# 9 Landscape and Visual

#### 9.1 Introduction

- 9.1.1 This chapter provides an assessment of the likely landscape and visual effects arising from proposed development including changes to the landscape character within the zone of influence, and changes to features or composition of views.
- 9.1.2 Effects on landscape and visual receptors are closely related but separately assessed. Landscape receptors are its characteristics, key features and special qualities, and visual receptors are people and changes to their visual amenity.
- 9.1.3 This assessment sets out the national and local legislation, policy and guidance related to the proposed development and its site before setting out the baseline conditions and how these will be affected by proposed development.

# 9.2 Review of proposed development

- 9.2.1 A full proposed development description is set out in Chapter 3. However, elements of the proposed development particularly relevant to the LVIA include;
  - the erection of overhead line equipment and laying of rail track along two test tracks of track configuration;
  - the operation of trains across two test tracks of track configuration;
  - the construction and operation of a multi-storey control building;
  - the construction and operation of a research and development centre;
  - the construction and operation of buildings for up to 400 rolling stock vehicles;
  - the construction and operation of a carriage wash facility; and
  - construction and operation of access roads, car parking, drainage and landscaping.
- 9.2.2 Mitigation proposed as part of the closely related Nant Helen Complementary Restoration Earthworks application (references 20/0738/FUL (Powys) and P/2020/0362 (Neath Port Talbot), that will also contribute to the mitigation of the effects of proposed development is described and accounted for in this assessment.
- 9.2.3 An iterative process was followed to include proposals to mitigate the effects of proposed development. These proposals and any reductions

to the significance of effect are outlined in the assessment where it is assumed that any mitigation planting will have established by year 15.

# 9.3 Legislation, policy context and guidance

## **European Landscape Convention**

- 9.3.1 The following paragraphs are quoted from Institute of Environmental Management and Assessment (IEMA) and the Landscape Institute's *Guidance on Landscape and Visual Impact Assessment (GLVIA), 3rd Edition* (2013).
- 9.3.2 "The UK has signed and ratified the European Landscape Convention (ELC) since 2002, when the last edition of this guidance was published. The recognition that government has thus given to landscape matters raises the profile of this important area and emphasises the role that landscape can play as an integrating framework for many areas of policy. The ELC is designed to achieve improved approaches to the planning, management and protection of landscapes throughout Europe and to put people at the heart of this process."
- 9.3.3 The ELC defines landscape as:

"Landscape" means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."

### Well-being of Future generations (Wales) Act 2015

- 9.3.4 Part 2 of the Act sets out what is meant by sustainable development, defining it as:
- 9.3.5 "the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the wellbeing goals."
- 9.3.6 Under the "well-being goals", of relevance is "A resilient Wales" described as "A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change)."
- 9.3.7 Section 5 of the Act provides a meaning for sustainable development principles, stating that "the body must act in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs."

9.3.8 Based on the Act Neath Port Talbot published *Well-being Plan 2018-2023* that sets out Local Well-being objectives. Of particular reference is 'Objective 5: Value our green infrastructure and the contribution it makes to our well-being'. The objective sets out the contribution that it will make to each of the seven national well-being goals.

9.3.9 Powys County Council's *Towards* 2040 – the *Powys Well-being Plan* sets out its own objectives and contributions to the seven national well-being goals. Of particular relevance is 'Well-being Objective 2' which relates to the natural environment, access to it, and a sustainable and resilient environment.

# **Planning Policy Wales (PPW) – Edition 11**

- 9.3.10 The following paragraphs have been highlighted as they are of particular relevance to proposed development.
  - **6.0.1** outlines the necessity for protecting landscape character and visual amenity.
  - **6.3.5** outlines the statutory duty planning authorities have to National Parks and AONBs
  - **6.3.6** outlines the purpose and importance of national parks.
  - **6.3.8** outlines landscape and scenic importance of national parks.
  - **6.3.9** outlines the importance of assessing national parks to ensure that effects are acceptable.
  - **6.3.10** whilst the proposed development does not fall within the Brecon Beacons National Park, this paragraph outlines the overall importance and weighting given to national parks in the decision-making process.
  - **6.3.20** and **6.3.21** outline the importance of LANDMAP as a resource in the decision-making process.
  - **6.3.12** outlines the importance of conserving and enhancing local landscapes.
  - **6.3.13** outlines the recognition of important landscapes through non-statutory designations such as SLAs.
  - **6.4.26** outlines the importance and irreplaceable nature of Ancient Woodland which can contribute to landscape character and value.

#### **Technical Advice Notes**

9.3.11 "Technical advice notes (TANs) provide detailed planning advice for Wales. Local planning authorities take them into account when they are preparing development plans."

9.3.12 The following TANs are of particular relevance to the proposed development.

#### (TAN) 5: nature conservation and planning

**Paragraph 4.3.2** – regarding the necessity to provide landscape proposals to avoid, mitigate or compensate for adverse effects on nature conservation.

#### (TAN) 12: design

**Paragraph 4.8** – regarding design, scale, siting, use of materials in relation to landscape character and distinctiveness;

**Paragraph 4.11** - regarding the use of LANDMAP to inform assessment and decision making;

**Paragraph 4.14** – regarding legibility in relation to views and vistas, landscape features and connectivity of footpath networks.

### **Local Planning Policy**

- 9.3.13 The proposed development falls within Powys County Council and Neath Port Talbot County Borough Council.
- 9.3.14 Key policies within Powys Local Development Plan (2011-2026, adopted April 2018) have been identified:

#### Policy DM4 – Landscape

Proposals for new development outside the towns, large villages, small villages and rural settlements defined in the Settlement Hierarchy must not, individually or cumulatively, have an unacceptable adverse effect, on the valued characteristics and qualities of the Powys landscape. All proposals will need to:

- 1) be appropriate and sensitive in terms of integration, siting, scale and design to the characteristics and qualities of the landscape including its: topography; development pattern and features; historical and ecological qualities; open views; and tranquillity; and
- 2) have regard to LANDMAP, Registered Historic Landscapes, adjacent protected landscapes (National Parks and Areas of Outstanding Natural Beauty) and the visual amenity enjoyed by users of both Powys landscapes and adjoining areas.

<sup>&</sup>lt;sup>1</sup> GOV.WALES (2020) Technical Advice Notes

9.3.15 Key policies within the Neath Port Talbot LDP (2011-2026, adopted January 2016) are listed below:

#### Policy EN2 Special Landscape Areas

- 9.3.16 This policy identifies 6 Special Landscape Areas (SLA) within which, development "will only be permitted where it is demonstrated that there will be no significant adverse impacts on the features and characteristics for which the SLA has been designated."
- 9.3.17 Whilst the site is not located within any SLA, Neath Port Talbot Special Landscape Area 2: Dulais Valley is considered relevant to the proposed development as its boundary abuts the Powys County boundary. It is assumed that the defining features and characteristics of the SLA would continue beyond the county boundary. The defining features of the Dulais Valley SLA have been explored as part of the baseline studies and taken into consideration when defining and assessing individual character areas.

#### **Policy SP 14**

- 9.3.18 The countryside and undeveloped coast, including landscapes, seascapes and agricultural land, will be protected and where feasible enhanced through the following measures: 1. The protection of the open countryside through the control of inappropriate development outside settlement limits; 2. The protection of the undeveloped coast through the control of inappropriate development; 3. The designation and protection of Special Landscape Areas; 4. The designation and protection of Green Wedges. LDP Objective: OB 15
- 9.3.19 As well as policies, Key Issues and Overarching objectives are identified within the Neath Port Talbot LDP which need to be addressed.
  - **KI 11**: There is a need to balance the impact of development on the countryside, landscape and coast, in particular the exploitation of mineral and renewable energy resources.
  - **OB 15**: Conserve Neath Port Talbot's important landscapes, countryside, undeveloped coast, important wildlife, habitats and geodiversity sites, ensuring that developments throughout the County Borough respect all landscapes and minimise adverse impacts. [KI 2, KI 11 and KI 12]

#### **Management Plans**

9.3.20 The proposed development site is located in close proximity to the Brecon Beacons National Park and therefore information included within A Management Plan for the Brecon Beacons National Park

> 2015-2020<sup>2</sup> has been used to form judgments on the anticipated effects as a result of the proposed development.

- 9.3.21 The management plan is integrated with other plans and policies and outlines the importance and purpose of the national park and sets out the management plan themes to meet the purposes and duties of the national park.
- 9.3.22 Most relevant to this assessment are the potential effects on park users and their enjoyment of and opportunities for outdoor access and recreation within the national park. The relationship that the national park has with its contextual landscape, beyond the national park boundary is a key consideration which has potential to impact upon the overall character of the national park through effects derived from changes in the sense of peace and tranquillity, its remoteness and ruralness.
- 9.3.23 Key extracts relevant to this assessment are listed below:
  - **1.9 Special Qualities:** A National Park offering peace and tranquillity with opportunities for quiet enjoyment, inspiration, relaxation and spiritual renewal.
  - **1.10 Vision**: Widely acclaimed for its natural beauty, geodiversity, biodiversity and cultural heritage while being a sought-after destination, providing an outstanding variety of sustainable opportunities for all to understand, enjoy and benefit from its tranquillity, rural character, Welsh way of life, sense of remoteness and other special qualities.

Objectives Theme 1: Conserve and enhance the sense of tranquillity, peace and remoteness experienced throughout the National Park.

**Aims Theme 3**: The sense of tranquillity, peace and remoteness experienced throughout the National Park will be conserved and enhanced.

# Relevant guidance

- 9.3.24 This assessment has followed guidance set out in the following documents:
  - Guidelines for Landscape and Visual Impact Assessment (GLVIA), (Third Edition, 2013)<sup>3</sup>;
  - Technical Guidance Note 06/19 Visual representation of development proposals, Landscape Institute (September 2019)<sup>4</sup>; and

LVIA | Issue | March 2021 Page 9-6 J-\264000\264904-004 INTERNAL PROJECT DATA\4-50 REPORTSIENVIRONMENTAL IMPACT ASSESSMENT\POST PAC UPDATE DOCUMENTS\ES CHAPTERS\ES CHAPTER
9 LVIA VERP03 DOCX

<sup>&</sup>lt;sup>2</sup> Brecon Beacons National Park Authority A Management Plan for the Brecon Beacons National Park 2015-2020

<sup>&</sup>lt;sup>3</sup> Landscape Institute and I. E. M. A (2013) Guidelines for Landscape and Environmental Impact Assessment

<sup>&</sup>lt;sup>4</sup> Landscape Institute (2019) Technical Guidance Note 06/19 Visual representation of development proposals

• LANDMAP Methodology Overview (2017)<sup>5</sup>.

# 9.4 Scoping and consultation

### **Scoping**

- 9.4.1 The scope was defined following the advice provided in GLVIA3<sup>6</sup>
- 9.4.2 A desktop study was undertaken to scope the proposed development landscape and visual assessment. This desktop study sought to define key matters including:
  - the extent of the study area to be used for assessment of landscape and visual effects;
  - sources of relevant landscape and visual information;
  - the nature of relevant possible landscape and visual effects;
  - identification of main receptors;
  - appropriate methodology to be used (including baseline to be used and cumulative effects).
- 9.4.3 Following further studies, site investigation and receipt of scoping opinions from Neat Port Talbot Council and Powys County Council, the scope of the assessment was refined further. The table below outlines the changes made as a result of the scoping opinions and initial consultation.

**Table 9-1: Response to scoping opinion** 

Scoping opinion clause	Response
The proposed 2km buffer applied to the ZTV "would miss a number of viewpoints and receptors within the National Park, including from land north/east of Coelbren/Dyffryn Cellwen, on ridges of Llorfa and Cefn Mawr to the north west and from Cribarth to the north, and around Pen-y-cae to the north east".	Following initial site surveys, the buffer was extended to 8km.
''In light of NRW advice, you may wish to provide additional viewpoints as follows:	The suggested viewpoints have been visited and where deemed appropriate are included within the report.
- Trig point on Cribarth (SAM & Registered Common Land) approx. 3.16km	
- Public Footpath north east of Henrhyd falls, south of Bryn Bugeiliaid (open access land) 2.5- 3km	

<sup>&</sup>lt;sup>5</sup> Natural Resources Wales (2017) LANDMAP Methodology Overview

LVIA | Issue | March 2021 Page 9-7

J-\264000\264904-004 INTERNAL PROJECT DATA\4-50 REPORTS|ENVIRONMENTAL IMPACT ASSESSMENT\POST PAC UPDATE DOCUMENTS|ES CHAPTERS|ES CHAPTER 9 LVIA VERP03 DOCX

<sup>&</sup>lt;sup>6</sup> Landscape Institute and I. E. M. A (2013) Guidelines for Landscape and Environmental Impact Assessment

Scoping opinion clause	Response
<ul> <li>Dismantled railway north west of Bryn Bugeiliaid forest, on edge of NNR (Ogof Ffynnon Ddu) &amp; a permissive path (Open Country) approx. 4km.</li> <li>Bridleway on Cefn Mawr ridge north west of Giedd Forest (Open Access 4.8-5km. The alternative to this could be Llorfa ridge, which was used in the open cast assessment, although this is further away.</li> </ul>	
Potential viewpoints from paths on/close to the site with views looking towards the national park e.g. on Mynydd Y Drum or to the south.".	
NRW have stated that the baseline for the LVIA should be based on the approved restoration plans for the site, and not the existing situation, i.e. the existing working surface coal mine which is a largely prerestored site. BBNPA would concur with this advice. The site is subject to planning conditions to secure restoration of the site to beneficial after uses and this also means that the site is not a brown field site, but green field – this should be reflected in the LVIA.	The baseline has been updated and is defined within this chapter. The assessment is based on future baseline post-restoration and provides a worst-case assessment.
NRW also refer to the need to consider effects of light pollution, particularly Night-time effects and the Dark Sky Reserve status of the National Park. BBNPA would concur with this advice. Reference should be made to the SPG Obtrusive Lighting and Light Pollution dated 27.03.2015.	A night-time assessment has been undertaken and is included as a separate appendix to this report (Appendix 9E). The current assessment is limited due to the level of development of the lighting design. The assessment makes recommendations to be taken forward to detailed design when a full lighting assessment will likely be produced.
NRW state that the LVIA should refer to the National Park's Management Plan, (i.e. the latest version 2015-2010), the Special Qualities of the National Park (particularly peace and tranquillity) and the Landscape Character Assessment (as set out in the Landscape and Development Supplementary Planning Guidance dated 24.10.2014). Impacts on Landscape Character Area 2 - Y Mynydd Du, 3 – Fforest Fawr and 4 - Waterfall Country and Southern Valleys should be assessed. BBNPA would concur with this advice.	Whilst there are no direct impacts upon the national park, indirect impacts and resulting effects* have been considered, notably those that will affect the enjoyment and recreation of the national park due to impacts on the national park's special qualities. References to the Management Plan and Landscape Character Assessment have been made where appropriate.  (*Effects that result indirectly from the proposed development as a consequence of a direct effect, 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)

Scoping opinion clause	Response
Noted the absence of any viewpoint on the A4221 / Inter Valley Road and within Coelbren.	The majority of views from Inter Valley Road towards the site are screened by roadside vegetation. Longer distance views are generally to the north towards the Brecon Beacons. This has been confirmed by site surveys.  A representative viewpoint from Coelbren has been included in this report.

### Consultation

9.4.4 Stakeholder comments relating to landscape and visual effects are outlined in the table below.

Table 9-2: Response to representations from stakeholders on scope of landscape and visual assessment

Stakeholder	Comment	Response
Neath Port Talbot Council	Noted the absence of any viewpoint on the A4221 / Inter Valley Road and within Coelbren.	The majority of views from Inter Valley Road towards the site are screened by roadside vegetation. Longer distance views are generally to the north towards the Brecon Beacons. This has been confirmed by site surveys.  A representative viewpoint from Coelbren has been included in this report.
Brecon Beacons National Park Authority, Neath Port Talbot Council and Powys County Council.	Draft Landscape Character Area boundaries and visual receptor locations were sent to stakeholders for comment outside of the scoping process.  Comments were provided by stakeholders within the scoping opinion.	Additional viewpoints were visited and where deemed appropriate included within the report.

Table 9-3: Response to representations from stakeholders on PAC submission

Stakeholder	Comment	Response
NRW	Landscape - Visual effects	
	'There would be significant adverse visual effects on receptors at eight viewpoints within the park for a considerable time period (during the four-year construction period and continuing for up to 15 years	Noted.

LVIA | Issue | March 2021

after completion). Beyond 15 years significant adverse effects would remain at two viewpoints. The woodland planting proposed should integrate much of the development into the surrounding landscape within the 15-year period. However, some of the rail infrastructure and engineered features (overhead lines and cuttings) will remain noticeable as permanent features in the views and continue to have an adverse effect on the scenic quality of views and the sense of tranquillity & remoteness.'

'There is potential for light pollution and impact on the National Park's Dark Skies.' A light pollution/dark skies assessment is required to be undertaken and used to influence the final lighting scheme.

A night-time assessment has been undertaken and is included as a separate appendix to this report (Appendix 9E). The current assessment is limited due to the level of development of the lighting design. The assessment makes recommendations to be taken forward to detailed design when a full lighting assessment will likely be produced.

#### NRW

#### Mitigation

'Whilst some additional native tree and shrub planning .... may help to reduce the visual impact of the buildings, it would not be possible to reduce the adverse effects of the rail infrastructure that has been identified in the Landscape Visual and Impact Assessment (LVIA).'

'We believe there is benefit in investigating the inclusion of Green Infrastructure in the design of the buildings at the washery and advise this should be completed alongside a colour assessment to reduce the long-term effects of the development on the BBNP.'

Requirement 1 - Plans: All plans associated with this development are amended in line with the established principles of habitat mitigation/enhancements agreed under consented application 20/0738/FUL.

Noted.

The inclusion of green infrastructure including green/brown roofs has been identified as an opportunity within this chapter and the potential reduction of landscape and visual effects as a result is recognised, though it does not form part of the proposed scheme that has been assessed.

Habitat mitigation and enhancement plans have been updated to align with the consented application. In some cases, reductions in landscape and visual effects at year 15 rely upon mitigation planting that was developed as part of the previously consented application (20/0738/FUL), this has been

		added and clearly identified on Figure 9.14.
Brecon Beacons National Park Authority	The Brecon Beacons National Park Authority currently has very significant concern that the proposal will have adverse impacts on one of the National Park's statutory purposes. Key issues raised relate to landscape and visual impacts:  1. Night-time assessment – 'The LVIA currently omits a night-time assessment. This assessment is required in order to understand the full impact on the National Park and the near-by Dark Sky Reserve.'	1. A night-time assessment has been undertaken and is included as a separate appendix to this report. The current assessment is limited due to the level of development of the lighting design. The assessment makes recommendations to be taken forward to detailed design when a full lighting assessment can be produced.
	2. Visual effects – 'The Environmental Statement outlines that there would be residual effects to 4 visual receptors following the establishment of mitigation planting at year 15. Viewpoints 2, 3 and 9 having moderate adverse beyond the 15 years and viewpoint 14 having a major adverse impact. Three out of four of these viewpoints are from within the National Park. On this basis the National Park Authority still has very significant concern with the proposal and requires further planting mitigation to be incorporated in areas around the northern and eastern areas of the Washery site and also use of other means to integrate the development into the landscape to be detailed (e.g. use of green or brown roofs etc).'	2. Landscape mitigation planting has been limited around the washery site to promote habitat continuity between grassland and the SSSI to the north. The inclusion of green infrastructure including green/brown roofs has been identified as an opportunity within this chapter and the potential reduction of landscape and visual effects as a result is recognised, though it does not form part of the proposed scheme that has been assessed. The existing washery site forms part of the baseline condition and changes in scale of development have been identified and form part of the assessment.
	3. Landscape effects: 'The Environmental Statement outlines moderate adverse effects on the landscape during construction and during the operation landscape impacts are moderate adverse with the impact of the mitigation planting taking at year 15 changing two out of three landscape character areas to have minor adverse landscape impacts. The National Park Authority maintains significant concern with the proposal's	3. Noted.

	impact on the special qualities of the National Park.'	
	4. Effective management and monitoring of mitigation planting: 'the basis of much of the landscape and visual conclusions outlined in the Environmental Statement are on assumption that the proposed mitigation planting establishes itself as expected in the 15-year period. It is also noted that some of the specific detail on the planting is stated 'to be developed at detailed design stage' and there is also a planning condition attached to the earthworks permission requiring further detail too. The National Park Authority has outlined reservations regarding the adequacy/effectiveness of this mitigation measures in reality (see previous comments on the earthworks application) and has outlined above, the need for additional mitigation around the Washery site in particular.	4. Management and monitoring processes will be outlined within subsequent stages. It is therefore recommended that this be revisited and form part of the management and monitoring plan once further detail about planting is developed. This chapter currently assumes established planting at Year 15.
	The National Park requests careful consideration to:  • 'the mechanism to ensure the long-term management and maintenance of this planting'	
	• 'an appropriate mechanism for the effective monitoring of landscape and visual effects in the future'.	
	It is the National Park Authority's view that effective monitoring may require (more numerous time interval) photomontages in the Environmental Statement to enable effective comparisons/ monitoring to be undertaken in the future (and interventions to be made is required).'	
NPT	During consultee meetings held on 27/10/20 and 08/02/21 it was suggested that additional information (sections) would help demonstrate how the proposed development sits within the landscape at this location.	Sections through the sidings with indicative sight lines have been produced to demonstrate the proposed development at this location (see Figure 9.17).  'Appendix F - Visual Impact of Southern Sidings' provides supporting written narrative to the sections.
N/A	During consultee meetings held on 27/10/20 and 08/02/21 it was suggested that the LVIA should provide further information detailing how the landscape mitigation proposals would be developed and the processes/requirements for	'Appendix G – Landscape Strategy for Reserved Matters' outlines the recommended contents of a landscape strategy.

establishment, monitoring and
management of proposals. It was
suggested that the contents of a
'Landscape Strategy' which would
provide this information should be
outlined within the LVIA.

# 9.5 Methodology

#### Overview

- 9.5.1 Throughout this chapter, 'Nant Helen Restoration' refers to the restoration proposals as originally submitted in the 2011 Nant Helen Remainder Application and later amended as part of the 2019 Addendum (section 73 application 19/1899/REM).
- 9.5.2 Throughout this chapter 'Nant Helen Complementary Restoration Earthworks' refers to the earthworks proposals submitted as part of the 2020 application (references 20/0738/FUL (Powys) and P/2020/0362 (Neath Port Talbot) which has been consented.
- 9.5.3 This assessment is based on worst-case winter conditions where filtering and screening provided by intervening vegetation or trees is at its least effective (see limitations).
- 9.5.4 The assessment firstly describes the current baseline conditions and then the future baseline. The assessment is carried out based on construction, on completion year 1, and at year 15 once planting has established.
- 9.5.5 The assessment is based on the future baseline once the Nant Helen Restoration and Nant Helen Complementary Restoration Earthworks have been completed.
- 9.5.6 A study area of 8km from the site boundary was used to identify potentially affected receptors. This was based on the Zone of Theoretical Visibility (ZTV), findings from site surveys and feedback from consultation.
- 9.5.7 The use of the term 'impact' throughout this chapter refers to absolute, objective changes such as 'the removal of trees'. The use of the term 'effects' refers to the consequences of such 'impacts' such as 'degradation of a view' or 'loss of landscape character'.

## Methodology for establishing baseline conditions

- 9.5.8 The following studies were undertaken to understand baseline conditions and inform the assessment:
  - desk study study of existing site information and preparation of ZTV;

- initial site surveys (summer) Initial site surveys were undertaken in September 2019 to identify representative viewpoints and familiarise with the landscape and its character;
- preparation of figures including those included in ES Volume 3:
  - Figure 9.1 Landscape Context Plan
  - Figure 9.2 Site Location and ZTV
  - Figure 9.3 Site Location and Viewpoints
  - Figure 9.4 Landscape Character Areas
  - Figure 9.5 to 9.13 Viewpoint Photography Sheets

## Receptors and approach to identification of receptors

9.5.9 This study identifies landscape and visual receptors that may be affected by the proposed development. The types of receptors assessed and the methods for identification of these receptors are described below.

#### 9.5.10 Landscape Receptors – (Landscape Character Areas)

This report assesses the impact of the proposed development on landscape character areas (LCAs). LCAs are defined within GLVIA3 as follows:

'These are single unique areas which are the discrete geographical areas of a particular landscape type'. (GLVIA3)

Some of the key features that make up character areas are as follows:

- Geological influences;
- Land Cover:
- Human activity;
- Aesthetic aspects such as scale complexity or openness.

### 9.5.11 Identification of Landscape Character Areas

The following existing information sources were used to identify LCAs appropriate to the nature and scale of the proposed development.

- Brecon Beacons National Park Landscape Character Assessment<sup>7</sup>
- Neath Port Talbot LANDMAP Landscape Assessment<sup>8</sup>

<sup>&</sup>lt;sup>7</sup> Fione Fyfe Associates (2012) Brecon Beacons National Park – Landscape Character Assessment

Neath Port Talbot County Borough Council and Countryside Council for Wales (2004) Neath Port Talbot LANDMAP Landscape Assessment

- Landscape and Seascape Supplementary Planning Guidance<sup>9</sup>
- LANDMAP<sup>10</sup>

Where appropriate, LCAs formed by the relevant authorities were used. Amendments to these areas were made where they terminated abruptly at authority boundaries. New LCAs were identified based on LANDMAP aspects where previous assessments did not exist.

There are no pre-defined LCAs within Powys County Council.

#### 9.5.12 Visual Receptors

Representative visual receptors identified across the site include public places, recreational routes/areas, transport routes, residential areas/communities and were selected based on:

- accessibility to the public;
- potential number and sensitivity of receptors who may be affected;
- the viewing direction, distance (i.e. short-, medium- and longdistance views) and elevation;
- the nature of the viewing experience (for example static views, views from settlements and views from sequential points along routes);
- the view type (for example panoramas, vistas and glimpses);
- the potential for cumulative views of the proposed development in conjunction with other developments.

### **Design mitigation**

- 9.5.13 Mitigation planting proposals have been developed in parallel with the assessment process to minimise the significance of effects. Planting across the site has been incorporated to function as visual screening and to integrate the proposed development into the surrounding landscape. Proposals were developed in consultation with the proposed development ecologist.
- 9.5.14 To reduce potential landscape and visual effects a number of mitigation proposals have also been incorporated into the proposed development design and description including:
  - Landscape and visual mitigation planting which is shown on Figure 9.14. (The design of areas shown to receive mitigation

<sup>&</sup>lt;sup>9</sup> Neath Port Talbot County Borough Council (2018) Landscape and Seascape Supplementary Planning Guidance

<sup>&</sup>lt;sup>10</sup> Natural Resources Wales (2019). *Natural Resources Wales / LANDMAP - the Welsh landscape baseline*. [online]

- planting shall be developed at detailed design to ensure they meet the minimum functional requirements as set out in this chapter).
- Acoustic barriers are to have wooden cladding on external faces to minimise visual impacts.
- Train carriages are to be unlit outside of daylight operational hours.
- The vehicle maintenance track shall be on the outside of the rail track. This ensures that the tallest features (overhead line equipment and trains) are furthest back from the embankment edge and any screening planting is most effective.
- Overhead line equipment shall be cantilevered to minimise visual effects.
- 9.5.15 All of the above design mitigation has been accounted for in the landscape and visual assessment.

### **Assessment methodology**

9.5.16 This report assesses the anticipated impacts that will arise as a result of the proposed development. The methodology for deriving the significance of effect for landscape and visual receptors is set out within Appendix 9A.

# 9.6 Limitations and assumptions

#### Limitations

9.6.1 Due to the proposed development timeframes, it has not been possible to assess the proposed development based on summer and winter conditions. Instead, the assessment has been based on worst-case winter conditions only.

# **Assumptions**

#### Construction

- 9.6.2 It is assumed that the construction period for the proposed development will be between 2021 and 2024. It is assumed that there is no requirement for overnight working during the construction period.
- 9.6.3 It is assumed that there will be no night-time working during the construction phase. Working hours would be 08:00-18:00 Monday to Friday and 8:00 13:00 on a Saturday.
- 9.6.4 It is assumed that construction of the proposed development will commence within 3 years of the completion of the Nant Helen Restoration and Nant Helen Complementary Restoration Earthworks.

This represents the worst-case scenario where the restored landscape may be affected by construction and operation of the proposed development.

9.6.5 It is unknown at this stage whether the rail infrastructure will be single track or dual track. For the purposes of this assessment and to capture the worst-case scenario it is assumed that a dual track will be constructed with cantilevered overhead line equipment.

#### **Operation**

- 9.6.6 It is assumed that the rail testing facility will be in 24hour use. (see night-time assessment limitation).
- 9.6.7 It is unknown at this stage whether the rail infrastructure will be single track or dual track. For the purposes of this assessment and to capture the worst-case scenario it is assumed that a dual track with cantilevered overhead line equipment will be operated.
- 9.6.8 It is assumed that due to the exposed nature of the site and ground conditions for any mitigation planting proposed, as part of the Nant Helen Complementary Restoration Earthworks or as part of the proposed development, the growth of trees may be limited. The exact timescales cannot be measured but a worst-case, cautious approach has been taken when considering the effectiveness of mitigation planting.

### 9.7 Baseline Environment

- 9.7.1 An overview of the proposed development site and surrounding landscape is provided below. LCAs were derived from existing landscape character assessments and analysis of LANDMAP aspect areas. Appendix 9B provides summary tables of the aspect areas that form the constituent parts of larger character areas.
- 9.7.2 Special Landscape Areas (SLAs) relevant to the study area only include Neath Port Talbot Special Landscape Area 2: Dulais Valley. It was determined that effects upon the SLA would not be separately assessed. The features, characteristics and recognised special qualities of the SLA have instead been used when defining amendments to the LCA boundaries and assigning values. The baseline conditions for each LCA are also described. It is the changes to these character areas that this report assesses.
- 9.7.3 The site is located approximately 2km east of Ystradgynlais, and approximately 22km north-east of Swansea. To the north, the Brecon Beacons National Park lies approximately 96m from the proposed development at its closest point. The surrounding landscape is formed by the Swansea Valley and Dulais Valley. The Brecon Beacons mountain range lies to the north and east, and elevated landform comprising the hills Mynydd Marchywel and Hirfynydd are located to

the south and south-west. Built up areas within the surrounding landscape include Abercraf, Coelbren, Dyffryn Cellwen, Seven Sisters and Swansea.

- 9.7.4 A context plan showing the key landscape features identified within 8km of the site boundary is shown on Figure 9.1. Figure 9.4 shows the landscape character area boundaries that were generated.
- 9.7.5 Table 9-3 provides a summary of the descriptions of the landscape character areas being assessed. Value and susceptibility<sup>11</sup> of the landscape character areas has been assigned based on the criteria as set out in Appendix 9A. For detailed landscape character area descriptions refer to Appendix 9C.

**Table 9-4: Landscape Future Baseline Summary** 

Landscape Character Area	Future Baseline Key Features / Characteristics	Value
Banwen Uplands LCA	Inter Valley Road.  Important habitats towards the northern boundary of the character area. Caeau Ton-Y-Fildre SSSI.	High
Black Mountain Southern Fringe LCA	Pattern formed by small-medium scale fields.  Transition landform.	Medium
Bryn Henllys Reclaimed Open Cast LCA	Open character.  Public access due to large number of PRoWs.  Long-distance panoramic views available from higher ground.	Low
Coelbren Settlement LCA	Prices Arms pub.  Disused Neath and Brecon Railway and Swansea Vale Railway.	Low
Cwm Twrch LCA	Enclosed fields with overgrown hedges.  Valley landform.  Woodland belt along north-eastern edge including Ancient Semi-Natural Woodland.	Medium

LVIA | Issue | March 2021 Page 9-18

J/\264000\264904-00\4 INTERNAL PROJECT DATA\4-50 REPORTS\ENVIRONMENTAL IMPACT ASSESSMENT\POST PAC UPDATE DOCUMENTS\ES CHAPTERS\ES CHAPTER
9 LVIA VERP03 DOCX

<sup>&</sup>lt;sup>11</sup> Susceptibility refers to the degree to which a particular landscape feature or character area is able to accommodate the changes proposed by a development without significant effects to its components or overall character.

Landscape Character Area	Future Baseline Key Features / Characteristics	Value
Dulais Valley LCA	Valley landform.	High
	River Dulais.	
	Enclosed pastoral land with treed field boundaries.	
	A4109.	
	Neath and Brecon Railway.	
	Crynant.	
Fforest Fawr LCA	Remoteness.	High
	Peace and tranquillity.	
	Dark skies.	
	The Beacons Way.	
	High proportion of open access land.	
Head of Dulais Valley LCA	A4109 along the Dulais river valley.	Medium
LCA	Sparsely vegetated, restored coal mine valley slope to the south.	
	Linear settlements typical of mining industry.	
	Neath and Brecon Railway corridor and washery.	
	Seven Sisters Miners Welfare and Onllwyn Welfare Hall.	
Hirfynydd LCA	Roman Road that follows the ridgeline from north-east to south-west.	Medium
	Wind Turbines on north-eastern edge.	
	Large proportion of coniferous woodland plantation.	
	Elevated topography (Hirfynydd hill).	
Mynydd Allt y grug LCA	Exposed rock and scree cover.	Medium
	Heathland.	
	Views across Tawe Valley.	

Landscape Character Area	Future Baseline Key Features / Characteristics	Value
Mynydd Marchywel LCA	High proportion of coniferous plantation.	Medium
	Remoteness and tranquillity.	
	Elevated landform and distinctive Varteg Hill.	
	Pylons and wireless mast that are highly visible.	
Mynydd Uchaf, Mynydd Garth & Cefn Gwrhyd	Open character.	High
LCA	Common Land.	
	Panoramic views.	
	Grazed landcover.	
	Gwrhyd Welsh Independent Church.	
Nant Helen Reclaimed Uplands LCA	Past mining activity.	Low
Opianus ECA	Open character.	
	Established marsh and grassland landcover.	
	Newly restored marsh, acid grassland and enclosed pasture.	
	Tramroad at Ystradgynlais Scheduled Monument.	
Slopes of Cefn Gwrhyd &	Grazed pasture.	Medium
Cwm Egel LCA	Field boundaries formed by hedgerows and stone walls.	
	Scattered farmsteads.	
	Remoteness and tranquillity.	
	SSSIs.	
	Ancient Semi-Natural Woodland.	
Swansea Valley LCA	Meandering River Tawe.	Medium
	Deciduous woodland.	
	Mosaic of pasture fields.	

Landscape Character Area	Future Baseline Key Features / Characteristics	Value
Swansea Valley Settlements LCA	Linear settlements of Ystalyfera, Gurnos, Ystradgynlais, Penrhos, Cwm-twrch Isaf, Cwmgiedd and Glan-rhyd.	Medium
	Transport corridors of A4067, A4068 and B4599.	
	Enclosed, relatively high density urban character.	
	Historic relics of the industrial history of the area such as Swansea Canal that is now used for recreation.	
Upland Settlements	A4068.	Medium
	Exposed character and views of surrounding landscape.	
	Linear settlements.	
Waterfall Country and	Recreational opportunities.	High
Southern Valleys LCA	Complex geology.	
	Complex pastoral field patterns.	
	Rivers and multiple waterfalls.	
	Peace and tranquillity.	
Wooded Tawe Valley LCA	Ancient Woodlands.	Medium
LCA	River Tawe.	
	A4067 and A4221.	
	Settlements of Caerbont, Abercraf and Caehopkin.	
	Listed buildings at Gwaunclawdd.	
Y Mynydd Du LCA	Openness.	High
	Peace and tranquillity.	
	Spectacular long-distance views to the south.	
	Recreational value and accessibility.	

#### 9.8 Assessment of effects

### **Assessment of effects from construction (Landscape)**

9.8.1 Appendix 9D provides the assessment for all LCAs. This section provides the assessment of the one identified LCA which would be significantly affected during the construction phase. For the purpose of the EIA, these are effects which are identified as being of **moderate and above significance.** Landscape Character Area boundaries are shown on Figure 9.4.

### **Nant Helen Reclaimed Uplands**

9.8.2 The LCA has some capacity to accommodate the proposed development without affecting its overall integrity due to the development taking place on engineered landforms within the restored landscape. The LCA also contains existing urban features such as electricity pylons and is surrounded by urban development (Ystradgynlais and Seven Sisters) and road infrastructure (A4109, A4221 and A4067). It is susceptible to the removal of restored features and urbanisation. The susceptibility to change is therefore Medium.

Value: Low

Susceptibility: **Medium** Sensitivity: **Medium** 

- 9.8.3 The construction of the outer and inner rail tracks would take place within the LCA. Two rail tracks would be constructed on the existing Nant Helen Complementary Earthworks development. This rail infrastructure would tie into the Neath and Brecon Railway to the south and further associated sidings and buildings located at the washery.
- 9.8.4 Construction includes the laying of the track bed and rail track and erection of overhead line equipment. To the south, where the rail tracks connect with the sidings at the washery, construction would include 2 platforms 230m in length and an associated station building.
- 9.8.5 Works within the adjacent Head of Dulais Valley LCA would include the construction of maintenance and storage sheds, research and development centre and a multi-storey control centre building as well as rail sidings for up to 400 vehicles. These works would be at the location of the washery and would not directly impact on the LCA but would contribute to the overall sense of scale of construction works taking place.
- 9.8.6 Whilst the removal of previously restored areas of the LCA is not anticipated, the construction works within and adjacent to the LCA would introduce large-scale construction activity to the restored landscape. Evidence of historic mining activity and urbanising

features including pylons, overhead lines and engineered landforms are characteristic of the LCA. Due to the activity being introduced to approximately half of the LCA but concentrated to the engineered earthworks and not resulting in removal of mature vegetation/habitats the magnitude of change would be Medium (Adverse) for this Medium sensitivity receptor. The significance of effect on the Nant Helen Reclaimed Uplands LCA would therefore be **Moderate** (Adverse).

#### **Assessment of effects from construction (Visual)**

9.8.7 Appendix 9D provides the assessment for all viewpoints. This section provides the assessment of the viewpoints identified which would be significantly affected during the construction phase. For the purpose of the EIA, these are effects which are identified as being of **moderate and above significance**. Viewpoint locations are shown on Figure 9.3.

### Viewpoint 1 - View from Ystradgynlais Bridleway 61

9.8.8 Recreational receptors within the national park have a High susceptibility as their attention is concentrated on available views outwards from elevated topography.

Value: **High** 

Susceptibility: **High** Sensitivity: **High** 

- 9.8.9 Construction activity would be visible within 3.5km of the viewpoint. Receptors would have views of construction works on the northern embankment and the shallow cuttings at the western edge of the proposed development. These works would include; the laying of track bed and rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers; and construction of a vehicle maintenance access route alongside the track. Construction works would be confined to the engineered landforms implemented as part of the Nant Helen Complementary Restoration Earthworks.
- 9.8.10 Broadleaf woodland planting implemented as part of the Nant Helen Complementary Restoration earthworks would provide some filtering of works at grade on the northern embankment.
- 9.8.11 Due to the introduction of construction activity across an open upland landscape across which restored features from the Nant Helen restoration works, such as vegetation would not yet have established, the magnitude of change would be Medium (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Moderate (Adverse)**.

### Viewpoint 2 - View from Ystradgynlais Footpath 64

9.8.12 Recreational receptors within the national park have a High susceptibility as their attention is concentrated on available views outwards from elevated topography.

Value: High

Susceptibility: **High** Sensitivity: **High** 

- 9.8.13 Construction activity would be visible within 1.7km of the viewpoint. Receptors would have views of construction works on the northern embankment of the proposed development. These works would include; the laying of track bed and rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers; and construction of vehicle access route alongside the track. Construction works would be confined to the engineered landforms implemented as part of the Nant Helen Complementary Restoration Earthworks.
- 9.8.14 Broadleaf woodland implemented as part of the Nant Helen Complementary Restoration earthworks would provide some filtering of works that are at grade with the embankment. However, due to the elevated position of the viewpoint, the majority of the works including construction vehicles and erection of infrastructure elements would remain visible.
- 9.8.15 Due to the construction works visible across a wide section of the view, and the perceived disturbance within restored areas of the view, the magnitude of change would be Medium (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Moderate (Adverse)**.

# Viewpoint 3 - View from Trig point on Cribarth

9.8.16 Recreational receptors within the national park have a High susceptibility as their attention is concentrated on available views outwards from elevated topography.

Value: High

Susceptibility: **High** Sensitivity: **High** 

- 9.8.17 Construction activity would be visible within 2km of the viewpoint. Receptors would have views of construction works on the northern embankment as well as some works visible on the cutting at the eastern edge of the proposed development. These works would include; the laying of track bed and rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers; and construction of vehicle access route alongside the track.
- 9.8.18 Works would also be visible, further into the distance at the location of the washery and would include demolition of existing sheds and

construction of; sidings for up to 400 vehicles; multi-storey control building; research and development centre; and maintenance/storage shed for rolling stock.

- 9.8.19 Receptors' views would be dominated by the construction works associated with the outer rail track on the northern embankment. The establishing planting on the northern embankment implemented as part of the Nant Helen Complementary Restoration Earthworks would not filter views of construction due to the receptors' elevated position above the proposed development.
- 9.8.20 The works at the washery would take place within a less prominent area of the view and where activity is already a feature of the view. Although 2km from the viewpoint, construction works would be taking place within a prominent, open upland area within the view. Works would be incongruous with the restored landscape and a large proportion of the proposed development would be visible, the magnitude of change would therefore be High (Adverse) for these High sensitivity receptors. The significance of effect would therefore be Major (Adverse).

### Viewpoint 4 - View from Ogof Ffynnon Ddu NNR

9.8.21 Recreational receptors within the national park have a High susceptibility as their attention is concentrated on available views outwards from elevated topography.

Value: High

Susceptibility: **High** Sensitivity: **High** 

- 9.8.22 Construction activity would be visible within 4km of the viewpoint. Receptors would have views of construction works on the northern embankment as well as some works visible on the cutting at the eastern edge of the proposed development. It is also anticipated that some works may be perceptible on the inner track in deep cutting. These works would include; the laying of track bed and rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers; and construction of vehicle access route alongside the track.
- 9.8.23 The majority of works taking place at the location of the washery would be screened by the topography in the middle ground but demolition of existing sheds and construction of taller structures including the multi-storey control building or works at the eastern edge of the washery would be perceptible.
- 9.8.24 Mitigation broadleaf woodland planting on the northern embankment implemented as part of the Nant Helen Complementary Restoration Earthworks would provide partial visual filtering of works at grade with the top of the embankment. Construction vehicles and taller

features such as fencing, overhead line equipment and signals would remain visible throughout the construction period.

9.8.25 Due to the construction works taking place on a prominent landform in the direction of the longer distance views, the magnitude of change would be Medium (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Moderate** (**Adverse**).

### Viewpoint 5 - View from western edge Ynyswen

9.8.26 Residential receptors have a High susceptibility to change due to the permanence and static nature of views.

Value: **Medium** Susceptibility: **High** Sensitivity: **High** 

- 9.8.27 Construction activity would be visible within 1km of the viewpoint. Receptors would have views of construction works on the northern embankment. These works would include; the laying of track bed and rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers; and construction of a vehicle access route alongside the track.
- 9.8.28 Mitigation broadleaf woodland planting on the northern embankment implemented as part of the Nant Helen Complementary Restoration Earthworks would partially filter views of construction activity due to receptors viewing the proposed development from lower ground. It is anticipated that construction vehicles and overhead line equipment would be clearly visible above intervening mitigation vegetation across the embankment.
- 9.8.29 Due to the works being visible across the view above existing mature and establishing vegetation and the introduction of activity into an otherwise rural backdrop the magnitude of change would be High (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Major** (Adverse).

#### Viewpoint 8 - View from Ystradgnlais Footpath 4

9.8.30 Recreational receptors have a High susceptibility as their attention is concentrated on surrounding views.

Value: **Medium** Susceptibility: **High** Sensitivity: **Medium** 

9.8.31 Construction activity would be visible within 3.1km of the viewpoint. Receptors would have views of the construction works on the shallow cutting at the western edge of the proposed development. It is anticipated that works on the northern embankment would also be perceptible. These works would include; the laying of track bed and

rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers; and construction of vehicle maintenance access route alongside the track.

9.8.32 Construction works would extend urban activity and features into the open, upland hillside above the woodland, adding to the existing development in the view. The magnitude of change would be Medium (Adverse) for these Medium sensitivity receptors. The significance of effect would therefore be **Moderate (Adverse)**.

### Viewpoint 9 - View from NCNR 43

9.8.33 Recreational receptors have a High susceptibility to change as their attention is concentrated on surrounding views.

Value: Low

Susceptibility: **High** Sensitivity: **Medium** 

- 9.8.34 Receptors would have close range views of the construction work on the northern embankment. These works would include; the laying of track bed and rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers; and construction of a vehicle maintenance access route alongside the track.
- 9.8.35 Mitigation planting implemented as part of the Nant Helen Complementary Restoration Earthworks would partially filter the construction works at ground level on the top of the embankment, however due to the close proximity of works it is anticipated that the majority of works would be clearly visible.
- 9.8.36 The introduction of construction activity at close range above the viewpoint into a view that comprises engineered landform, but no urban features or activity would result in a Medium (Adverse) magnitude of change for these Medium sensitivity receptors. The significance of effect would therefore be **Moderate** (Adverse).

# **Viewpoint 10 - View from Station Road, Coelbren**

9.8.37 Residential receptors have a High susceptibility to change due to the permanence and static nature of views.

Value: Low

Susceptibility: **High** Sensitivity: **Medium** 

9.8.38 Construction would be visible within 600m of the viewpoint. To the south, works would be visible at the location of the washery, including demolition of existing buildings/equipment and the construction of; sidings for up to 400 vehicles; multi-storey control building; research and development centre; and maintenance/storage sheds for rolling stock. It is anticipated that cranes used for construction and the taller

buildings would be visible at this location above intervening vegetation within field boundaries and alongside the A4221 within the middle ground.

- 9.8.39 To the west, receptors would have views of construction on the shallow outer track cuttings at the eastern extent of the Project. It is also anticipated that construction works within the deeper cuttings of the inner track would be perceptible. These works would include; the laying of track bed and rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers; and construction of vehicle maintenance access route alongside the track. These works would be visible just above mature vegetation and below the horizon.
- 9.8.40 Due to the increased large-scale activity at the washery, in close proximity to receptors, and the introduction of activity and urban elements on the grassed cuttings to the west, the magnitude of change would be Medium (Adverse) for these Medium sensitivity receptors. The significance of effect would therefore be **Moderate** (**Adverse**).

### Viewpoint 12 - View from Ystradfellte Byway 74

9.8.41 Recreational receptors within the national park have a High susceptibility as their attention is concentrated on available views outwards from elevated topography.

Value: High

Susceptibility: **High** Sensitivity: **High** 

- 9.8.42 Construction would be visible within 1.8km of the viewpoint. Receptors would have views of construction on the shallow outer track cuttings at the eastern extent of the proposed development. It is also anticipated that construction works within the deeper cuttings of the inner track would be perceptible. These works would include; the laying of track bed and rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers; and construction of vehicle maintenance access route alongside the track.
- 9.8.43 Further works at the location of the washery would be visible including the demolition of existing buildings/equipment and construction of; sidings for up to 400 vehicles; multi-storey control building; research and development centre; and maintenance/storage sheds for rolling stock. Due to the lack of vegetation north-east of the washery site these works will be clearly visible, whilst works closer to Onllwyn will be screened by topography.
- 9.8.44 Due to the lack of intervening vegetation and therefore the clear visibility of construction works at the washery and on earthworks to the west, the magnitude of change would be Medium (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Moderate (Adverse)**.

### Viewpoint 14 - View from Ystradgynlais Footpath 10

9.8.45 Recreational receptors have a High susceptibility as their attention is concentrated on surrounding views.

Value: **Medium** Susceptibility: **High** Sensitivity: **High** 

- 9.8.46 Construction activity would be visible within 400m of the viewpoint. Receptors would have views of construction works on the shallow cuttings at the western edge of the proposed development as well works on the slight embankment and cutting earthworks running parallel to the pylons to the east. These works would include; the laying of track bed and rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers; and construction of a vehicle maintenance access route alongside the track.
- 9.8.47 Views of construction works at the location of the washery would also be available, beyond the existing pylons and power lines. These works would be difficult to distinguish, due to distance and construction works within the foreground and middle ground but would include demolition of existing sheds and construction of; sidings for up to 400 vehicles; multi-storey control building; research and development centre; and maintenance/storage sheds for rolling stock.
- 9.8.48 The view includes existing urban features such as pylons, wind turbines, settlements and road infrastructure in the middle to long distance to the east. However, the construction works within a restored upland landscape would be incongruous. Expansive long-distance view to the north-west would be retained and therefore the magnitude of change would be Medium (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Moderate** (Adverse).

## Viewpoint 16 - View from properties on A4109

9.8.49 Residential receptors have a High susceptibility to change due to the permanence and static nature of views.

Value: Low

Susceptibility: **High** Sensitivity: **Medium** 

9.8.50 Construction would be visible within 500m of the viewpoint.

Receptors would have direct views of construction on the outer rail track embankment and shallow cutting at the southern edge of the proposed development. These works would include; the laying of track bed and rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers; and construction of a vehicle maintenance access route alongside the track.

9.8.51 There would be large-scale construction activity within the open, elevated landscape in the view, however there are existing urban features within the foreground and middle ground including; the Neath and Brecon Railway; street lighting; pylons; and engineered landforms (Nant Helen Complementary Restoration Earthworks). The magnitude of change would therefore be Medium (Adverse) for these Medium sensitivity receptors. The significance of effect would therefore be Moderate (Adverse).

## Viewpoint 18 - View from Sarn Helen Roman Road

Recreational receptors have a High susceptibility as their attention is 9.8.52 concentrated on surrounding views.

Value: **High** 

Susceptibility: High Sensitivity: High

- 9.8.53 Construction would be visible within 2.7km of the viewpoint. Due to the elevation of the viewpoint, receptors would have views of the construction works on the cutting and embankment that form the southern extent of the outer rail track. Works would also be perceptible within the deeper cuttings that form the inner rail track. These works would include; the laying of track bed and rail track; erection of overhead line equipment; erection of signals, fencing and acoustic barriers: and construction of vehicle maintenance access route alongside the track.
- 9.8.54 At the intersection of the rail tracks and the connecting branch line to the Neath and Brecon Railway, works would also include the construction of rail platforms and a station building.
- 9.8.55 Construction of rail infrastructure across a small section of the branch line which follows the existing vehicular access between the coal washery, and the central site compound would be visible.
- 9.8.56 To the north, construction works at the washery site would be perceptible, including the demolition of existing buildings/equipment and construction of; sidings for up to 400 vehicles; multi-storey control centre building; research and development centre; and maintenance/storage sheds for rolling stock. It is anticipated that cranes and construction of taller elements including the multi-storey control building would be more clearly visible in this area, above the topography.
- 9.8.57 Due to the elevated view down onto construction works across a wide section of the available view, the magnitude of change would be Medium (Adverse) for these High sensitivity receptors. The significance of effect would therefore be Moderate (Adverse).

Page 9-30 LVIA | Issue | March 2021

### **Assessment of effects from operation (Landscape)**

9.8.58 Appendix 9D provides the assessment for all landscape character areas. This section provides the assessment of the identified landscape character area which would be significantly affected during operation. For the purpose of the EIA, these are effects which are identified as being of **moderate and above significance**. Landscape Character Area boundaries are shown on Figure 9.4.

### **Nant Helen Reclaimed Uplands**

9.8.59 The LCA has some capacity to accommodate the proposed development without affecting its overall integrity due to the development taking place on engineered landforms within the restored landscape. The LCA also contains existing urban features such as pylons and is surrounded by urban development (Ystradgynlais and Seven Sisters) and road infrastructure (A4109, A4221 and A4067). It is susceptible to the removal of restored features and urbanisation. The susceptibility to change is therefore Medium.

Value: Low

Susceptibility: **Medium** Sensitivity: **Medium** 

#### Year 1

- 9.8.60 The proposed development would introduce urban features including; overhead line equipment, signals and fencing; two platforms and a station building to the north-eastern extent of the LCA. The rail tracks would tie into the Neath and Brecon Railway and further associated sidings and buildings located at the washery.
- 9.8.61 The urbanising features would sit on the engineered earthworks within the newly reprofiled and restored landscape.
- 9.8.62 Changes within the contextual landscape are closely related to the existing Neath and Brecon Railway corridor and the washery site and would not impact the LCA.
- 9.8.63 The introduction of new urbanising features and large-scale activity and noise across a large proportion of the LCA, whilst not anticipated to result in loss or degradation of key features, would result in a substantial change to the newly restored landscape. The scale of the new features and prominent position on elevated topography would result in a Medium (Adverse) magnitude of change. The significance of effect would therefore be **Moderate (Adverse)**.

#### **Year 15 – (with established mitigation planting)**

9.8.64 Established mitigation planting will reduce the perceptibility of the proposed development from within the rest of the LCA to the southwest. The planting on the north-eastern edge of the site combined with

established planting implemented as part of the Nant Helen Complementary Restoration Earthworks will re-establish the wooded valley character just north of the LCA.

9.8.65 Although the perceptibility of the proposed development will be decreased across the south-western extent of the proposed development the proposed development will remain a substantial change to the LCA and therefore the magnitude of change would remain Medium (Adverse). The significance of effect would be **Moderate (Adverse)**.

### **Wooded Tawe Valley**

9.8.66 The LCA is susceptible to changes that would result in an increased sense of urbanisation and loss of its natural character. The susceptibility to change is therefore Medium.

Value: Medium

Susceptibility: **Medium** Sensitivity: **Medium** 

#### Year 1

- 9.8.67 The presence of rail infrastructure elements such as overhead line equipment, signals and fencing on the outer track of the proposed development would introduce urban and rail infrastructure features to the newly restored adjacent landscape.
- 9.8.68 There are direct impacts on a small area of the LCA where the proposed development is on the embankment that passes through the plantation woodland, introducing track bed, overhead line equipment and train movements to the highest areas on the valley slope. These changes would continue on the embankment in the adjacent LCA, where the grassland land cover would allow the proposed development, particularly train movements, to influence the surrounding landscape. The LCA's valley topography would limit the influence of the proposed development on the LCA, however the proposed development features contrast with the infrastructure within the LCA and would be a substantial change to the character of the adjacent landscape. Mitigation planting implemented as part of the Nant Helen Complementary Restoration Earthworks would provide a buffer between the LCA and the operational scheme but would not be sufficiently established within its first three years to screen the proposed development.
- 9.8.69 Due to the introduction of rail infrastructure up the valley slope and the contrast with its otherwise wooded character and limited development beyond the valley floor, the magnitude of change would therefore be Medium (Adverse) for this Medium sensitivity receptor. The significance of effect would be **Moderate (Adverse)**.

#### **Year 15** – (with established mitigation planting)

9.8.70 Established mitigation planting implemented as part of the Nant Helen Complementary Restoration Earthworks would reinstate the wooded valley character on the southern side of the Swansea valley. The planting would provide screening of rail infrastructure and passing trains reducing the perceptibility of the proposed development from the rest of the LCA. The magnitude of change would therefore reduce to Low (Adverse). The significance of effect would be Minor (Adverse).

### Y Mynydd Du

9.8.71 The LCA is susceptible to indirect changes that would affect its sense of peace and tranquillity, which are; recognised special qualities of the national park; identified within the aims and objectives of A Management Plan for the Brecon Beacons National Park 2015-2020; and recognised within both the national park's landscape character assessment and within LANDMAP. The LCA is also susceptible to the introduction of incongruous features into the contextual landscape. The susceptibility to change is therefore Medium.

Value: **High** 

Susceptibility: **Medium** Sensitivity: **High** 

#### Year 1

- 9.8.72 There are no direct impacts to the LCA. The operational scheme would introduce urban features into a recently restored landscape which forms part of the LCA's contextual landscape. These features include the fencing, signals and overhead line equipment on the outer rail track which would affect the southern extent of the LCA.
- Passing trains halfway up the valley slope would impact upon the sense of peace and tranquillity at the southern extent of the LCA. It is anticipated that the proposed development would be perceptible at a greater distance from within the LCA however this would form part of much wider vistas where settlements, road and rail infrastructure also form constituent parts of the surrounding landscape. The magnitude of change would be Medium (Adverse) for this High sensitivity receptor. The significance of effect would therefore be **Moderate** (Adverse).

#### **Year 15 – (with established mitigation planting)**

9.8.74 Established mitigation planting would help the proposed development to integrate into the surrounding landscape and would reduce the perceptibility of movement/activity within the contextual landscape. Planting implemented as part of the Nant Helen Complementary Restoration Earthworks would re-establish the wooded valley side that forms part of the contextual landscape. Woodland planting at the western extent of the proposed development would screen rail infrastructure and passing trains and would integrate the proposed development through its connection with surrounding mature

woodland. Due to the reduced perceptibility of the proposed development and the reinstatement of character within the LCAs wider surrounding landscape, the magnitude of change would reduce to Low (Adverse). The significance of effect would be Minor (Adverse).

#### **Assessment of effects from operation (Visual)**

9.8.75 Appendix 9D provides the assessment for all viewpoints. This section provides the assessment of the viewpoints identified which would be significantly affected during operation. For the purpose of the EIA, these are effects which are identified as being of **moderate and above significance**. Viewpoint locations are shown on Figure 9.3.

# Viewpoint 1 - View from Ystradgynlais Bridleway 61

9.8.76 Recreational receptors within the national park have a High susceptibility as their attention is concentrated on available views outwards from elevated topography.

Value: High

Susceptibility: **High** Sensitivity: **High** 

#### Year 1

- 9.8.77 The proposed development would be visible within 2km of the viewpoint. Receptors would have views of rail infrastructure on the northern embankment and shallow cuttings at the western edge of the proposed development. This would include; overhead line equipment; signals, fencing and acoustic barriers. When in use, passing trains would highlight the location of the track and introduce fast movement into a rural upland landscape view. Infrequent maintenance vehicle operations will also be visible alongside the track.
- 9.8.78 Broadleaf woodland implemented as part of the Nant Helen Complementary Restoration earthworks would be perceptible but would only provide minimal filtering of rail infrastructure and train movements at grade with the embankment due to its size.
- 9.8.79 The proposed development will be visible across a small section of the view. However, due to the introduction of urbanising features into a prominent, open upland landscape and the introduction of fast movement into an otherwise rural view, the magnitude of change would be Medium (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Moderate (Adverse)**.
- 9.8.80 Year 15 (with established mitigation planting)
- 9.8.81 Established mitigation planting implemented as part of the Nant Helen Complementary Restoration Earthworks would provide a greater level of filtering of train movements and overhead line equipment and

visually integrate the proposed development with existing surrounding woodland on the valley slopes.

- 9.8.82 It is anticipated that mitigation planting on the western extent of the proposed development outside the outer rail track would provide screening of passing trains. Overhead line equipment may remain visible above the tree canopies due to the location of planting away from the cutting edge down the hillside.
- 9.8.83 The additional screening provided by mitigation planting implemented as part of the proposed development and the Nant Helen Complementary Restoration Earthworks would reduce the overall perceptibility of the proposed development and restore the overall character of the view. Whilst some woodland will be visible further up the side of Mynydd y Drum contrasting with the open upland landscape, woodland will tie in with existing coniferous plantation and the change will only affect a small proportion of the overall view. The magnitude of change will therefore be Low (Adverse). The significance of effect would be Minor (Adverse).

### Viewpoint 2 - View from Ystradgynlais Footpath 64

9.8.84 Recreational receptors within the national park have a High susceptibility as their attention is concentrated on available views outwards from elevated topography.

Value: **High** 

Susceptibility: **High** Sensitivity: **High** 

#### Year 1

- 9.8.85 Receptors would have elevated views onto rail infrastructure on the northern embankment of the proposed development. This would include; overhead line equipment; signals, fencing and acoustic barriers. During operation, fast train movement would be introduced into the open landscape across the view. The scale and linearity of the infrastructure would contrast with the winding A4221.
- 9.8.86 Broadleaf woodland implemented as part of the Nant Helen Complementary Restoration earthworks would be perceptible but would only provide minimal filtering of infrastructure elements and trains at grade with the embankment. Due to the elevated position of the viewpoint, fast train movement would be visible above acoustic fencing and change the rural character of the view. Infrequent maintenance vehicle operations would also be visible alongside the track.
- 9.8.87 Due to the introduction of urbanising features into a rural open landscape view and visibility of features across a wide section of the view, the magnitude of change would be High (Adverse) for these

High sensitivity receptors. The significance of effect would therefore be **Major** (**Adverse**).

#### **Year 15 – (with established mitigation planting)**

- 9.8.88 Established mitigation planting implemented as part of the Nant Helen Complementary Restoration Earthworks would provide screening of acoustic barriers and train movements on the northern embankment. It is anticipated that overhead line equipment would remain visible above tree canopies but would be difficult to distinguish as they do not break the horizon.
- 9.8.89 Mitigation planting at the western extent of the proposed development would integrate with existing coniferous plantation, it is however anticipated that glimpsed views would be available of passing trains as they transition from embankment to cutting. Due to the reduced visibility of rail infrastructure and integration of mitigation planting with surrounding woodland cover the magnitude of change would reduce to Medium (Adverse). The significance of effect would be **Moderate (Adverse)**.

### Viewpoint 3 - View from Trig point on Cribarth

9.8.90 Recreational receptors within the national park have a High susceptibility as their attention is concentrated on available views outwards from elevated topography.

Value: **High** 

ie: nigii Sontibility

Susceptibility: **High** Sensitivity: **High** 

#### Year 1

- 9.8.91 Receptors would have elevated views of rail infrastructure on the northern embankment as well as some taller features visible on the cutting at the eastern edge of the proposed development. This would include; overhead line equipment; signals, fencing and acoustic barriers.
- 9.8.92 The view would be dominated by rail infrastructure on the outer rail track on the northern embankment. The planting on the northern embankment implemented as part of the Nant Helen Complementary Restoration Earthworks would not provide any filtering of views of infrastructure features or passing trains due to the receptors elevated position above the proposed development.
- 9.8.93 Facilities at the location of the washery would also be visible including; sidings for up to 400 vehicles; multi-storey control building; research and development centre; and maintenance/storage shed for rolling stock. The visibility of these features would not result in a substantial change to the character of the view as they would be

located on the site of existing development however the scale of the facilities would contrast with nearby small-scale settlements.

9.8.94 Due to the prominence and close proximity of the proposed development which would be visible across the restored upland landscape and would contrast with the rural charter of the view, the magnitude of change would be High (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Major (Adverse)**.

### **Year 15 – (with established mitigation planting)**

- 9.8.95 Established mitigation planting implemented as part of the Nant Helen Complementary Restoration Earthworks would provide partial screening of the rail infrastructure and passing trains on the northern embankment. It is anticipated that overhead line equipment would remain visible above canopies due to the elevated position of the receptor looking down onto the proposed development.
- 9.8.96 Mitigation planting at the eastern extent of the proposed development between the inner and outer rail track and would provide partial screening of trains as they transition between the northern embankment and the cuttings at the eastern extent of the proposed development. It is anticipated that glimpsed views of trains would remain visible.
- 9.8.97 Mitigation planting would provide screening of trains across a large proportion of the view and would integrate the proposed development with the adjacent wooded valley. Due to the elevated position of the receptor and the close proximity of the proposed development rail infrastructure would remain visible above tree canopies. The magnitude of change would therefore reduce to Medium (Adverse). The significance of effect would remain **Moderate** (Adverse).

# Viewpoint 4 - View from Ogof Ffynnon Ddu NNR

9.8.98 Recreational receptors within the national park have a High susceptibility as their attention is concentrated on available views outwards from elevated topography.

Value: High

Susceptibility: **High** Sensitivity: **High** 

### Year 1

9.8.99 Receptors would have views of rail infrastructure on the northern embankment as well as some taller features on the cutting at the eastern edge of the proposed development and the deeper cutting that forms the inner rail track. This would include; overhead line equipment; signals, fencing and acoustic barriers.

9.8.100 The majority of facilities at the location of the washery would be screened by the topography. It is anticipated that the increased scale of operations at this location would be perceptible and some taller structures such as the multi-storey control building or buildings/sheds at the eastern edge of the washery would be visible.

- 9.8.101 Mitigation planting on the northern embankment implemented as part of the Nant Helen Complementary Restoration Earthworks would provide partial filtering of infrastructure features at grade with the top of the embankment. Taller features such as overhead line equipment, signals, fencing and passing trains and maintenance vehicles would all remain visible across this section.
- 9.8.102 Due to the introduction of urbanising rail infrastructure to a rural landscape and prominent landform that dominates the middle ground of the view, the magnitude of change would be High (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Major** (Adverse).

### **Year 15** – (with established mitigation planting)

- 9.8.103 Established mitigation planting implemented as part of the Nant Helen Complementary Restoration Earthworks would provide screening of passing trains on the northern embankment. It is anticipated that overhead line equipment would remain visible above the tree canopies but would be difficult to distinguish as they would not break the horizon and due to the distance of the receptor from the proposed development. Tree planting would visually integrate with surrounding wooded landcover on the valley slopes.
- 9.8.104 Tree planting alongside the buildings at the coal washery would not screen any of the buildings but would provide a soft buffer and help integrate the structures within the surrounding landscape.
- 9.8.105 Due to the screening provided by mitigation planting and therefore the reduced perceptibility of the proposed development within the view, the magnitude of change would reduce to Low (Adverse). The significance of effect would be Minor (Adverse).

# **Viewpoint 5 - View from western edge Ynyswen**

9.8.106 Residential receptors have a High susceptibility to change due to the permanence and static nature of views.

Value: **Medium** Susceptibility: **High** Sensitivity: **High** 

### Year 1

9.8.107 Receptors would have views of rail infrastructure on the northern embankment. This would include; overhead line equipment; signals, fencing and acoustic barriers.

9.8.108 Mitigation planting on the northern embankment implemented as part of the Nant Helen Complementary Restoration Earthworks would partially filter views of infrastructure elements (at grade with the top of the embankment) due to the lower elevation of the viewpoint. It is anticipated that taller features such as overhead line equipment, signals and passing trains and maintenance vehicles would remain visible.

9.8.109 Due to the rail infrastructure being visible across the full width of the view across the hillside, and the introduction of movement and urbanising features to a rural view, the magnitude of change would be High (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Major** (**Adverse**).

### **Year 15 – (with established mitigation planting)**

- 9.8.110 Established mitigation planting implemented as part of the Nant Helen Complementary Restoration Earthworks would provide screening of train movements across the northern embankment and would visually integrate with existing woodland on the lower hillside slopes. It is anticipated that the viewing position of receptors on lower ground would increase the effectiveness of planting as a visual screen. Overhead line equipment would remain visible above the tree canopies but would not break the horizon.
- 9.8.111 There would be reduced visibility of trains and associated infrastructure across the view and woodland would be sufficiently established to visually integrate with mature woodland on the hillside. It is anticipated that the proposed development would remain perceptible due to overhead line equipment. The magnitude of change would therefore reduce to Low (Adverse) and the significance of effect would be Minor (adverse).

# Viewpoint 6 - View from Tanygarth, Abercraf

9.8.112 Residential receptors have a High susceptibility to change due to the permanence and static nature of views.

Value: Low

Susceptibility: **High** Sensitivity: **Medium** 

### Year 1

- 9.8.113 Receptors would have views of rail infrastructure on the northern embankment and the cutting at the north-western edge of the proposed development. This would include; overhead line equipment; signals, fencing and acoustic barriers.
- 9.8.114 Mitigation planting on the northern embankment implemented as part of the Nant Helen Complementary Restoration Earthworks would be perceptible but would only filter rail infrastructure features at grade

with the top of the embankment. Fast moving trains would be visible between property roof tops to the east.

- 9.8.115 To the south, existing mature coniferous plantation would provide screening of rail infrastructure and passing trains on embankment through the woodland. The proposed development would emerge above the woodland in shallow cutting and rail infrastructure and fast-moving trains would be visible across a short section of the view.
- 9.8.116 The proposed development will introduce urbanising features across the middle ground of the view, between the rooftops and the horizon. Existing mature coniferous woodland would screen the proposed development across a large portion of the view, leaving rail infrastructure and trains visible across short sections of the view to the south and south-east. The magnitude of change will be Medium (Adverse) for these Medium sensitivity receptors. The significance of effect would therefore be **Moderate** (Adverse).

## **Year 15 – (with established mitigation planting)**

- 9.8.117 Established mitigation planting implemented as part of the Nant Helen Complementary Restoration Earthworks would provide screening of passing trains along the northern embankment.
- 9.8.118 It is anticipated that woodland at the western edge of the proposed development would screen trains as they transition between the northern embankment and cuttings at the western extent of the proposed development. Overhead line equipment would remain visible above the tree canopies across a short section of the view.
- 9.8.119 Due to the reduced visibility of the proposed development, and the screening of fast movement from the backdrop of the view, the magnitude of change would reduce to Low (Adverse). The significance of effect would be **Minor** (**Adverse**).

# Viewpoint 7 - View from Pen-Rhiwfawr

9.8.120 Residential receptors have a High susceptibility to change due to the permanence and static nature of views.

Value: **Medium** Susceptibility: **High** Sensitivity: **High** 

### Year 1

- 9.8.121 Rail infrastructure on the shallow cutting at the western edge of the proposed development would be perceptible to receptors. This would include; overhead line equipment; signals, fencing and acoustic barriers.
- 9.8.122 Passing trains would introduce movement across an open, rural upland landscape and highlight other proposed development features.

9.8.123 The proposed development would introduce incongruous urbanising features across the hillside of Mynydd y Drum but would constitute a small proportion of much wider views. Built proposed development features would be perceptible, however train movements would result in noticeable change to the rural character of the view. The magnitude of change would be Medium (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Moderate** (Adverse).

### **Year 15 – (with established mitigation planting)**

- 9.8.124 Mitigation planting to the west of the outer rail track would provide screening of passing trains on the shallow cuttings. It is anticipated that overhead line equipment would remain visible above tree canopies but would not be clearly distinguishable due to the distance of the receptor from the proposed development.
- 9.8.125 Due to the screening of fast movement from the long-distance view, the magnitude of change would reduce to Low (Adverse). The significance of effect would be Minor (Adverse).

# Viewpoint 8 - View from Ystradgnlais Footpath 4

9.8.126 Recreational receptors have a High susceptibility as their attention is concentrated on surrounding views.

Value: **Medium** Susceptibility: **High** Sensitivity: **Medium** 

#### Year 1

- 9.8.127 Receptors would have views of rail infrastructure on the shallow cutting at the western edge of the proposed development. It is anticipated that a small section of the rail infrastructure on the northern embankment would also be perceptible. This would include; overhead line equipment; signals, fencing and acoustic barriers.
- 9.8.128 The proposed development would introduce fast-moving trains and visible urbanising features on the hillside, separated by mature woodland from settlements in the valley. This would affect the composition of the view by increasing the proportion of development within the valley.
- 9.8.129 Rail infrastructure would be clearly visible, contrasting with the landscape of ponds and marshy grassland to the west of the proposed development. Despite existing settlement being a feature of the view, due to the elevation and perceived increase of developed areas within the valley, the magnitude of change would be Medium (Adverse) for these Medium sensitivity receptors. The significance of effect would therefore be **Moderate (Adverse)**.

# Year 15 – (with established mitigation planting)

9.8.130 Mitigation planting on the hillside of Mynydd y Drum on the western side of the outer rail track, would provide screening of passing trains. It is anticipated that overhead line equipment would remain visible above tree canopies but would not break the horizon and would therefore be difficult to distinguish.

9.8.131 Due to the reduced perceptibility of the proposed development and therefore development within the valley, the magnitude of change would reduce to Low (Adverse). The significance of effect would be Minor (Adverse).

# **Viewpoint 9 - View from NCNR 43**

9.8.132 Recreational receptors have a High susceptibility to change as their attention is concentrated on surrounding views.

Value: Low

Susceptibility: **High** Sensitivity: **Medium** 

#### Year 1

- 9.8.133 Mitigation planting implemented as part of the Nant Helen Complementary Restoration Earthworks would provide a filter between receptors travelling along the cycle route and the rail infrastructure. Receptors would have filtered views of the rail infrastructure on the northern embankment. This would include; overhead line equipment; signals, fencing and acoustic barriers and fast-moving trains.
- 9.8.134 The introduction of rail infrastructure, close to receptors would result in a less tranquil experience for receptors using the cycle route who would have transient views of the proposed development. The magnitude of change would be Medium (Adverse) for these Medium sensitivity receptors. The significance of effect would therefore be **Moderate (Adverse)**.

### **Year 15** – (with established mitigation planting)

- 9.8.135 Established mitigation planting implemented as part of the Nant Helen Complementary Restoration Earthworks would screen rail infrastructure across the northern embankment and would alter the receptors experience from a corridor with woodland belts and glimpsed views out to a cycle route which would become a densely wooded enclosed corridor with limited views outwards.
- 9.8.136 Due to the close proximity of the railway, passing trains would remain perceptible and would intermittently affect the sense of tranquillity experienced by cycle route users. The magnitude of change would therefore remain Medium (Adverse). The significance of effect would be **Moderate (Adverse)**.

# **Viewpoint 10 - View from Station Road, Coelbren**

9.8.137 Residential receptors have a High susceptibility to change due to the permanence and static nature of views.

Value: Low

Susceptibility: **High** Sensitivity: **Medium** 

#### Year 1

- 9.8.138 Receptors would have views of rail infrastructure on the shallow outer track cutting at the north-eastern extent of the proposed development. It is also anticipated that taller features within some areas of the deeper cuttings of the inner track would be perceptible. These features would include; overhead line equipment; signals, fencing and acoustic barriers; and moving trains. The majority of cuttings are deep enough to completely screen rail infrastructure and therefore these would be visible across short sections of the view.
- 9.8.139 To the south, facilities at the location of the washery, including; sidings for up to 400 vehicles; multi-storey control building; research and development centre; and maintenance/storage sheds for rolling stock would be visible and would result in an increased scale of development beyond the intervening vegetation along the A4221 and within middle-ground field boundaries.
- 9.8.140 Due to the increased amount and size of buildings at the washery, in close proximity to receptors, and the introduction of urbanising features to a restored area of the landscape to the west, the magnitude of change would be Medium (Adverse) for these Medium sensitivity receptors. The significance of effect would therefore be **Moderate** (Adverse).

#### **Year 15 – (with established mitigation planting)**

- 9.8.141 Established mitigation planting on the eastern side of the outer rail track would provide screening of trains and rail infrastructure features within the shallowest parts of the cuttings to the west.
- 9.8.142 To the south, tree planting alongside the multi-storey control building; research and development centre; and maintenance/storage sheds for rolling stock would not screen the buildings but would provide a soft buffer to lessen the visual intrusion of the structures.
- 9.8.143 Due to the screening of the proposed development to the west and the reduced perceptibility of buildings at the washery site the magnitude of change would reduce to Low (Adverse). The significance of effect would be reduced to Minor (Adverse).

# **Viewpoint 11 - View from Tawe-Uchaf Footpath 5**

9.8.144 Recreational receptors within the national park have a High susceptibility as their attention is concentrated on available views outwards from elevated topography.

Value: High

Susceptibility: **High** Sensitivity: **High** 

#### Year 1

- 9.8.145 Receptors would have views of taller rail infrastructure features within the shallowest areas of inner track cuttings. This would include; overhead line equipment; signals, fencing and acoustic barriers; and moving trains.
- 9.8.146 Trains travelling at high speeds would contribute to the receptors' awareness of the proposed development within a restored area of the view.
- 9.8.147 Facilities associated with the proposed development rail infrastructure including; sidings for up to 400 vehicles; multi-storey control building; research and development centre; and maintenance/storage sheds for rolling stock would be visible to the south at the location of the washery. The western half of the site would be screened by intervening vegetation and topography however, the introduction of buildings further east would result in increased scale of development within the view.
- 9.8.148 Rail infrastructure features and moving trains will only be visible across short sections of the view to the west however, due to the increased scale of development and visibility of sidings and buildings at the washery the magnitude of change would be Medium (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Moderate (Adverse)**.

### **Year 15** – (with established mitigation planting)

- 9.8.149 Established mitigation planting would screen passing trains and rail infrastructure on the outer rail track and shallow areas of the inner rail track to the west.
- 9.8.150 Buildings at the site of the washery including the multi-storey control building; research and development centre; and maintenance/storage sheds for rolling stock would remain visible however mitigation planting alongside the buildings would provide a soft buffer to the structures.
- 9.8.151 Due to the reduced perceptibility of rail infrastructure to the west and the reduced dominance of buildings at the washery site, the magnitude of change would reduce to Low (Adverse). The significance of effect would be Minor (Adverse).

# Viewpoint 12 - View from Ystradfellte Byway 74

9.8.152 Recreational receptors within the national park have a High susceptibility as their attention is concentrated on available views outwards from elevated topography.

Value: High

Susceptibility: **High** Sensitivity: **High** 

#### Year 1

- 9.8.153 Receptors would have views of rail infrastructure within the shallowest areas of the inner track cuttings at the eastern extent of the proposed development. It is anticipated that taller features including; overhead line equipment; signals, fencing and acoustic barriers; and fast-moving trains would be visible.
- 9.8.154 It is anticipated that topography would screen the majority of the branch line connecting the outer tracks to the washery. However, the platforms and station building would be visible and indicate the location of rail infrastructure.
- 9.8.155 Facilities associated with the proposed development rail infrastructure including; sidings for up to 400 vehicles; multi-storey control building; research and development centre; and maintenance/storage sheds for rolling stock would be visible at the location of the washery and would result in an increased scale of development The sidings and buildings would be clearly visible due to the location on a small exposed plateau and a lack of intervening vegetation.
- 9.8.156 The proposed development would result in an increase in the scale of development at the washery site and would introduce new urbanising features to the view to the west. These changes would contribute to the urbanisation of a view that already comprises development associated with rail infrastructure and urbanising features such as urban settlement and pylons. The magnitude of change would therefore be Medium (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Moderate (Adverse)**.

### **Year 15** – (with established mitigation planting)

- 9.8.157 Mitigation planting outside the outer rail track at the south-eastern extent of the proposed development would screen rail infrastructure and passing trains on cuttings. Established planting around the platforms and station building would integrate the structures within the surrounding landscape, it is still anticipated that the station building would remain visible above the tree canopies.
- 9.8.158 Buildings at the washery site including multi-storey control building; research and development centre; and maintenance/storage sheds for rolling stock would remain visible however tree planting alongside the

buildings would help the structures to integrate with their vegetated surroundings.

9.8.159 Due to the reduced visibility of the proposed development and integration through mitigation planting the magnitude of change would reduce to Low (Adverse). The significance of effect would be reduced to Minor (Adverse).

## Viewpoint 13 - View from School Road, Ystalyfera

9.8.160 Residential receptors have a High susceptibility to change due to the permanence and static nature of views.

Value: Low

Susceptibility: **High** Sensitivity: **Medium** 

#### Year 1

- 9.8.161 Receptors would have views of rail infrastructure on the shallow cuttings at the north-western extent of the proposed development. This would include; overhead line equipment; signals, fencing and acoustic barriers.
- 9.8.162 Passing trains would be clearly visible across the shallow cuttings due to the positioning on a prominent landform (the slopes of Mynydd y Drum) with no intervening vegetation.
- 9.8.163 Due to the introduction of rail infrastructure features and fast train movement which would be incongruous with the restored landscape and rural hillside setting of the view, the magnitude of change would be Medium (Adverse) for these Medium sensitivity receptors. The significance of effect would therefore be **Moderate** (**Adverse**).

### **Year 15 – (with established mitigation planting)**

- 9.8.164 Mitigation planting on the side of Mynydd y Drum at the western extent of the proposed development would provide screening of passing trains. It is anticipated that overhead line equipment would remain visible above tree canopies but would not break the horizon and would therefore be difficult to distinguish.
- 9.8.165 Due to the screening of train movement and the reduced perceptibility of the proposed development the magnitude of change would therefore reduce to Low (Adverse). The significance of effect would be reduced to Minor (Adverse).

# Viewpoint 14 - View from Ystradgynlais Footpath 10

9.8.166 Recreational receptors have a High susceptibility as their attention is concentrated on surrounding views.

Value: Medium

Susceptibility: **High** Sensitivity: **High** 

#### Year 1

- 9.8.167 Receptors would have views of rail infrastructure within the shallowest areas of the cuttings at the western edge of the proposed development as well as elevated views across works on the slight embankment and cuttings running parallel to the pylons to the east. This would include; overhead line equipment; signals, fencing and acoustic barriers.
- 9.8.168 The close proximity of the rail infrastructure features, and fast-moving trains would introduce development and activity to the rural upland view, affecting the perception of the immediate view and views to the Brecon Beacon National Park to the north. The introduction of rail infrastructure would widen the existing corridor of urban features comprising pylons, urban settlement, and road and rail infrastructure.
- 9.8.169 Facilities associated with the rail testing tracks would be visible beyond the pylons and power lines at the location of the washery. This would include; sidings for up to 400 vehicles; multi-storey control building; research and development centre; and maintenance/storage sheds for rolling stock. The introduction of buildings and sidings would increase the scale of development at the location of the washery, however intervening features including rail infrastructure and existing pylons and the distance of the buildings would make the change difficult to distinguish. The magnitude of change would therefore be High (Adverse) for these High sensitivity receptors. The significance of effect would be **Major (Adverse)**.

#### **Year 15 – (with established mitigation planting)**

- 9.8.170 Mitigation planting at the western extent of the proposed development would partially screen rail infrastructure and passing trains across shallow cuttings. The proposed development would remain visible across embankments and cutting running parallel to the pylons to the east.
- 9.8.171 Due to the close proximity of receptors to the proposed development and the upland character that offers open views the magnitude of change would remain High (Adverse). The significance of effect would remain as **Major** (**Adverse**).

# **Viewpoint 16 - View from properties on A4109**

9.8.172 Residential receptors have a High susceptibility to change due to the permanence and static nature of views.

Value: Low

Susceptibility: **High** Sensitivity: **Medium** 

#### Year 1

9.8.173 Receptors would have direct views of rail infrastructure on the outer rail track small embankment and shallow cutting at the southern edge of the proposed development. This would include; overhead line equipment; signals, fencing and acoustic barriers. It is anticipated that taller features would also be visible within the shallowest areas of the cuttings that form the inner rail track.

- 9.8.174 The introduction of rail infrastructure and passing trains would alter the character of the views and widen the infrastructure corridor that currently comprises the A4109, Neath and Brecon Railway and pylons that all span the view.
- 9.8.175 The changes as a result of the proposed development would introduce urban features and fast movement into an open restored area of the landscape that forms the backdrop to foreground views of the A4109. The magnitude of change would be Medium (Adverse) for these Medium sensitivity receptors. The significance of effect would therefore **be Moderate (Adverse)**.

## **Year 15 – (with established mitigation planting)**

- 9.8.176 Belts of woodland planting to the south of the outer rail track would screen the majority of the rail infrastructure. It is anticipated that overhead line equipment (approx. 9m tall) would remain visible above the tree canopies. Train movement would be screened across the view.
- 9.8.177 The reduced visibility of the proposed development would result in the restoration of the backdrop to the view as a restored landscape with some urban detractors. The mitigation planting would be slightly incongruous with the open upland landscape but would integrate with existing plantation woodland at a similar elevation. Due to the reduced visibility of the proposed development the magnitude of change would reduce to Low (Adverse). The significance of effect would reduce to Minor (Adverse).

# Viewpoint 18 - View from Sarn Helen Roman Road

9.8.178 Recreational receptors have a High susceptibility as their attention is concentrated on surrounding views.

Value: **High** 

Susceptibility: **High** Sensitivity: **High** 

#### Year 1

9.8.179 Receptors would have views of rail platforms and associated station building at the intersection of the rail tracks and the connecting branch line to the Neath and Brecon Railway. The branch line connecting to the Neath and Brecon Railway would be visible across a small section before being screened by topography. Due to the elevation of the

viewpoint, receptors would also have views of the rail infrastructure on the cutting and embankment that form the southern extent of the outer rail track. Taller rail features would also be perceptible within the shallowest areas of the inner rail track cuttings. This would include; overhead line equipment; signals, fencing and acoustic barriers.

- 9.8.180 To the north it is anticipated that facilities at the location of the washery would be perceptible. This would include; sidings for up to 400 vehicles; multi-storey control building; research and development centre; and maintenance/storage sheds for rolling stock. It is anticipated that the taller structures would be visible and the increased number of units at this location would increase the scale of the development in the view.
- 9.8.181 Passing trains would be clearly visible across the earthworks implemented as part of the Nant Helen Complementary Restoration Earthworks and would add movement across a wide section of the view.
- 9.8.182 The proposed development would introduce transport infrastructure and urbanising features across an open restored landscape in an elevated view, the proposed development would not break the horizon and long-distance open views would be retained, the magnitude of change would therefore be Medium (Adverse) for these High sensitivity receptors. The significance of effect would therefore be **Moderate (Adverse)**.

#### Year 15 – (with established mitigation planting)

- 9.8.183 Mitigation planting to the south of the outer rail track and planting alongside the branch line earthworks would provide screening of passing trains across a large proportion of the view. It is anticipated that overhead line equipment would remain visible above the tree canopies.
- 9.8.184 There would be no change to the visibility of facilities at the location of the washery.
- 9.8.185 Due to the reduced visibility of train movement across a large portion of the view and the integration of platforms and station building due to established woodland the magnitude of change would reduce to Low (Adverse). The significance of effect would be Minor (Adverse).

# 9.9 Mitigation and enhancement

9.9.1 Mitigation proposals envisaged to reduce significant adverse landscape and visual effects have been accounted for in the year 15 assessment when it is assumed that planting will have established, albeit within the limitations expressed in Paragraph 1.6.8.

9.9.2 Planting for the mitigation of operational effects was developed and areas for both visual screening and landscape integration are shown on Figure 9.14. This plan was developed in conjunction with the project ecologist to ensure that it is appropriate and meets the requirements of any secondary ecological functions.

9.9.3 Descriptions of the function of planting areas are outlined below. The planting areas on Figure 9.14 show the maximum extent of planting, these areas should be developed at detail design to ensure they reflect the local character as closely as possible. The functional requirements for areas shown on Figure 9.14 are set out below:

#### 9.9.4 **Area L-01**

Visual screening planting to mitigate effects from viewpoints 1, 2, 6, 7, 8 and 14.

#### 9.9.5 **Area L-02**

Visual screening planting to mitigate effects from viewpoints 16, 18 and 17.

#### 9.9.6 Area L-03

Visual screening planting to mitigate effects from viewpoints 17 and 18. Planting to integrate the branch line, platforms and station building.

### 9.9.7 **Area L-04**

Planting to integrate the rail infrastructure, with the surrounding wooded valley character. Design should be developed to work with culverts.

#### 9.9.8 Area L-05

Visual screening planting on bund to mitigate effects from viewpoint 10.

#### 9.9.9 Area L-06

Visual screening planting on bund to mitigate effects from viewpoints 10 and 12.

### 9.9.10 Area L-07

Planting to integrate buildings at the washery site into the surrounding vegetated landscape. Creates a soft visual buffer for viewpoints 10, 11 and 12. Planting to be limited to immediate area surrounding buildings and not to encroach into existing habitats to the north.

### **Opportunities**

9.9.11 Opportunities for green/brown roofs should be sought on the buildings at the old washery site. Inclusion would help integrate the buildings

into the surrounding landscape and reduce visual effects. However, mitigation afforded by such measures has not been taken into account in the assessment at this stage as delivery of this mitigation is not yet confirmed.

# 9.10 Residual effects

9.10.1 The section below outlines the adverse landscape and visual effects that would remain beyond year 15. Photomontages showing the proposed development at year 15 from viewpoint 3 and viewpoint 16 are shown on Figure 9.15 and 9.16.

## **Residual effects from operation (Landscape)**

9.10.2 There would be residual effects to one LCA following the establishment of mitigation planting at year 15.

### **Nant Helen Reclaimed Uplands**

9.10.3 Mitigation planting required to mitigate the landscape and visual effects would provide some benefits in reducing the effects on the LCA but would remain a significant change to the restored open upland landscape. The proposed development is located within and covers a large proportion of the LCA. Moderate (Adverse) Effects to the LCA would therefore remain beyond year 15.

# Residual effects from operation (Visual)

- 9.10.4 It is anticipated that there would be residual effects to 4 visual receptors following the establishment of mitigation planting at year 15.
- 9.10.5 Residual effects from viewpoint 2 and 3 are as a result of the elevated position of receptors and the assumed tree growth by year 15. It is assumed that tree growth will be limited due to ground conditions and the exposed nature of the site and these residual effects are therefore representative of the worst-case scenario. Should overhead line equipment be fully screened by planting, then significant effects will be removed.

### Viewpoint 2 - View from Ystradgynlais Footpath 64

9.10.6 It is anticipated that **Moderate** (**Adverse**) effects would remain beyond year 15 due to the proposed development being visible across a dominant feature of the view.

### **Viewpoint 3 - View from Trig point on Cribarth**

9.10.7 It is anticipated that **Moderate** (**Adverse**) effects would remain beyond year 15 due to the receptors elevated position and therefore the limited effectiveness of mitigation planting.

9.10.8 Residual effects from viewpoint 9 and 14 are as a result of the close proximity of receptors to the proposed development and resultant change to future baseline conditions.

### Viewpoint 9 - View from NCNR 43

9.10.9 It is anticipated that **Moderate** (**Adverse**) effects would remain beyond year 15 due to the close proximity of the proposed development and change in character of the cycleway from this viewpoint to an enclosed wooded corridor.

## Viewpoint 14 - View from Ystradgynlais Footpath 10

9.10.10 It is anticipated that **Major** (**Adverse**) effects would remain beyond year 15 due to the close proximity of the proposed development and therefore dominance of the proposed development in the view.

# 9.11 Assessment summary matrix

# Construction

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at Construction	Significance at construction
Loss or degradation of character due to construction impacts.	Banwen Uplands LCA	Medium	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to construction impacts.	Black Mountain Southern Fringe LCA	Medium	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to construction impacts.	Bryn Henllys Reclaimed Open Cast LCA	Low	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to construction impacts.	Coelbren Settlement LCA	Low	Low (Adverse)	Minor (Adverse)
Loss or degradation of character due to construction impacts.	Cwm Twrch LCA	Medium	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to construction impacts.	Dulais Valley LCA	Medium	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to construction impacts.	Fforest Fawr LCA	High	Negligible (Adverse)	Minor (Adverse)
Loss or degradation of character due to construction impacts.	Head of Dulais Valley LCA	Medium	Low (Adverse)	Minor (Adverse)
Loss or degradation of character due to construction impacts.	Hirfynydd LCA	Medium	Low (Adverse)	Minor (Adverse)
Loss or degradation of character due to construction impacts.	Mynydd Allt y grug LCA	Medium	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to construction impacts.	Mynydd Marchywel LCA	Medium	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to construction impacts.	Mynydd Uchaf, Mynydd Garth & Cefn Gwrhyd LCA	Medium	Negligible (Adverse)	Negligible (Adverse)

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at Construction	Significance at construction
Loss or degradation of character due to construction impacts.	Nant Helen Reclaimed Uplands LCA	Medium	Medium (Adverse)	Moderate (Adverse)
Loss or degradation of character due to construction impacts.	Slopes of Cefn Gwrhyd & Cwm Egel LCA	Medium	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to construction impacts.	Swansea Valley LCA	Medium	No Change	Neutral
Loss or degradation of character due to construction impacts.	Swansea Valley Settlements LCA	Medium	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to construction impacts.	Upland Settlements	Medium	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to construction impacts.	Waterfall Country and Southern Valleys LCA	High	Negligible (Adverse)	Minor (Adverse)
Loss or degradation of character due to construction impacts.	Wooded Tawe Valley LCA	Medium	Low (Adverse)	Minor (Adverse)
Loss or degradation of character due to construction impacts.	Y Mynydd Du LCA	High	Low (Adverse)	Minor (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 1	High	Medium (Adverse)	Moderate (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 2	High	Medium (Adverse)	Moderate (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 3	High	High (Adverse)	Major (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 4	High	Medium (Adverse)	Moderate (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 5	High	High (Adverse)	Major (Adverse)

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at Construction	Significance at construction
Visual effects due to construction impacts of the proposed development.	Viewpoint 6	Medium	Low (Adverse)	Minor (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 7	High	Negligible (Adverse)	Minor (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 8	Medium	Medium (Adverse)	Moderate (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 9	Medium	Medium (Adverse)	Moderate (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 10	Medium	Medium (Adverse)	Moderate (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 11	High	Low (Adverse)	Minor (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 12	High	Medium (Adverse)	Moderate (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 13	Medium	Low (Adverse)	Minor (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 14	High	Medium (Adverse)	Moderate (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 15	N/A	N/A	N/A
Visual effects due to construction impacts of the proposed development.	Viewpoint 16	Medium	Medium (Adverse)	Moderate (Adverse)

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at Construction	Significance at construction
Visual effects due to construction impacts of the proposed development.	Viewpoint 17	Medium	Low (Adverse)	Minor (Adverse)
Visual effects due to construction impacts of the proposed development.	Viewpoint 18	High	Medium (Adverse)	Moderate (Adverse)

# **Operation**

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at year 1 (prior to established mitigation planting)	Significance at year 1 (prior to established mitigation)	Mitigation	Magnitude at year 15 (following establishment of mitigation planting)	Significance at year 15 (following establishment of mitigation planting)
Loss or degradation of character due to the on completion impacts of the proposed development.	Banwen Uplands LCA	Medium	Low (Adverse)	Minor (Adverse)	Mitigation Planting across proposed development.	Low (Adverse)	Minor (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Black Mountain Southern Fringe LCA	Medium	Negligible (Adverse)	Negligible (Adverse)	Mitigation Planting across proposed development.	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Bryn Henllys Reclaimed Open Cast LCA	Low	Negligible (Adverse)	Negligible (Adverse)	Mitigation Planting across proposed development.	Negligible (Adverse)	Negligible (Adverse)

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at year 1 (prior to established mitigation planting)	Significance at year 1 (prior to established mitigation)	Mitigation	Magnitude at year 15 (following establishment of mitigation planting)	Significance at year 15 (following establishment of mitigation planting)
Loss or degradation of character due to the on completion impacts of the proposed development.	Coelbren Settlement LCA	Low	Low (Adverse)	Minor (Adverse)	Mitigation Planting across proposed development.	Low (Adverse)	Minor (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Cwm Twrch LCA	Medium	Negligible (Adverse)	Negligible (Adverse)	Mitigation Planting across proposed development.	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Dulais Valley LCA	Medium	Low (Adverse)	Minor (Adverse)	Mitigation Planting across proposed development.	Low (Adverse)	Minor (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Fforest Fawr LCA	High	Low (Adverse)	Minor (Adverse)	Mitigation Planting across proposed development.	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Head of Dulais Valley LCA	Medium	Low (Adverse)	Minor (Adverse)	Mitigation Planting across proposed development.	Low (Adverse)	Minor (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Hirfynydd LCA	Medium	Low (Adverse)	Minor (Adverse)	Mitigation Planting across proposed development.	Negligible (Adverse)	Negligible (Adverse)

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at year 1 (prior to established mitigation planting)	Significance at year 1 (prior to established mitigation)	Mitigation	Magnitude at year 15 (following establishment of mitigation planting)	Significance at year 15 (following establishment of mitigation planting)
Loss or degradation of character due to the on completion impacts of the proposed development.	Mynydd Allt y grug LCA	Medium	Negligible (Adverse)	Negligible (Adverse)	Mitigation Planting across proposed development.	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Mynydd Marchywel LCA	Medium	Negligible (Adverse)	Negligible (Adverse)	Mitigation Planting across proposed development.	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Mynydd Uchaf, Mynydd Garth & Cefn Gwrhyd LCA	Medium	Negligible (Adverse)	Negligible (Adverse)	Mitigation Planting across proposed development.	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Nant Helen Reclaimed Uplands LCA	Medium	Medium (Adverse)	Moderate (Adverse)	Mitigation Planting across proposed development.	Medium (Adverse)	Moderate (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Slopes of Cefn Gwrhyd & Cwm Egel LCA	Medium	Negligible (Adverse)	Negligible (Adverse)	Mitigation Planting across proposed development.	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Swansea Valley LCA	Medium	No Change	Neutral	Mitigation Planting across	No Change	Neutral

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at year 1 (prior to established mitigation planting)	Significance at year 1 (prior to established mitigation)	Mitigation	Magnitude at year 15 (following establishment of mitigation planting)	Significance at year 15 (following establishment of mitigation planting)
					proposed development.		
Loss or degradation of character due to the on completion impacts of the proposed development.	Swansea Valley Settlements LCA	Medium	Low (Adverse)	Minor (Adverse)	Mitigation Planting across proposed development.	Low (Adverse)	Minor (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Upland Settlements	Medium	Negligible (Adverse)	Negligible (Adverse)	Mitigation Planting across proposed development.	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Waterfall Country and Southern Valleys LCA	High	Low (Adverse)	Minor (Adverse)	Mitigation Planting across proposed development.	Negligible (Adverse)	Negligible (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Wooded Tawe Valley LCA	Medium	Medium (Adverse)	Moderate (Adverse)	Mitigation Planting across proposed development.	Low (Adverse)	Minor (Adverse)
Loss or degradation of character due to the on completion impacts of the proposed development.	Y Mynydd Du LCA	High	Medium (Adverse)	Moderate (Adverse)	Mitigation Planting across proposed development.	Low (Adverse)	Minor (Adverse)

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at year 1 (prior to established mitigation planting)	Significance at year 1 (prior to established mitigation)	Mitigation	Magnitude at year 15 (following establishment of mitigation planting)	Significance at year 15 (following establishment of mitigation planting)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 1	High	Medium (Adverse)	Moderate (Adverse)	Planting on Northern Embankment (Implemented as part of Nant Helen Complementar y Restoration Earthworks) and Area L-01.	Low (Adverse)	Minor (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 2	High	High (Adverse)	Major (Adverse)	Planting on Northern Embankment (Implemented as part of Nant Helen Complementar y Restoration Earthworks) and Area L-01.	Medium (Adverse)	Moderate (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 3	High	High (Adverse)	Major (Adverse)	Planting on Northern Embankment (Implemented as part of Nant Helen	Medium (Adverse)	Moderate (Adverse)

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at year 1 (prior to established mitigation planting)	Significance at year 1 (prior to established mitigation)	Mitigation	Magnitude at year 15 (following establishment of mitigation planting)	Significance at year 15 (following establishment of mitigation planting)
					Complementar y Restoration Earthworks).		
Visual effects due to the operational impacts of the proposed development.	Viewpoint 4	High	High (Adverse)	Major (Adverse)	Planting on Northern Embankment (Implemented as part of Nant Helen Complementar y Restoration Earthworks).	Low (Adverse)	Minor (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 5	High	High (Adverse)	Major (Adverse)	Planting on Northern Embankment (Implemented as part of Nant Helen Complementar y Restoration Earthworks).	Low (Adverse)	Minor (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 6	Medium	Medium (Adverse)	Moderate (Adverse)	Planting on Northern Embankment (Implemented as part of Nant	Low (Adverse)	Minor (Adverse)

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at year 1 (prior to established mitigation planting)	Significance at year 1 (prior to established mitigation)	Mitigation	Magnitude at year 15 (following establishment of mitigation planting)	Significance at year 15 (following establishment of mitigation planting)
					Helen Complementar y Restoration Earthworks) and Area L-01.		
Visual effects due to the operational impacts of the proposed development.	Viewpoint 7	High	Medium (Adverse)	Moderate (Adverse)	Planting on Northern Embankment (Implemented as part of Nant Helen Complementar y Restoration Earthworks) and Area L-01.	Low (Adverse)	Minor (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 8	Medium	Medium (Adverse)	Moderate (Adverse)	Planting on Northern Embankment (Implemented as part of Nant Helen Complementar y Restoration Earthworks) and Area L-01.	Low (Adverse)	Minor (Adverse)

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at year 1 (prior to established mitigation planting)	Significance at year 1 (prior to established mitigation)	Mitigation	Magnitude at year 15 (following establishment of mitigation planting)	Significance at year 15 (following establishment of mitigation planting)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 9	Medium	Medium (Adverse)	Moderate (Adverse)	Planting on Northern Embankment (Implemented as part of Nant Helen Complementar y Restoration Earthworks).	Medium (Adverse)	Moderate (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 10	Medium	Medium (Adverse)	Moderate (Adverse)	Area L-05, L- 06 and L-07.	Low (Adverse)	Minor (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 11	High	Medium (Adverse)	Moderate (Adverse)	Area L-07.	Low (Adverse)	Minor (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 12	High	Medium (Adverse)	Moderate (Adverse)	Area L-06 and L-07.	Low (Adverse)	Minor (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 13	Medium	Medium (Adverse)	Moderate (Adverse)	Area L-01.	Low (Adverse)	Minor (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 14	High	High (Adverse)	Major (Adverse)	Area L-01.	High (Adverse)	Major (Adverse)

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude at year 1 (prior to established mitigation planting)	Significance at year 1 (prior to established mitigation)	Mitigation	Magnitude at year 15 (following establishment of mitigation planting)	Significance at year 15 (following establishment of mitigation planting)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 15	N/A	N/A	N/A	N/A	N/A	N/A
Visual effects due to the operational impacts of the proposed development.	Viewpoint 16	Medium	Medium (Adverse)	Moderate (Adverse)	Area L-02.	Low (Adverse)	Minor (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 17	Medium	Low (Adverse)	Minor (Adverse)	Area L-03.	Negligible (Adverse)	Negligible (Adverse)
Visual effects due to the operational impacts of the proposed development.	Viewpoint 18	High	Medium (Adverse)	Moderate (Adverse)	Area L-03 and L-04.	Low (Adverse)	Minor (Adverse)