Site's western extents. The Site lies on a plateau of high ground, falling relatively sharply to the south from approximately 120m AOD to 43m AOD on the valley floor, to the north more gently to approximately 113m AOD, towards the River Tywi some 1.5km west, and to the east where it meets the B4309. The rural character of the landscape is altered by the two sets of 400kV electricity pylons and OHL which pass through the western-central part of the Site broadly running north to south parallel with each other. In addition, timber low-voltage (132kV) trident wood poles and overhead cables pass through the northern part of the Site broadly west to east before turning north to pass west of Bwlch-Y-Gwynt Farm. Overall land within the Site is typically rural, however the existing electricity infrastructure, and to some degree the presence of the A484 combine to exert a man-made influence on its character.	Value of Local Landscape Character of the Site: Medium Susceptibility to Change: Medium OVERALL SENSITIVITY: MEDIUM	<u>During Construction:</u> Construction activity would bring a noticeable change to land within the Site and would alter its character from largely agricultural/rural to industrial. The existing influence of the electricity infrastructure would offset this change to a limited degree, as parts of the Proposed Development would not appear uncharacteristic, but would lead to an intensification, in particular the additional 400kV towers and OHL. The construction of the elements within the Site including: • The substation itself and its associated ancillary elements; • Control buildings; • A construction compound directly south of the exiting access road within existing agricultural land which would include plant and material storage areas, an assembly area, welfare compound and parking area, and a soil storage area; • Security fence up to 3.4m high; • Temporary hoardings; • Passive infra-red security lighting and closed-circuit television (CCTV) cameras; • Metalled internal access road approximately 5.5m wide with adjacent hard standing; • Diesel generators for back up supply; • Construction compound within fields south of the access track; and • Widened access track to provide safe passage for construction vehicles. These elements would result in short term and long-term changes to the existing Site character.	<u>During Construction:</u> Size/Scale: Large Geographical Extent: Site level Duration/Reversibility: Short term/Partially reversible/Partially permanent OVERALL MAGNITUDE: Moderate, largely as a result of the existence of electricity infrastructure across the Site, and the overall partial change within the RLB.	Moderate adverse
			<u>On Completion (Year 1):</u> Following completion of the Proposed Development, the impacts on the character of land within the Site would remain given its partially permanent/permanent nature and intensification of infrastructure at this location. The cessation of construction activity including the movement of large vehicles/plant and removal of the construction compound, temporary hoarding and task lighting would reduce impacts slightly, however the mitigation proposals outlined in Section 6 of the LVIA would not be established at this point and would therefore only be partially effective in restoring lost character.	<u>On Completion (Year 1):</u> Size/Scale: Large Geographical Extent: Site level Duration/Reversibility: Long term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Moderate	Moderate adverse
			<u>15 Years After Planting:</u> Following successful establishment of the proposed mitigation measures, the Proposed Development would have integrated within the landscape to some degree – in particular the establishment of new hedgerows, hedgerow trees, scrub and other field boundary treatments such as hedgerow enhancement would restore elements of the Site's previous character and would be complimented by additional screening afforded by the proposed woodland and earthworks. The introduction of the additional 400kV towers, earthworks and other above ground substation elements would however remain as a noticeable change.	<u>15yrs After Planting:</u> Size/Scale: Medium Geographical Extent: Site level Duration/Reversibility: Long term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Slight	Minor adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Green Infrastructure Network – (function of the Site)	The Site performs a function of the green network through its well-connected field boundary treatments which are typical of the area. They appear to be relatively robust and generally provide good connections with the wider landscape and field boundaries. Hedgerows are however at times a monoculture, lacking in diversity which would increase ecological value. Given the land is either arable or pastoral however, in biodiversity terms it is not as diverse as areas of land in the vicinity; in particular land to the south of the western arm of the Site.	Value of Green Infrastructure Network: Medium Susceptibility to Change: Medium OVERALL SENSITIVITY: MEDIUM	<u>During Construction:</u> There is predicted to be loss of existing green infrastructure capability during the construction phase of the Proposed Development as hedgerows and hedgerow trees are removed to provide access for large vehicles and plant along the proposed access track and provide areas for construction of the substation and ancillary components. Field boundary treatments and existing agricultural land would be kept intact where practicable; however, there would be a partial loss of vegetation within the footprint of the Site to accommodate the Proposed Development.	<u>During Construction:</u> Size/Scale: Large Geographical Extent: Site level Duration/Reversibility: Long term/Permanent OVERALL MAGNITUDE: Moderate	Moderate adverse
			<u>On Completion (Year 1):</u> Following completion of the Proposed Development, the partial loss of field boundary treatments which perform the function of green infrastructure would remain, replaced by infrastructure associated with the substation. The mitigation proposals submitted as part of the landscape strategy for the Proposed Development would provide an element of the previous function associated with hedgerows and hedgerow trees along with new areas of scrub; however new planting would not be fully established at year one of operation and would therefore not provide fully for the loss.	<u>On Completion (Year 1):</u> Size/Scale: Large Geographical Extent: Site level Duration/Reversibility: Long term/Permanent OVERALL MAGNITUDE: Moderate	Moderate adverse
			<u>15 Years After Planting:</u> By year 15 of the Proposed Development, the mitigation proposals proposed within Section 6 of the LVIA are predicted to be successfully established, and would, to a degree, retain a similar function to the previous green infrastructure across the Site. The mitigation would not however fully replace the connections provided previously by the field boundary treatments, and therefore some level of adverse effect would remain.	<u>15yrs After Planting:</u> Size/Scale: Medium Geographical Extent: Site level Duration/Reversibility: Long term/Reversible OVERALL MAGNITUDE: Slight	Minor adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Long Distance Walking Routes, Public Rights of Way and National Cycle Networks	There are a number of PRoW across the study area, and the Wales Coast Path, which is a long-distance walking route, lies some 1km west of the Site. One PRoW passes through the Site's southern area which would be utilised for OHL construction enabling works, this being PRoW 29/14/2 which passes east to west along the connecting road between Cwmafael and Crugan Fach Farms. One National Cyle Network (NCN) Route lies within the study area (NCN Route 4) approximately 620m west of the proposed access road where it links with the Wales Coast Path.	Value of Public Rights of Way: High (NCN Route 4/Wales Coast Path)/Medium other PRoW. Susceptibility to Change: Medium OVERALL SENSITIVITY: High (NCN Route 4/Wales Coast Path)/Medium other PRoW.	During Construction: PRoW beyond the Site, Wales Coast Path long-distance footpath, and NCN 4 are not predicted to experience any direct effects as a result of the Proposed Development during the construction phase. PRoW 29/14/2, which lies within the southern extents of the Site, would experience short-term limited experiential effects during construction as a result of the movement of large vehicles etc.	During Construction: Size/Scale: Small Geographical Extent: Site level Duration/Reversibility: Brief/Reversible OVERALL MAGNITUDE: Negligible	Negligible adverse
			On Completion (Year 1): Following completion of the Proposed Development, and in particular the OHL construction enabling works which would temporarily affect the PRoW during the construction phase, no impacts are predicted on PRoW 29/14/2 or any of the remaining PRoW, or NCN Route 4/Wales Coast Path.	On Completion (Year 1): Size/Scale: No change Geographical Extent: N/A Duration/Reversibility: N/A OVERALL MAGNITUDE: No change	No Change
			15 Years After Planting: Effects at year 15 of operation are predicted to be the same as those experienced at year 1.	15yrs After Planting: Size/Scale: No change Geographical Extent: N/A Duration/Reversibility: N/A OVERALL MAGNITUDE: No change	No Change

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Landscape features: Landform of the Site	In general, landform across the Site is relatively flat, falling gradually north to south between 130m AOD and 120m AOD before rising again slightly just north of Crugan Fach Farm to 130m AOD. Land falls sharply south of Crugan Fach Farm, creating a valley down to Gwendraeth Fach River. Elsewhere land is broadly undulating, creating valleys and dips characteristic of the area.	Value of Landscape Feature: Medium Susceptibility to Change: Medium OVERALL SENSITIVITY: MEDIUM	<u>During Construction:</u> Changes to landform to accommodate the Proposed Development would be broadly confined to earthworks and level changes during construction of the access track and the substation including areas of cut and fill. Groundworks in the form of a landscape bund are also proposed as part of the visual mitigation proposals directly southwest of the proposed substation to an approximate height of 3m, planted with scrub (up to 5m). This would be considered and designed to not appear obtrusive or uncharacteristic within the local landscape vernacular and would take cognisance of safety with regards to OHL where the bund height would reduce. Levels are unlikely to change around the areas for the proposed 400kV towers, and land would be returned to its previous condition as far as practicable following/during installation. Changes made to accommodate the access track and other hardstanding areas within the substation compound would however be permanent.	<u>During Construction:</u> Size/Scale: Medium Geographical Extent: Site level Duration/Reversibility: Long term/Permanent OVERALL MAGNITUDE: Moderate	Moderate adverse
			<u>On Completion (Year 1):</u> Following completion of the Proposed Development, the changes undertaken as part of the construction phase would remain, i.e. level changes to accommodate the access track and the hardstanding within the substation compound. As a result, the impacts would remain the same.	<u>On Completion (Year 1):</u> Size/Scale: Medium Geographical Extent: Site level Duration/Reversibility: Long term/Permanent OVERALL MAGNITUDE: Moderate	Moderate adverse
			<u>15 Years After Planting:</u> Impacts on landform by year 15 would remain the same as those experienced at construction and Year 1 given their permanent nature.	<u>15yrs After Planting:</u> Size/Scale: Medium Geographical Extent: Site level Duration/Reversibility: Long term/Permanent OVERALL MAGNITUDE: Moderate	Moderate adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Landscape features: Trees, woodland and hedgerows within the Site	Hedgerows and hedgerow trees are a feature across the Site, acting as field boundary treatments typically characteristic of the area. Where hedgerow trees are more prevalent, i.e. north and south of the existing access track near the junction with the A484, and adjacent to the existing 400kV pylons within the northern part of the Site, they form linear woodland. There are no individual trees within the agricultural fields, however there is a linear belt of woodland, approximately 65m wide, within the southernmost extents of the Site boundary which is earmarked for OHL construction enabling works. Hedgerows within the Site boundary are predominantly informal, and generally robust although gappy at times, however there are areas of more formal hedgerows throughout.	Value of Landscape Feature: Medium Susceptibility to Change: Medium OVERALL SENSITIVITY: Medium	<u>During Construction:</u> There would be a partial loss of field boundary treatments during the construction phase of works to accommodate the proposed access track and the substation compound. Stantec undertook an Arboricultural Impact Assessment in January 2025 and identified the following: - Eight individual trees, four groups of trees, and four hedgerows would need to be removed in full in order to accommodate the Proposed Development. - Four groups of trees and ten hedgerows would be partially removed in order to accommodate the Proposed Development. There is predicted to be some loss of hedgerow trees, including linear woodland to provide for the proposed access track, as illustrated on Drawing PDD-101256-LAY-053.	<u>During Construction:</u> Size/Scale: Large Geographical Extent: Site level Duration/Reversibility: Medium term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Moderate as a result of partial loss.	Moderate adverse
			<u>On Completion (Year 1):</u> Following completion of the Proposed Development, the mitigation proposals outlined in Section 6 of the LVIA prescribe replacement of lost hedgerows and woodland where possible and pertaining to local vernacular. This would include: - New hedgerow along the northern boundary of the proposed access road; - New hedgerow along the western edge of the substation site; - Woodland planting to the southwest of the Site to provide future screening opportunities; - Planting of individual trees along the eastern edge of the Site extents to break up views towards the Proposed Development from the east; - New scrub planting around the southern extents of the Site to provide green infrastructure connections and increased NBB. Although these proposed mitigation measures would be planted to replace lost vegetation, at year one of operation they would not be adequately established and therefore would not perform the function for which they were intended. Consequently, the impacts on trees, hedgerows and woodland within the Site experienced during construction largely remain.	<u>On Completion (Year 1):</u> Size/Scale: Large Geographical Extent: Site level Duration/Reversibility: Medium term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Moderate	Moderate adverse
			<u>15 Years After Planting:</u> Following successful establishment of the mitigation measures proposed for the Site, including new planting and enhancement of existing hedgerows, these measures would go some way towards reducing the overall effects of the Proposed Development on these features. The proposed hedgerows and individual trees along with the woodland areas would provide strong green infrastructure connections across the Site, and would, to some degree, allow the substation compound to integrate within its wider surroundings.	<u>15yrs After Planting:</u> Size/Scale: Medium Geographical Extent: Site level Duration/Reversibility: Long term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Slight	Minor adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Landscape features: Field Pattern / Field Boundaries	The field pattern within the Site boundary is generally characteristic of the area, that is medium to large sized, irregular patterned, predominantly arable land. LANDMAP identified this pattern as “a good example of a Carmarthenshire lowland agricultural landscape”. Field boundaries, as discussed previously, are broadly made up of predominantly informal hedgerow with occasional hedgerow trees, well-formed generally although gappy in places, with the hedgerow trees at times forming narrow linear woodland. Occasionally the field boundaries are formed by scrub vegetation as opposed to hedgerows, although this appears less common overall.	Value of Landscape Feature: Medium Susceptibility to Change: Medium OVERALL SENSITIVITY: MEDIUM	<u>During Construction:</u> The construction of the substation compound and ancillary elements would result in loss of both field pattern and field boundaries as they are removed to be replaced by the Proposed Development. This would result in a substantial change overall to the field pattern and boundary treatments and would consequently alter the character and use of land within the Site boundaries. This would predominantly occur within the eastern area of the Site which would house the substation compound, and the linear stretch of land for the proposed access road, with other areas remaining largely unaffected.	<u>During Construction:</u> Size/Scale: Large Geographical Extent: Site level Duration/Reversibility: Long term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Moderate	Moderate adverse
			<u>On Completion (Year 1):</u> The resulting loss of field boundary treatments and alterations to field pattern following the construction phase would remain during year one of operation. The inclusion of additional planting as part of the proposed mitigation measures would go some way to replacing lost features, however these would not be established and therefore the loss of character through impacts on field pattern and field boundaries would remain broadly similar to those experienced during the construction phase of works.	<u>On Completion (Year 1):</u> Size/Scale: Large Geographical Extent: Site level Duration/Reversibility: Long term/Partially permanent/Partially reversible OVERALL MAGNITUDE: Moderate	Moderate adverse
			<u>15 Years After Planting:</u> By year 15 of operation, the loss of field pattern would remain given the permanent footprint of the substation compound and proposed access road, however field boundary treatments, although not returned to baseline conditions, would provide a function similar or improved from current conditions as a result of the successful establishment of: - Hedgerow along the northern and southern edge of the proposed access road; - Enhancement of existing hedgerows where required, and which remained following the construction phase; - New hedgerow planting in strategic areas within the Site boundary to provide improved ecological networks where possible. Therefore, although the baseline field pattern would be permanently altered, impacts would reduce by year 15 as a result of successful implementation of the mitigation proposals.	<u>15yrs After Planting:</u> Size/Scale: Medium Geographical Extent: Site level Duration/Reversibility: Long term/Partially permanent/partially reversible OVERALL MAGNITUDE: Slight	Minor adverse

BASELINE AND SENSITIVITY			CHANGE AND SIGNIFICANCE		
National Landscape Character Area, or Landscape Feature/ Designation	Baseline Description: (Key Defining Characteristics)	Value, Susceptibility to Change, OVERALL SENSITIVITY	Description of Change	Size / scale, Geographical Extent, Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
Existing Infrastructure	Existing infrastructure within the Site comprises six 400kV high voltage towers and associated OHL, and three trident wood poles 132kV low-voltage towers and associated OHL. The 400kV towers and OHL run broadly north to south through the Site, passing to the east of Llwyngwcw and Cwmafael farms, and to the west of Crugan Fach Farm. The 132kV towers and OHL enter the Site from the west, passing under the 400kV towers before turning northeast and eventually north between Llwyngwcw Farm and Bwlch Y Gwynt Farm.	Value of Landscape Feature: Low Susceptibility to Change: Low OVERALL SENSITIVITY: LOW	<u>During Construction:</u> During construction there are anticipated to be a number of minor changes across the Site in relation to the existing infrastructure. These include but are not limited to: - Relocation of one 132kV wood pole and associated OHL; - Up to two additional 400kV towers and a gantry to connect to the existing OHL to allow the diversion of existing lines into the new substation. Given the existing presence of electricity infrastructure across the Site, the changes which would be undertaken on these features during construction is not considered to result in notable impacts. The existing single-track lane and access gate(s) which passes along the Site's northern boundary would be utilised as access to the construction compound.	<u>During Construction:</u> Size/Scale: Moderate Geographical Extent: Site level Duration/Reversibility: Partially permanent/partially reversible change associated with the changes to the 400kV and 132kV pylons. OVERALL MAGNITUDE: Negligible	Negligible adverse
			<u>On Completion:</u> Permanent changes made as a result of the Proposed Development would remain during operation, and therefore the impacts would also remain. As a result, the magnitude of impact would remain the same as that experienced during construction.	<u>On Completion:</u> Size/Scale: Moderate Geographical Extent: Site level Duration/Reversibility: Partially permanent/partially reversible change associated with the changes to the 400kV and 132kV pylons. OVERALL MAGNITUDE: Negligible	Negligible adverse
			<u>15 Years After Planting:</u> As with operation in year one, the permanent changes brought about by the Proposed Development on existing infrastructure would remain at year 15, and therefore the magnitude of impact would remain negligible.	<u>15yrs After Planting:</u> Size/Scale: Moderate Geographical Extent: Site level Duration/Reversibility: Partially permanent/partially reversible change associated with the changes to the 400kV and 132kV pylons. OVERALL MAGNITUDE: Negligible	Negligible adverse

Embedded Mitigation Measures

Embedded Mitigation:	- Enhancement / reinforcement of a number of existing hedgerows across the Site to retain field boundary patterns in perpetuity where possible, enhance visual screening opportunities, and enhance the existing green infrastructure network; - Proposed native hedgerow planting to introduce new habitat connections where hedgerows are lost to construction wherever possible and suitable; - Proposed native hedgerow planting along the northern and southern cutting of the proposed access track to compensate for the loss of field boundary hedgerows, provide additional visual screening, and provide amenity value; - Seeding areas with species rich grassland where land would no longer be viable for agricultural use to increase amenity and ecological value, with particular focus on purple moor grass and rush pasture; - Planting of woodland blocks southeast and directly west of the substation compound to provide visual screening from nearby properties and enhance key characteristics of the local landscape character; - Planting of individual trees to the east of the substation to break up views towards the substation from sensitive receptors at Bancycapel; - Creation of SuDS ponds south of the proposed access road to provide amenity value and potentially increase Net Benefit for Biodiversity (NBB); - Provision of a 3m landscape bund which effectively wraps around the south-eastern corner of the substation compound planted with scrub up to an additional 5m to provide screening in views from the property to the southeast and from the A484; and - Scrub planting throughout the Proposed Development, including along and between the landscape bund, to aid visual screening, provide additional green network connections, and enhance NBB.
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Representative Views Assessment:

The representative views assessment considers people’s baseline views and visual amenity from selected locations.

Baseline Photos:

To aid the reader’s understanding, baseline photos are included as thumbnails at the foot of each visual receptor assessment sheet, with the full-size images within **Appendix A, Figure L5**.

Terminology for Visual Effect:			
Type of View:	Glimpsed, Filtered, Oblique, Framed, Open	Geographical Extent of Effect:	Widespread, Large, Medium, Small, Very Small
Number of Viewers:	Few, Moderate, Many	Duration:	Long-term, Medium-term, Short-term, Brief
Value of Views:	Very High, High, Medium, Low	Reversibility:	Permanent / Partially Reversible / Reversible
Susceptibility to Change:	High, Medium, Low	Overall Magnitude of Effect:	Major, Moderate, Slight, Negligible, Neutral, No Change
Overall Sensitivity of Receptor:	Very High, High, Medium, Low	Direction of Effect:	Adverse, Beneficial, Neutral
Size/Scale of Visual Effect:	Very Large, Large, Medium, Small, Very Small, No Change	Type of Effect:	Temporary, Permanent / Direct, Indirect
		Level of Effect:	Substantial, Major, Moderate, Minor, Negligible, No Change

BASELINE AND SENSITIVITY				CHANGE AND SIGNIFICANCE		
Visual Receptor / View Location	National Landscape Character Area and Approx. Distance to Site Boundary	Description of Baseline View, Type and number of View and Visual Receptors	Value of Views, Susceptibility to Change: OVERALL SENSITIVITY	Description of Change to the View	Size / scale, Geographical Extent and Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
VL1: View from PRow 29/14/2 between Cwmafael and Crugan Fach farms	NLCA: 33: Gwendraeth Vales Distance: Adjacent to Site boundary (Short-distance)	Baseline Description, Type of View, Viewer and Number of Users: At this location views look south across the Gwendraeth Valley, and land dominated by agriculture, woodland and hedgerows. Existing electrical infrastructure is also prevalent within the view however, with high-voltage towers and overhead lines visually prominent given their proximity. Distant views as far as the Gower Peninsula are possible between areas of high ground in the middle-distance, although again these views are broken up by intervening overhead cables. The view therefore is relatively open, although largely foreshortened to the middle-distance by landform. These views are likely to be experienced by few receptors given that during field surveys assessors could not access the full length of the PRow and were forced to turn back.	Value of Views: Medium Susceptibility to Change: Medium OVERALL SENSITIVITY: MEDIUM	During Construction (All Phases): During construction all activity would be behind the view and landform which promotes views south across the valley at this location, therefore there is no visual change predicted.	During Construction: Size/Scale: N/A Geographical Extent: N/A Duration/Reversibility: N/A OVERALL MAGNITUDE: No change	No change
				On Completion: Following construction, the Proposed Development would be behind the view at this location; therefore, no visual change is predicted.	On Completion: Size/Scale: N/A Geographical Extent: N/A Duration/Reversibility: N/A OVERALL MAGNITUDE: No change	No change
				After 15 Years: The Proposed Development would be behind the view at this location; therefore, no visual change is predicted.	After 15 Years: Size/Scale: N/A Geographical Extent: N/A Duration/Reversibility: N/A OVERALL MAGNITUDE: No change	No change



Terminology for Visual Effect:						
Type of View:	Glimpsed, Filtered, Oblique, Framed, Open			Geographical Extent of Effect:	Widespread, Large, Medium, Small, Very Small	
Number of Viewers:	Few, Moderate, Many			Duration:	Long-term, Medium-term, Short-term, Brief	
Value of Views:	Very High, High, Medium, Low			Reversibility:	Permanent / Partially Reversible / Reversible	
Susceptibility to Change:	High, Medium, Low			Overall Magnitude of Effect:	Major, Moderate, Slight, Negligible, Neutral, No Change	
Overall Sensitivity of Receptor:	Very High, High, Medium, Low			Direction of Effect:	Adverse, Beneficial, Neutral	
Size/Scale of Visual Effect:	Very Large, Large, Medium, Small, Very Small, No Change			Type of Effect:	Temporary, Permanent / Direct, Indirect	
				Level of Effect:	Substantial, Major, Moderate, Minor, Negligible, No Change	

BASELINE AND SENSITIVITY				CHANGE AND SIGNIFICANCE		
Visual Receptor / View Location	National Landscape Character Area and Approx. Distance to Site Boundary	Description of Baseline View, Type and number of View and Visual Receptors	Value of Views, Susceptibility to Change: OVERALL SENSITIVITY	Description of Change to the View	Size / scale, Geographical Extent and Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
VL1a: View from field gate near Lanfryn residence	NLCA: 33: Gwendraeth Vales Distance: 350m (Short-distance)	Baseline Description, Type of View, Viewer and Number of Users: This view looks broadly northeast across rolling agricultural land typical of the surrounding area and is broadly representative of the nearby property which would experience similar views. Existing electrical infrastructure dominates the skyline, with high-voltage pylons and overhead lines traversing the landscape north to south. The Lanfryn residence lies approximately 55m northwest of this location. Cwmafael Farm can be seen in the middle-distance. The view here is framed by the mature field boundary hedgerows on either side which results in focussed views across a landscape partially characterised by electricity infrastructure. Although this view illustrates visibility from the field gate south of the Lanfryn residence it is considered that views from the property would be similar in nature, and therefore this view has been used to illustrate and assess the potential visual changes for residents at Lanfryn.	Value of Views: Medium Susceptibility to Change: High OVERALL SENSITIVITY: HIGH	During Construction: There would be direct views towards the works including construction of the proposed substation, erection of the additional towers and OHL, and earthworks proposed as landscape and visual mitigation. Temporary fencing may reduce visibility of construction activity; however, the change would be clearly noticeable for nearby residents and would have a noticeable effect on its overall composition.	During Construction: Size/Scale: Medium Geographical Extent: Small Duration/Reversibility: Medium-term / Partially reversible OVERALL MAGNITUDE: Moderate	Major Adverse
				On Completion: Following completion of the Proposed Development, elements of the proposed substation, new towers and associated infrastructure, proposed earthworks and associated planting would result in a perceptible visual change at this location. The proposed earthworks and woodland block planting would provide some additional filtering of views towards the Proposed Development; however, the planting would not be fully established and would not effectively perform the screening function for which it was intended at this stage, therefore the change would remain similar to that experienced during construction.	On Completion: Size/Scale: Medium Geographical Extent: Small Duration/Reversibility: Long-term / Permanent OVERALL MAGNITUDE: Moderate	Major Adverse
				After 15 Years: Once the proposed mitigation measures have established, in particular the proposed woodland block northeast of the view, and scrub planting atop the proposed landscape bund, views towards the elements within the substation compound would be partially screened. The change overall would remain perceptible for receptors of high sensitivity, particularly the additional towers and OHL, although given the existing presence of electrical infrastructure within the view their addition would not be entirely anomalous.	After 15 Years: Size/Scale: Small Geographical Extent: Small Duration/Reversibility: Long-term / Permanent OVERALL MAGNITUDE: Slight	Moderate Adverse
						

Terminology for Visual Effect:					
Type of View:	Glimpsed, Filtered, Oblique, Framed, Open	Geographical Extent of Effect:	Widespread, Large, Medium, Small, Very Small		
Number of Viewers:	Few, Moderate, Many	Duration:	Long-term, Medium-term, Short-term, Brief		
Value of Views:	Very High, High, Medium, Low	Reversibility:	Permanent / Partially Reversible / Reversible		
Susceptibility to Change:	High, Medium, Low	Overall Magnitude of Effect:	Major, Moderate, Slight, Negligible, Neutral, No Change		
Overall Sensitivity of Receptor:	Very High, High, Medium, Low	Direction of Effect:	Adverse, Beneficial, Neutral		
Size/Scale of Visual Effect:	Very Large, Large, Medium, Small, Very Small, No Change	Type of Effect:	Temporary, Permanent / Direct, Indirect		
		Level of Effect:	Substantial, Major, Moderate, Minor, Negligible, No Change		

BASELINE AND SENSITIVITY				CHANGE AND SIGNIFICANCE		
Visual Receptor / View Location	National Landscape Character Area and Approx. Distance to Site Boundary	Description of Baseline View, Type and number of View and Visual Receptors	Value of Views, Susceptibility to Change: OVERALL SENSITIVITY	Description of Change to the View	Size / scale, Geographical Extent and Duration, Reversibility, OVERALL MAGNITUDE	Level and Direction of Effect
VL2: View from PRow 29/14/2 through Pen y maes woodland	NLCA: 33: Gwendraeth Vales Distance: 190m (Short-distance)	Baseline Description, Type of View, Viewer and Number of Users: At this location looking west from the PRow, views are largely foreshortened by intervening landform. The location is approximately 250m southeast of Pen Y Maes Farm. Middle-distance southwest views are of agricultural land interspersed with woodland, hedgerows and individual trees. Where the skyline is not formed by these features it is formed by electrical pylons and overhead cables, with three towers visible within the view. The intervening landform results in a generally enclosed view, expected to be experienced by few users given the PRow does not connect further southwest near Crugan Fach.	Value of Views: Medium Susceptibility to Change: Medium OVERALL SENSITIVITY: MEDIUM	During Construction: Receptors would experience a partial, clearly noticeable change during the construction phase, which would be concentrated on the construction of elements within the southern part of the compound. This would include the construction of earthworks at the south-eastern corner of the compound and associated large plant, along with temporary and permanent fencing. This would result in a partial, clearly noticeable change in views west for receptors as they travel along the local PRow. Although electrical infrastructure is already within the view, the introduction of construction activity and the emerging substation elements would noticeably degrade the appreciation of the view.	During Construction: Size/Scale: Medium Geographical Extent: Small Duration/Reversibility: Medium-term / Partially reversible OVERALL MAGNITUDE: Moderate	Moderate Adverse
				On Completion: Following completion, the Proposed Development would cause a perceptible change for receptors, although views would generally be restricted to the southern part of the compound. This would result in a perceptible contrast to the predominant character of the baseline features which is agricultural land, moderately decreasing the appreciation of the view.	On Completion: Size/Scale: Small Geographical Extent: Small Duration/Reversibility: Long-term / Permanent OVERALL MAGNITUDE: Moderate	Moderate adverse
				After 15 Years: By year 15, views towards the elements within the Proposed Development would remain broadly similar to those experienced upon completion, although the proposed scrub planting to the southeast corner of the compound and additional tree planting on the eastern Site extents would 'soften' the view and would partially screen or filter visibility of some lower elements.	After 15 Years: Size/Scale: Small Geographical Extent: Small Duration/Reversibility: Long-term / Permanent OVERALL MAGNITUDE: Slight	Minor Adverse

Terminology for Visual Effect:					
Type of View:	Glimpsed, Filtered, Oblique, Framed, Open	Geographical Extent of Effect:	Widespread, Large, Medium, Small, Very Small		
Number of Viewers:	Few, Moderate, Many	Duration:	Long-term, Medium-term, Short-term, Brief		
Value of Views:	Very High, High, Medium, Low	Reversibility:	Permanent / Partially Reversible / Reversible		
Susceptibility to Change:	High, Medium, Low	Overall Magnitude of Effect:	Major, Moderate, Slight, Negligible, Neutral, No Change		
Overall Sensitivity of Receptor:	Very High, High, Medium, Low	Direction of Effect:	Adverse, Beneficial, Neutral		
Size/Scale of Visual Effect:	Very Large, Large, Medium, Small, Very Small, No Change	Type of Effect:	Temporary, Permanent / Direct, Indirect		
		Level of Effect:	Substantial, Major, Moderate, Minor, Negligible, No Change		