Tyddyn Forgan Energy Storage System

Second Issue

Landscape and Visual Appraisal

Draft Issue

Net Zero Twenty Six

February 2025

Document prepared on behalf of Net Zero Twenty Six Limited

TETRA TECH

Atlantic House, Greenwood Close, Cardiff Gate Business Park, Cardiff, CF23 8RD

Tetra Tech Limited. Registered in England number: 01959704

Tetra Tech Limited. Registered in England number: 01959704

Registered Office: 3 Sovereign Square, Sovereign Street, Leeds, United Kingdom, LS1 4ER

DOCUMENT CONTROL

Document:	Landscape and Visual Appraisal
Project:	Tyddyn Forgan Energy Storage System
Client:	Net Zero Twenty Six
Project Number:	Second Issue
File Origin:	\\lds-dc-vm-101\Data\Projects\784-B068934_Tyddyn_Forgan_ESS\60_Output\61_WIP\Landscape\Documents\LVA\B068934 Tyddyn Forgan LVA v1.docx

Revision:	N/A	**Prepared by:**	Marcus Pinker Principal Landscape Architect
Date:	February 2025	**Checked by:**	Emily Jones Director Landscape Architect
Status:	First issue - Draft	**Approved By:**	Suzanne Stamp Associate Director Landscape Architect
Description of Revision:	N/A		

Revision:	V2	**Prepared by:**	Emily Jones Director Landscape Architect
Date:	24th February 2025	**Checked by:**	Debbie Chung Landscape Architect
Status:	Second Issue - Draft	**Approved By:**	Martin Chisholm Director Landscape Architect
Description of Revision:	Minor corrections		

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1.1 Tetra Tech is instructed by Net Zero Twenty Six Limited to prepare this Landscape and Visual Appraisal (LVA) which relates to the proposed construction of an Energy Storage System (ESS) on land at Tyddyn Forgan, Bangor, Gwynedd.

1.2 SCOPE OF THE APPRAISAL

1.2.1 The proposal is for the construction of an ESS and all associated infrastructure plus necessary landscape works. The overall site area is approximately 4.5ha, including the proposed cabling route. The construction phase of the development also is likely to include necessary compounds, cabins and storage of materials, although exact details of these have not been provided.

1.2.2 This Landscape and Visual Appraisal (LVA) provides an assessment of the effects of the proposed development, on the landscape of the site and its context. The design of the proposed development and the identification of mitigation measures incorporated within the design to minimise adverse effects, is informed by the findings of the appraisal. In this LVA, effects on features identified as important to the scenic quality, or effects on the landscape character of the site and its setting are assessed. Effects on peoples' views of the site and its setting, or visual amenity, are also assessed.

1.2.3 For the purposes of assessing the landscape and visual effects of this proposal, study areas have been defined:

- The "Site" location as shown on **Figure LA.01**;
- The "landscape context" extends to a radius of 2km; and
- The visual study area extends to between 1km and 3km from the Site, depending on intervening topography and vegetation.

1.2.4 The Site is the area covered by the red line boundary, see **Figure LA.07** for its extent. The proposed ESS compound is situated in the western part of the red line area and is where all construction, other than a buried cable route, is proposed to be undertaken.

1.2.5 The objectives of the appraisal are to:

- Describe and evaluate the landscape of the site and surrounding landscape context and visual amenity of the surrounding area, which might be affected by the proposed development;
- Examine the development proposals and analyse the potential effects on the landscape and visual amenity associated with the scheme's design or operation;
- Provide an assessment of the landscape and visual effects of the proposed development with integral mitigation measures in place.

1.2.6 The LVA is presented with separate sections dealing with effects on landscape, effects on visual amenity, and cumulative effects. The LVA is illustrated by plans and photographs, as follows:

Figure LA.01	Site Location Plan
Figure LA.02	Designations
Figure LA.03	Public Access
Figure LA.04	Landscape Character
Figure LA.05	LANDMAP
Figure LA.06	Topography
Figure LA.07	Site Context
Figure LA.08	Zone of Theoretical Visibility
Figure LA.09	Viewpoint Photographs
Figure LA.10	Site Photographs
Figure LA.11	Photomontages

1.2.7 Detailed information is presented in Appendices as follows:

Appendix 1	General Assessment Methodology
Appendix 2	Policy
Appendix 3	LANDMAP
Appendix 4	List of Figures

1.3 APPRAISAL METHODOLOGY

1.3.1 The methodology used for assessing the landscape and visual effects is based on the recommendations in Guidelines for Landscape and Visual Impact Assessment 3rd Edition published by The Landscape Institute and the Institute of Environmental Management & Assessment in 2013 (GLVIA3) and Technical Guidance Note LITGN-2024-01, Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3) published August 2024. A summary of the general methodology used is set out in Appendix 1.

1.3.2 This appraisal comprises a non-Environmental Impact Assessment (EIA) LVA. The Landscape Institute advises in relation to Landscape and Visual Impact Assessment (LVIA) in EIA verses non-EIA appraisals, in its "Technical Guidance Note LITGN-2024-01 Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3),"[1] as follows:

> "In carrying out an LVA, the same principles and process as set out in GLVIA3 may be applied to report on effects (identifying the relative importance/ levels of the effects on a scale with reference to sensitivity and magnitude of effect), but it is not required to establish whether the effects arising are or are not significant. Effects should be comparable between LVA and LVIA. For example, a 'moderate effect' should be the same in both assessment contexts."

[1] https://www.landscapeinstitute.org/wp-content/uploads/2024/08/LITGN-2024-01-GLVIA3-NC_Aug-2024.pdf [accessed February 2025]

1.3.3 The appraisal process comprises a combination of desk studies and field surveys, with subsequent analysis, and involved:

- A review of landscape designations and planning policies for the landscape, and of other landscape studies relevant to the area, including national and local landscape character assessments and LANDMAP;
- A survey of the site and landscape context study areas and inspection of views of the site from publicly accessible viewpoints, including a photographic survey. The surveys were carried out on 29th January 2025;
- Selection of viewpoints in discussion with A. Rhys Roberts, Senior Development Management Officer, at Gwynedd Council;
- Evaluation of the features and elements of the landscape and their contribution to the landscape character, context and setting, based on these studies;
- Analysis of the development proposals and consideration of potential landscape and visual effects;
- Assessment of the susceptibility and sensitivity of the landscape to the changes likely to arise from the development;
- Identification of the extent of theoretic visibility of the development and potentially sensitive viewers and view locations, supported by a viewpoint analysis;
- Consideration of proposals for mitigation measures to avoid, reduce or offset adverse effects; and
- Assessment of magnitude of change arising from the proposal and the degree and nature of effects on the landscape and on visual amenity, with the mitigation proposals in place.

Assessment and mitigation

1.3.4 The effects of the development, whether beneficial or adverse, may vary in nature and degree through its lifecycle and, where feasible, mitigation measures are proposed to be incorporated in the design of the development. Where design measures cannot address identified likely adverse effects, measures such as management of the construction and operational processes are proposed. The purpose of mitigation measures is, first, to prevent or avoid the potential adverse effects identified, and if that is not possible, to reduce the potential adverse effect. Where notable adverse effects are unavoidable, the purpose is to offset or compensate for the effect where possible.

1.3.5 Details of the assessment criteria for landscape effects and visual effects are set out in those respective sections.

1.4 WEATHER

1.4.1 The weather is a factor affecting the assessment of, especially, visual impacts. The Met Office[2] publish average statistics for weather patterns for the region, monthly and annual, for maximum and minimum temperatures, days of air frost, hours of sunshine, amount of rainfall - both generally and the number of days when rainfall is above 1mm. For Aber No 2, at approximately 5.5km to the southeast, the nearest Climate Station to where the site is located:

- Rainfall above 1mm per day, which limits visibility, occurs on an average of 158.5 days in the year, about 43.5% of the year;
- There are on average 14.5 days when air frost occurs, which can produce hazy conditions limiting visibility, about 4 of the year; and
- There is an average of 1457.5 hours of sunshine per annum for the Station, more than the England NW & Wales N District average of 1374.3 hours.

1.5 GUIDANCE

1.5.1 In addition to GLVIA3, the Landscape Institute's Technical Guidance Note, Visual Representation of Development Proposals, September 2019[3] was referred to.

1.5.2 Relevant policy, landscape character assessments, and other contextual information sources were also referred to, including:

- LANDMAP assessment information;
- National Landscape Character Area descriptions, published by Natural Resources Wales (NRW), 2014; and
- Policies relevant to the landscape and visual amenity in national and regional policy including Planning Policy Wales; Anglesey and Gwynedd Joint Local Development Plan 2011 – 2026; Gwynedd Archaeological Trust Historic landscape Characterisation – areas 23 Arfon and 54 Improved fields above Pentir; Registered Historic Landscapes in Wales – Dinorwig; National Landscape Character Areas – 03 Arfon and 06 Snowdonia.

1.6 PHOTOGRAPHY

1.6.1 Photographs have a special role in describing landscape character and illustrating key views. In order for photography to be representative and to create an image that is as similar as possible to that which is seen with the human eye, the Landscape Institute (LI) advises using a lens with a focal length equivalent to 50 mm for a 35 mm Single Lens Reflex (SLR) camera, and a horizontal field of view of a little under 40 degrees. The equipment used for the appraisal photography includes:

- A Canon EOS 5D Mark iii digital SLR camera with a full frame sensor;

[2] The data quoted are those for Aber No 2 / England NW and Wales N, obtained from The Met Office website: https://www.metoffice.gov.uk/research/climate/maps-and-data/location-specific-long-term-averages/gcmnuetjg [accessed February 2025]
[3] The Landscape Institute Technical Guidance Note 06/19, Visual Representation of Development Proposals, September 2019, on LI website: https://www.landscapeinstitute.org/visualisation/ [accessed February 2025]

- Canon 50mm EF 1:1.8 II lens; and
- Manfrotto tripod and panoramic head.

1.6.2 Photographs were taken with a focal length of 50mm.

1.6.3 Landscape photography includes wide angle or panoramic views requiring a sequence of photographs to be taken across the view. Where this approach is taken, a series of overlapping photographs are digitally spliced together in PTGui Pro using a cylindrical projection to provide a panorama approximating to the normal field of view in a landscape context. Where necessary, the contrast and brightness of individual photographs is slightly manipulated in order to create a consistent panorama without visible joins.

1.6.4 The viewpoint locations were established using a camera mounted GPS device and verified against site survey.

1.7 CONSULTATION

1.7.1 Consultation with Gwynedd Council was carried out regarding the viewpoint assessment locations. The following were discussed:

- The locations of proposed viewpoints submitted to Gwynedd Council were agreed in an email from A. Rhys Roberts, Senior Development Management Officer, on 27th January 2025.

1.8 LIMITATIONS AND ASSUMPTIONS

1.8.1 This LVA has been based on the available information in drawings provided by CADmando: Tyddyn Forgan ESS Proposed Site Layout, Plan PL-01, Rev 04 (dated 14.02.2025).

1.8.2 All site surveys were undertaken from publicly accessible locations only. The viewpoint surveys were carried out during winter in dry and clear weather conditions, which is not that common for the time of year in the area. This may have resulted in increased visibility from some viewpoint locations than is available at many times for the area, as discussed in section 1.4 above.

1.8.3 It has been assumed that the tree belts adjacent to the southwestern and southeastern site boundary will be retained and that there will be no works within their Root Protection Areas. It has also been assumed that these trees will be protected during the construction period.

2.0 LANDSCAPE POLICIES AND DESIGNATIONS

2.1 NATIONAL AND LOCAL POLICY

Future Wales: The National Plan 2040

2.1.1 Future Wales sets out the development plan for Wales, influencing "all levels of the planning system in Wales and will help shape Strategic and Local Development Plans."[4] The plan promotes development that enhances our wellbeing and our quality of life"[5] and embeds the principles of the Well-being of Future Generations (Wales) Act 2015.

2.1.2 The key policies that are of relevance to the proposed development include:

- **Policy 17 – Renewable and Low Carbon Energy and Associated Infrastructure** requires that applications for renewable energy "will not have an unacceptable adverse impact on the environment" and that "new strategic grid infrastructure for the transmission and distribution of energy should be designed to minimise visual impact on nearby communities".

Planning Policy Wales

2.1.3 Planning Policy Wales (PPW) Edition 12, February 2024, sets out the land use planning policies of the Welsh Government. Its primary objective is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales, as required by the Planning (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation and resultant duties such as the Socio-economic Duty.

2.1.4 PPW translates The Welsh Government's commitment to sustainable development into the planning system, to be taken into account when preparing development plans, so that it can play an appropriate role in moving towards sustainability.

2.1.5 Under 'Placemaking in Action', paragraph 3.9 on character states that "the special characteristics of an area should be central to the design of a development. The layout, form, scale and visual appearance of a proposed development and its relationship to its surroundings are important planning considerations".

2.1.6 Paragraph 3.60 under 'Development in the Countryside' requites that "new building in the open countryside away from existing settlements or areas allocated for development in development plans must continue to be strictly controlled. All new development should be of a scale and design that respects the character of the surrounding area".

2.1.7 Under 'Landscape' in Distinctive and Natural Places', paragraph 6.3.3 states that "All the landscapes of Wales are valued for their intrinsic contribution to a sense of place, and local authorities should protect and enhance their special characteristics".

[4] https://gov.wales/future-wales-national-plan-2040-0 [accesses February 2025]
[5] Page 4, Future Wales The National Plan 2040

2.1.8 Paragraph 6.3.5 under 'National Parks and Areas of Outstanding Natural Beauty' requires that "planning authorities have a statutory duty to have regard to National Park and AONB purposes. This duty applies in relation to all activities affecting National Parks and AONBs, whether those activities lie within, or in the setting of, the designated areas".

Local Policy

2.1.9 The site lies within the boundaries of Gwynedd Council. Local planning policy relevant to the proposed development of the site is provided by the Anglesey and Gwynedd Joint Local Development Plan 2011 (JDLP) – 2026 (adopted 2017). Relevant policies relating to the proposed development are outlined below. Details of these policies can be found in **Appendix 2** of this report.

Anglesey and Gwynedd Joint Local Development Plan 2011 - 2026

- **Strategic Policy PS 5: Sustainable Development** states that "development will be supported where it is demonstrated that they are consistent with the principles of sustainable development" and that all proposals should "promote high standards of design that make a positive contribution to the local area".
- **Strategic Policy PS 6: Alleviating and Adapting to the Effects of Climate Change** requires that "in order to alleviate the effects of climate change, proposals will only be permitted where it is demonstrated that they have fully taken account of and responded to … using low or zero carbon energy technologies" that "protect visual amenities, the natural, built and historic environment and the landscape".
- **Policy PCYFF 3: Design and Place Shaping** stipulates that "all proposals will be expected to demonstrate high quality design which fully takes into account the natural, historic and built environmental context and contributes to the creation of attractive, sustainable places", including that "it complements and enhances the character and appearance of the site, … or area in terms of siting, appearance, scale, height, massing and elevation treatment", that "it respects the context of the site and its place within the local landscape, … and it takes account of the site topography and prominent skylines or ridges", and that "it utilises materials appropriate to its surroundings and incorporates hard and soft landscaping and screening where appropriate".
- **Policy PCYFF 4: Design and Landscaping** states that "all proposals should integrate into their surroundings and that "proposals that fail to show (in a manner appropriate to the nature, scale and location of the proposed development) how landscaping has been considered from the outset as part of the design proposal will be refused". This includes that a landscape scheme should:
  - Demonstrate how the proposed development has given due consideration to the Landscape Character Area Assessment;
  - Demonstrate how the proposed development respects the natural contours of the landscape;
  - Demonstrate how the proposed development respects and protects local and strategic views;

- Respect, retain and complement any existing positive natural features, landscapes, or other features on site; and
- Identify trees, hedgerows, water courses and topographical features to be retained.

- **Strategic Policy PS 7: Renewable Energy Technology** states that free-standing renewable energy technology development will be achieved by "ensuring that installations in areas covered by international or national landscape designations and visible beyond their boundaries, or areas of local landscape value, … do not individually or cumulatively compromise the objectives of the designations especially with regard to landscape character, and visual impact" and that installations outside of designated will be supported "provided that the installation would not cause significant demonstrable harm to landscape character, biodiversity, or amenity of residential or holiday accommodation, either individually or cumulatively".
- **Policy ADN 3: Other Renewable Energy and Low Carbon Technologies** states that "proposals for renewable and low carbon energy technologies, other than wind or solar, which contribute a low carbon future will be permitted", including that:
  - All impacts on landscape character, heritage assets and natural resources have been adequately mitigated, ensuring that the special qualities of all locally, nationally and internationally important landscape, biodiversity and heritage designations, including, where appropriate, their settings are conserved or enhanced;
  - That the proposal does not have a significant unacceptable effect on visual amenities;
  - That the proposal is mitigated to ensure that there aren't any significant unacceptable effects on sensitive uses located nearby; and
  - That the development does not have cumulative unacceptable effect with any prominent features in the landscape.
- **Strategic Policy PS 19: Conserving and where Appropriate Enhancing the Natural Environment** states that the "Councils will manage development so as to conserve and where appropriate enhance the Plan area's distinctive natural environment" and that when determining a planning application, consideration will be given to: safeguarding the Plan area's habitats and landscapes; protecting or where appropriate enhancing sites of international, national, regional and local importance and, where appropriate, their settings; protecting, retaining or enhancing the local character and distinctiveness of the individual Landscape Character Areas; and protecting, retaining or enhancing trees, hedgerows or woodland of visual or amenity value.
- **Policy AMG 2: Special Landscape Areas** relates to considering proposals within Special Landscape Areas (SLA), requiring that "development should aim to maintain, enhance or restore the recognised character and qualities of the SLA". The site does not lie within an SLA, however they are present within 1.4km and 2km of the site boundary.
- **Policy AMG 3: Protecting and Enhancing Features and Qualities that are Distinctive to the Local Landscape Character** requires that "proposals that would have significant adverse impact upon landscape character … must demonstrate through a landscape

assessment how landscape character has influenced the design, scale, nature and site selection of the development". "A proposal will be granted provided it doesn't have significant adverse impact upon features and qualities which are unique to the local landscape."

- **Policy AMG 5: Local Biodiversity Conservation** stipulates that "proposals must protect and, where appropriate, enhance biodiversity that has been identified as being important to the local area by avoiding significant harmful impacts through the sensitive location of development" and by "considering opportunities to create, improve and manage wildlife habitats and natural landscape. ..."

Supplementary Planning Guidance

2.1.10 The Gwynedd Council website states that "together with the Councils decision to adopt the JLDP it was decided that the SPG which had been adopted to support the previous Unitary Development Plan should remain, where appropriate, as material planning consideration in determining planning applications, until they are replaced by a new SPG or withdrawn."

SPG: Landscape Character

2.1.11 The Gwynedd Council SPG on landscape character was adopted in 2009. The SPG states in paragraph 51 that "when assessing planning applications that are likely to have an impact on the character of the landscape, proposals should be reviewed against the relevant landscape character area statements. … This information should be assessed where development could have an impact upon the form, appearance and setting of the built and natural landscape and its features. … In addition, where a site lies on or near the boundary of another character area, or where potential visual impacts are wide ranging, the adjacent character area(s) must be referred to as well."

2.1.12 Paragraph 53 requires that "opportunities to enhance landscape character and minimise negative impacts on it should be addressed through the development location and design process".

SPG: Maintaining and Creating Distinctive and Sustainable Communities

2.1.13 The Gwynedd Council SPG on Maintaining and Creating Distinctive and Sustainable Communities was adopted in 2019. Under 'Landscape' and 'matters to be considered' in Table 3, the SPG states that "landscapes … are intrinsic parts of the special features of the Plan's area, contributing to their character and general sense of place. Sustainable developments are ones that protect and improve the character of the landscape … of the Plan's area, along with the quality of the views of Snowdonia National Park, and which have been designed, located, scaled and landscaped to support and improve the key characteristics of the landscape, public views and open spaces."

2.2 DESIGNATIONS

2.2.1 Designations provide an indication of landscape value. They are areas that have been recognised for qualities such as scenic beauty and the recreational potential of the landscape. Designations are shown on **Figure LA.02**.

National landscape designations

National Parks and National Landscapes

2.2.2 Eryri National Park is approximately 6.5km to the east of the proposed ESS compound at its nearest point, or from between 6.8km and 7.5km to the southeast and south. Ynys Mon National Landscape is approximately 3.6km to the west of the proposed ESS compound at its nearest point. Both of these designated areas are situated outside of the study area and are unlikely to be affected by a development of this nature at the site.

Local landscape designations

Special Landscape Areas

2.2.3 In paragraph 6.5.10 the LDP states that "there are some areas of Gwynedd … with special features meaning that it is appropriate for them to be afforded additional protection. These areas have been identified as Special Landscape Areas … a non-statutory designation based on LANDMAP".

2.2.4 There are 3 SLAs within 2.5km of the proposed ESS compound, the nearest, at 1.4km to the southeast, is the **North-Western Fringes of Snowdonia SLA**, the **Vaynol Estate and Surrounds SLA** is located 2.0km to the northwest and the **Bangor Mountain & Minffordd rural hinterland SLA** is located 2.1km to the northeast. The latter two SLAs are situated on the periphery of the study area and it is unlikely that the proposed development would influence them.

2.2.5 The 2012 'Review of Special Landscape Areas in Gwynedd and Anglesey' identified the following special qualities for the SLAs

North-Western Fringes of Snowdonia SLA

- The rugged upland qualities of the landscape, with strong feelings of remoteness on hill summits;
- The open character of the uplands and hill summits, contrasting with the enclosed small-scale farmland and mining villages below;
- Valued tracts of semi-natural habitat (including acid grassland, heathland, wetland scrub and oak woodland), including parts of the Snowdonia SSSI and SAC, Llyn Padarn SSSI, Coed Dinorwig SSSI/LNR, and Moel Tryfan SSSI;
- The historic and cultural significance of the landscape, particularly its slate mining heritage within the Ogwen Valley, Dinorwig and Nantle Valley Landscapes of Outstanding Historic Interest;
- The landscape's function as a distant backdrop to the Llŷn and Anglesey AONBs; and

- The strong cultural and visual relationship between the SLA and Snowdonia National Park.

Historic and cultural landscape designations

2.2.6 Relevant historic and cultural designations are shown on **Figure LA.02**.

2.2.7 The setting of historic and cultural designations is a consideration during the preparation of landscape and visual appraisals as these features inform the overall landscape character, quality and value of the area. The LVA does not address the effects on heritage assets however it considers the contribution these features make to landscape value and scenic quality. Refer to the Archaeological and Heritage Desk-Based Assessment for impact of the proposed development on heritage features.

World Heritage Site

2.2.8 The Dinorwig Slate Quarry Mountain Landscape WHS is located 3.1km east or 3.6km to the southeast of the proposed ESS compound. Objective 5 of the Nomination as a WHA Property Management Plan 2020-2030 states that "the setting and views into and out of the proposed World Heritage Site will be managed to sustain the proposed Outstanding Universal Value of the property for the benefit of future generations", with principle 5.1 stating that "existing landscape protection measures and the land use planning framework will be used as a management tool to protect the essential setting and key views into and out of the proposed World Heritage Site".

Registered Landscapes of Outstanding and of Special Interest in Wales

2.2.9 The Site is located in the Dinorwig registered historic landscape, which covers the southwestern half of the study area and extends from the Menai Strait / Afon Menai to the northwest, to Snowden / Yr Wyddfa to the southeast. Cadw register the area as being an Outstanding historic landscape.[6]

2.2.10 2.4km to the east of the proposed ESS compound is Ogwen Valley registered historic landscape, which is also registered by Cadw as being an outstanding historic landscape.

Conservation areas and listed buildings

2.2.11 At 650m to the east, the nearest listed buildings to the proposed ESS compound are a group of 9 Grade II listed buildings at Ty'n Llwyn Farm. The only other listed structure with 1.5km of the proposed ESS compound is the Grade II listed Pont-y-felin,1.4km to the east.

2.2.12 The nearest conservation areas to the proposed ESS compound, at 2.4km to the northwest are Vaynol / Y Faenol and Aberpwll / Y Felinheli. The former contains the nearest Grade I and Grade II* listed structures to the proposed ESS compound at 2.8km, which are the Grade I listed Vaynol Hall, Chapel of St Mary and Vaynol Old Hall and the the Grade II* listed Long Barn, Gateway with inscription, Terraced Garden, Arched wall to forecourt and The Best

[6] https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=en&id=HLW%20(Gw)%206 [accessed February 2025]

Stables. The conservation area also includes a further 26 Grade II listed buildings and structures.

Scheduled monuments

2.2.13 The nearest Scheduled Monument to the site is the Rectangular Earthwork 110m NW of Coed Ty Mawr, a medieval moated site located 850m to the south of the proposed ESS compound. Fodol Ganol Enclosed Hut Group, a prehistoric enclosed hut circle, is located 1.4km to the north of the proposed ESS compound, while the nearby Gors y Brithdir Enclosed Hut Group & Ancient Fields, also a prehistoric enclosed hut circle, is 1.5km to the north.

Registered historic parks and gardens

2.2.14 Vaynol / Y Faenol registered park and garden is located 2.0km to the northwest of the proposed ESS compound. "It is registered for its well-preserved walled and terraced Elizabethan garden which survives at the centre of a superb, walled, coastal landscape park, with recently restored lake, in an outstanding setting with the Strait on one side and Snowdonia on the other."[7] The proposed development is not visible from the designated area and is screened by topography in the designated significant views.

Ecological designations

2.2.15 Ecological designations, although not specifically related to landscape amenity and not assessed within this report, are an indication of landscape value. Relevant ecological designations are shown on **Figure LA.02**.

Special Areas of Conservation (SAC)

2.2.16 The Eryri / Snowdonia SAC is 3.0km to the southeast of the proposed ESS compound, while the Y Fenai a Bae Conwy / Menai Strait and Conwy Bay SAC is located 3.1km to the west. Both are outside of the study area.

Sites of Special Scientific Interest (SSSI)

2.2.17 At 3.0km to the southeast and outside of the study area, Eryri is the nearest SSSI to the proposed ESS compound.

Ancient woodland

2.2.18 There are numerous small parcels of ancient woodland spread across the study area, with two areas in proximity to the Site. 190m to the north of the proposed ESS compound is an area of Plantation on Ancient Woodland Site, while 220m to the southeast is a Restored Ancient Woodland Site. The former is part of a woodland belt that screens the Site and adjacent substation in views towards the Site from the north, while the latter does similar in views towards the Site from the southeast.

Public access

[7] https://cadwpublic-api.azurewebsites.net/reports/parkgarden/FullReport?lang=en&id=180 [accesses February 2025]

2.2.19 Public access is shown on **Figure LA.03**.

Public rights of way (PRoW)

2.2.20 Public rights of way are not a feature of the study area and there is a very sparse network present. There are no public rights of way either within the Site or its local area, the nearest are public footpaths either 900m to the south or 1km to the northwest of the proposed ESS compound.

Open access land

2.2.21 The nearest access land to the proposed ESS compound is 2.6km to the southeast and it covers the high ground of Moelyci and Moel Rhiwen. Open views to the west and north towards the Site and to Anglesey /Ynys Mon beyond are available from it.

Long distance footpaths (LDFP)

2.2.22 The Wales Coast Path, which follows the both the southern and northern banks of the Menai Strait / Afon Menai is 3.0km to the northwest of the proposed ESS compound at its nearest point. The North Wales Pilgrim's Way, which skirts the lower slopes of Moelyci, is a similar distance to the southeast and northeast of the proposed ESS compound.

National cycle routes (NCR)

2.2.23 NCR 08 (Lôn Las Cymru), which connects Cardiff to Holyhead, runs adjacent to the A487 and B4547 2.0km to the northwest of the proposed ESS compound. Due to the intervening topography and distance, there are no view of the proposed development available form this route.

2.3 INTERIM SUMMARY

2.3.1 The following elements of the landscape policies and designations are relevant to the assessment of landscape and visual effects of this proposal:

- The impact of the proposed development on the environment, as set out in PPW and in polices in the JLDP, is a material consideration;
- Design considerations to be into account include visual amenities, the natural environment topography, and the landscape (Policies PS 6, PCTFF 3, ADN 3 and PS 19);
- The integration of the proposed development into its surroundings through design and landscaping is to be considered (Policies PCTFF 3 and PCTFF 4);
- The development proposals are to respect the character and context of the Site and its place within the local landscape (Policies PCTFF 4, ADN 3 and AMG 3);
- The conservation and enhancement of the natural environment and the biodiversity on the Site are to be considered in the design (Polices PCTFF 3, PS19 and AMG 5);
- Ensuring that potential adverse effects of the proposed development are contained to a small area and do not have an adverse effect on the National Park, National Landscape,

World Heritage Site and Special Landscape Areas, is a material consideration (Policy AMG 2); and

- The effect of the development on the visual amenity of receptors using areas with public access, including public rights of way, other routes with public access and access land, is to be taken into account (Policies PS7 and ADN3).

3.0 THE PROPOSED DEVELOPMENT

3.1.1 Details of the proposed development are provided on the application plans accompanying the application. This chapter describes the main aspects of the proposed development which may affect the landscape and/or visual amenity. It also identifies features of the proposals which will assist in mitigating adverse landscape and visual impacts.

3.1.2 The proposed development comprises of 100 Energy Storage System (ESS) units, laid out in 2 sets of double parallel rows. Each unit is approximately 2.4m wide, 7.8m long and 2.8m high. In addition to the ESS units, the compound will also contain a 132kv substation (6.8m high), a water tank (2.5m high), a control room building (5.6m high) and 3 containers (2.4m wide, 12.2m long and 2.7m high) for storage, switchgear and a welfare office. The compound will be surrounded by a 2.4m high palisade security fence with security cameras around its perimeter. The proposals also include access roads, service roads around the ESS units in the compound, and an underground cable connection to the substation to the north – see drawing Tyddyn Forgan Proposed Site Layout (PL-01 Rev 04) by CADmando in **Appendix 4**.

3.1.3 The development is proposed to be constructed in one phase over a period of approximately 12 months and be operational for 40 years.

3.1.4 The development proposals divide the Site into three distinct areas: the proposed ESS compound; the cable route and access track; and the open land around the proposed ESS compound. The cable route and access road form the northwest boundary of the Site, the access road already exists and forms the access to the Pentir Substation. The cable route extends north-eastwards from the main part of the Site to the substation in a narrow corridor along the alignment of the access track. The proposed ESS compound area, which will contain the majority of the development proposals comprises of an area of approximately 125m west to east and 150m north to south and is situated in the centre of the main part of the site.

Sources of potential effects on landscape and views

3.1.5 The main features of the development proposal which could potentially result in landscape and visual impacts are:

Construction Phase

- Activities and movement of plant and equipment during the construction period, including the temporary structures in the construction compound;
- Clearing the grassland vegetation and topsoil from the development areas;
- The construction of the site access, service roads and development platforms;
- The installation of the ESS units and associated structures and infrastructure;
- Digging the cable trench to the substation;
- Temporary fencing protecting the site perimeter; and

- Potential lighting associated with the construction works.

Operational Phase

- The introduction of the proposed ESS compound and associated infrastructure;
- The introduction of planting within the site; and
- The change of use from pastoral agricultural land to an energy storage facility.

Mitigation measures

3.1.6 The potential for adverse effects on landscape and visual amenity has been recognised and mitigation measures incorporated in the scheme to avoid or reduce adverse effects or to offset or compensate for unavoidable adverse effects.

3.1.7 Mitigation measures incorporated into the scheme design include the provision of screen planting in the western corner of the Site to assist in screening the proposed development from views from passersby on the B4547, and woodland edge / scrub planning along the southwest boundary to grade the existing conifer tree belt into the wet grassland of the Site.

3.1.8 Consideration of the policies in the LDP have been incorporated in the proposed development, these include:

- The location of the Site in an area that already has a character influenced by similar development, while also considering its cumulative impact with these features;
- Strategically placed vegetation that assists in screening views into the Site but does not interfere with the open nature of parts of it;
- Increasing biodiversity with the provision of additional new habitats, including woodland edge and water features, while simultaneously retaining as much of the existing habitat as feasible;
- Locating the Site in an area that is not recognised for its landscape nor contains any notable landscape features, as implied by there being no designations within its context area; and
- The selection of a Site location that is not readily visible in the views available to visual receptors in residential properties or using areas with public access.

4.0 EFFECTS ON THE LANDSCAPE

4.1 INTRODUCTION

4.1.1 This section deals with the effects on the landscape of the site and its surrounding context due to the proposed construction and occupation of the site.

4.2 ASSESSMENT CRITERIA

4.2.1 The assessment process is described generally in section 1.3 above. The general methodology for assessing the effects in this report is set out in **Appendix 1**.

4.2.2 The degree of the likely landscape effects of the proposed development is determined by relating the sensitivity of the receptors to the changes arising from the development proposals, and the degree and nature of the changes in the landscape arising from the proposals.

4.3 LANDSCAPE BASELINE

4.3.1 The landscape baseline is a description and analysis of the existing landscape, against which the effects of the proposed development are assessed. The landscape is described, first, by reference to landscape character assessments for the area in which the site is located, at national and local levels, and then, from site-specific surveys and analysis carried out for the purposes of this assessment.

National landscape character assessment

4.3.2 The desk study has made reference to National Landscape Character Areas (NLCA) for Wales[8]. NLCAs divide Wales into 48 distinct natural areas. Each NLCA "defined at a broad landscape scale throughout Wales. The descriptive profiles for the 48 individual character areas highlight what distinguishes one landscape from another, with reference to their regionally distinct natural, cultural and perceptual characteristics."

4.3.3 The site and the study area are located within the **National Landscape Character Area 03 Arfon**, which covers the lowland area between the Menai Strait / Afon Menai and the Snowdonia / Eryri foothills (**Figure LA.04**). The key characteristics which are relevant to the site and study area are identified as:

- The Arfonian plateau – a broad, gently undulating lowland and valley landform, rising from the coast to about 200m and flanked by the much higher adjacent uplands of Eryri;
- Menai Strait – the tidal channel separating Anglesey and the mainland;
- A dramatic inland panorama of steeply rising mountains - with many views to well-known ridges and peaks, including Snowdon;

[8] https://naturalresources.wales/evidence-and-data/maps/nlca/?lang=en [accessed January 2025]

- Deep 'U' shape valleys emerge from uplands into Arfon – and whose rivers then cross the area. The rivers include the Gregyn, Ogwen, Cegin, Gwyfrai, Seoint and Llyfni, and in the Llanberis area also include the ice-deepened lakes of Llyn Padarn and Llyn Peris;
- Very extensive slate workings – on the flanks of the upland valleys, including associated old mines, levels, railways, waste tips and workshops. Many are at a spectacular scale;
- Pastoral land cover – predominates;
- Wooded valley slopes – by rivers and beside the Menai Strait;
- Lowland – upland contrasts – from the intimate, wooded, lush, soft, sheltered lowland and pastures to the exposed, open, heavily grazed, marginal upland fringes;
- Prehistoric and funerary sites - a rich concentration of burial sites, hill forts and stone-built hut circles and their field systems, which often survive on the more marginal parts of the foothills;
- Landed estates and their designed parklands - from the Medieval and post Medieval periods, such as Penrhyn, Faenol and Glynllifon, on the better land and often with designed parklands and scattered individual trees;
- Settlement pattern relates to sites of strategic significance: river mouths and ports, coastal defensive, where the upland valleys emerge, and near slate workings; and
- The University City of Bangor – occupying a constricted site flanked by coast and wooded hills.

4.3.4 The Visual and Sensory Profile describes the area around the Site as "inland and onto the plateau the mosaic of small fields becomes apparent, primarily pastoral, bounded by combinations of hedgerows, cloddiau and stone walls, and interspersed with hedgerow trees and small coverts".

4.3.5 **National Landscape Character Area 06 Snowdonia**, covers the high ground to the southeast of the study area and is "an extensive, rural upland area, broadly coinciding with the Snowdonia National Park". The key characteristics which are relevant to the site and study area are identified as:

- A mountainous topography - with the principal mountain range orientated broadly north east to south west;
- Wales's sharpest ridges and highest peaks lie within this area – in a landscape often defined by massive, angular skylines. Most famously this includes the massif of Snowdon, with the peak of Yr Wyddfa, highest in England and Wales at 1085m AOD, and a number of radiating ridges;
- U-shaped glacial valleys and corries - carved through the mountainous terrain and deepened by the ice in the last Ice Age;
- An upland character to principle land cover elements - including hill sheep grazing, forestry, heather dominated moorland and upland grassland. Rock outcrops and slate/shale ridges and screes are frequently apparent;

- Moorland and blanket bog – substantial areas with significant ecological interest and large parts of the area are designated SSSI. Species rich crag flora and grassland is a feature of upland areas, for example, at Moel Hebog;
- Prehistoric archaeology - many ritual and funerary sites including cairns, standing stones and stone circles, many located along hill crests, mountains, ridges and passes, often forming strong visual features;
- Ancient stone built remains - deserted stone-built Iron Age, Roman period, Medieval and later, settlements and field systems survive in an almost unbroken "cordon" of relict landscapes along the lower slopes between the Dyfi in the south west and the Conwy in the north east;
- Slate mining heritage - abundant in many parts but notably created the extensive slate landscape of Blaenau Ffestiniog and slate is the principal building material in much of the area. Remains include quarries, waste heaps, mines, levels, workshops and cottages;
- Sparsely populated / few large settlements – confined to valleys, the few include the small towns of Dolgellau and Bala, and the slate town of Blaenau Ffestiniog, and compact valley villages in slate and stone such as Beddgelert and Betws-y-Coed;
- Transport routes affected by steep topography - the majority of the area has few roads, these are routed along valleys, linked by the occasional twisting mountain pass;
- Sublime, picturesque, iconic visual and sensory landscape of great drama – the inspiration for many artists over the last 200 years, part of the great tour for Wordsworth, and others;
- A stronghold of the Welsh language and culture - of small-scale rural farming, of large-scale mineral exploitation. It includes great contrast, and exhibits an intimate relationship between the natural drama and the cultural heritage of its people; and
- Tourism - today Snowdonia is recognised as a National Park and is visited by thousands of tourists who come to experience the natural and cultural heritage. The area forms a great outdoor challenge for many recreational visitors as they explore.

LANDMAP

4.3.6 Landscape Assessment, following the LANDMAP methodology, has been undertaken for Gwynedd Council. The assessment uses the Natural Resources Wales (NRW) / Wales Landscape Partnership Group approach which separates the defining aspects of the landscape into five categories, or aspect layers: geological, habitats, historic, cultural, and visual & sensory. It considers the relationship that exist between people and places; how people have given meaning to places through time and how the physical landscape has shaped their actions, or how their actions have shaped the landscape.

4.3.7 Summarised descriptions for the most relevant aspect areas to the site and its context are outlines below for all five aspect layers. The findings of the LANDMAP studies have formed the basis of the landscape and visual baseline within this appraisal. **Table 4-1** below defines the criteria that LANDMAP uses for evaluating each aspect area.

Table 4-1 Criteria for evaluating LANDMAP Aspect Areas[9]

LANDMAP Evaluation	Definition	Landscape value
Outstanding	of international or national importance	High
High	of regional or county importance	High
Moderate	of local importance	Medium
Low	of little or no importance	Low
Unassessed	insufficient information exists to evaluate	Unknown

4.3.8 Whilst all LANDMAP aspect areas have been considered, for the purposes of this LVA, the main focus is on the most relevant aspect areas to the Site and its context. LANDMAP Guidance Note 46 outlines criteria that can be used to identify the relevant aspect areas when determining the Study Area in the compilation of a LVA. The guidance comprises of a series of filters to existing LANDMAP evidence to help focus the detailed assessment of potentially sensitive landscape and visual receptors on the aspect areas most likely to be affected. The filtering process described within Guidance Note 46 is included in **Appendix 3**, with aspect areas that have been selected to inform determining the value of landscape receptors in the LVA, in accordance with the methodology, recorded in **Table 4.2** below and illustrated on **Figures LA.05-1** to **LA.05-9**.

LANDMAP Summary

4.3.9 The below table summarises the LANDMAP aspect areas that the filtering process identified to help focus the detailed assessment of potentially sensitive landscape and visual receptors on the aspect areas most likely to be affected. The table provides the overall evaluations for each of the aspect areas and the equivalent landscape value in the landscape assessment process. The overall evaluation is used to inform the landscape value of identified landscape receptors (overall evaluations are not provided for the Cultural Landscape Services Aspect Layer).

Table 4-2 Summary of LANDMAP

Aspect Layer	Aspect Area name and Unique ID	Classification (Level 3)	Overall Evaluations	Landscape value
Geological Landscape (**Figures LA.05-2** and **LA.05-7**)	Bangor GWNDDGL110	Lowland plateau	**Moderate**	**Medium**
Landscape Habitats	N/A GWNDDLH683	Mosaic	**Moderate**	**Medium**

[9] LANDMAP Methodology Overview, June 2017 https://cdn.naturalresources.wales/media/681752/landmap-methodology-overview-2017-eng.pdf?mode=pad&rnd=131547814890000000

Aspect Layer	Aspect Area name and Unique ID	Classification (Level 3)	Overall Evaluations	Landscape value
(**Figures LA.05-3** and **LA.05-8**)	N/A GWNDDLH653	Improved Grassland	**Low**	**Low**
Historic Landscape (**Figures LA.05-4** and **LA.05-9**)	Pentir GWNDDHL002	Regular Fieldscapes	**High**	**High**
	Northern Arfon plateau GWNDDHL024	Irregular Fieldscapes	**High**	**High**
	Gwaun GWNDDHL902	Regular Fieldscapes	**Outstanding**	**High**
	Llanddeiniolen / Dinorwic GWNDDHL853	Irregular Fieldscapes	**Outstanding**	**High**
	Hillslopes below Moel y Ci/Rhiwen GWNDDHL851	Irregular Fieldscapes	**Outstanding**	**High**
	Rhiwlas GWNDDHL554	Nucleated Settlement	**Moderate**	**Medium**
Cultural Landscape Services (**Figure LA.05-5**)	Bethel (between Clynnog and Bangor) GWNDDCLS008	Open Rolling Lowland	**N/A**	**Unknown**
	Waen-Pentir GWNDDCLS015	Hillside & Scarp Slopes Grazing	**N/A**	**Unknown**
Visual and Sensory (**Figures LA.05-1** and **LA.05-6**)	Bethel (between Clynnog and Bangor) GWNDDVS006	Open Rolling Lowland	**Moderate**	**Medium**
	Waen-Pentir GWNDDVS006	Hillside & Scarp Slopes Grazing	**Moderate**	**Medium**
	Cefn-du GWNDDVS012	Upland Grazing	**High**	**High**

County and District level landscape assessments

4.3.10 The most recently published Landscape Character assessment of relevance to the Site is the **Gwynedd Landscape Strategy - Update (2012)**. The Site is located within the northeastern edge of **Landscape Character Area 04 Caernarfon Coast and Plateau**, which also covers the southwestern part of the study area. Covering the northeastern part of the study area from approximately 400m from the proposed ESS compound is **LCA 01 Bangor Coastal Plain**. The southeastern part of the study area and from approximately 350m south of the proposed ESS compound is **LCA 02 Penisarwaun Plateau**. Outside of the study area are **LCA 03 Llanberis Bethesda**, which covers the high ground to its southeast, and **LCA 16 Menai Coas**t, which covers the lowlands to its northwest. Intervisibility between LCA 03 and the proposed development is a consideration; there is no invisibility with LCA 16 therefore it has been scoped out of the assessment. Landscape Character Areas (LCA) are shown on **Figure LA.04**.

LCA 04 Caernarfon Coast and Plateau

4.3.11 The key characteristics relevant to the study area are identified as:

- A long broad fringe adjacent to the Menai Coast LCA, extending to the upland fringes of Moel Tryfan and Mynydd y Cillgwyn;
- Character of landscape influenced by glacial actions and resultant deposits and landforms;
- Mixture of settlement types – small villages to large towns;
- Range of coastal habitats and landscapes, which contribute to character of the area; and
- Area provides an important setting to the Anglesey AONB to the north (beyond the Menai Straits).

LCA 01 Bangor Coastal Plain

4.3.12 The key characteristics relevant to the study area are identified as:

- Narrow coastal plain, bounded inland by Snowdon Massif and overlooked from the National Park;
- Dissected by a number of small south-north running streams, often small, wooded valleys;
- Landscape pattern largely reflects influence of Penrhyn Estate – planned, formal parkland, estate farms and settlements. It also includes historically important industrial relics at Nantlle Slate Quarries;
- Vernacular boundaries, especially slate fences, cloddiau and hedges; and
- Strong visual links with the Menai Straits and southern edge of the Anglesey AONB.

4.3.13 The section on 'Relationship to Snowdonia National Park and Anglesey AONB' states that "any developments or management proposals should recognise possible visual impacts upon the northern edge of the Snowdonia National Park, as well as the southern edge of the Anglesey AONB (on the northern banks of the Menai Straits). Views into and out from the area from the two protected landscapes are therefore very important. This will influence location, scale, form and materials used in any development". Both the National Park and the National Landscape are outside of the study area and due to distance are unlikely to be affected by the development proposals.

LCA 03 Llanberis Bethesda

4.3.14 The key characteristics relevant to the study area are identified as:

- Fringe of Snowdon Massif, includes extensive areas of former slate workings;
- Typified by small, nucleated quarrying communities;
- Water bodies, woodlands and wet marshy areas important features; and
- Tourism becoming increasingly important.

LCA 02 Penisarwaun Plateau

4.3.15 The key characteristics relevant to the study area are identified as:

- Agricultural area with distinct small/regular gently undulating;
- Occupying an intermediate zone between coast on or around 100m contour;
- Exhibits a number of post glacial landforms such as alluvial fans;
- Number of small, densely clustered settlements; and
- Large areas of woodlands and plantations.

4.4 SITE-SPECIFIC APPRAISAL

4.4.1 The following paragraphs provide descriptions of the site and should be read alongside **Figures LA.07** and **LA.10-1** to **LA.10-3**.

The landscape of the site

4.4.2 The Site is accessed from the B4547 to its southwest, a mature tree belt along the side of the road separating the main part of the Site from the road and largely screening the Site in the views available to passersby. The tree belt comprises of deciduous trees along the roadside with spruce behind and adjacent to the Site boundary. The Site sits adjacent to and includes the access track to the Pentir Substation, the latter being located to the north of the Site and being surrounded by woodland. To the east of the Site is a Morgan Sindall construction compound for the installation of underground grid connection cables between the Glyn Rhonwy Storage Facility and Pentir Substation. Pastoral farmland divided by either hedgerows or post and wire fences is situated to the northwest of the Site and to the southwest of the B4547, while to the southeast of the Site in an area of rough grassland. A major powerline approximately 150m to the east of the site runs north – south.

Features of the site

4.4.3 The most prominent feature of the Site is the concrete access track to the Pentir Substation, it runs along the northwestern Site boundary and extents to the northeast in a narrow corridor to the substation. The track is separated from the main part of the Site by a post and wire fence, with access provided by a field gates in the southwestern and northern corners. The fence line has occasional small birch trees and gorse bushes and its length.

4.4.4 The main part of the Site, which is roughly triangular in shape, slopes gently towards the south to a ditch that runs approximately parallel to the southwestern Site boundary. The Site comprises of rough and wet pastoral grassland, much of which contains rushes. This form of rough and wet grassland is relatively common is small parcels across the study area. Post and wire fences form the Site boundary, and although functional, are in various states of repair. The southeasternmost part of the Site is separated by a diagonal north - south aligned fence.

4.4.5 In the eastern part of the Site and running roughly parallel to its eastern boundary, is a buried 400kv powerline. The powerline is demarked on the ground by a strip of grassland

along the edges of which are gorse bushes, several small spruce and birch trees, and in places the remnants of post and wires fences. A couple of small trees in the centre of the Site and some scrubby bushes in the southwestern corner are the only other notable features on the Site. A tree belt comprising of semi-mature deciduous and coniferous trees abuts the southwestern and southeastern Site boundary.

Characteristics and aesthetics

4.4.6 The high mountains of Eryri National Park from a prominent and dramatic backdrop to views from across the study area, creating a sense of large scale and separation, as they form a barrier to the east and south of the study area. The Menai Strait / Afon Menai creates a similar barrier to the north and west although this is not perceptible from the study area.

4.4.7 Although containing many small and scattered woodlands, the plateau on which the Site is located has a strong sense of openness, which is assisted by the awareness of scale created by the presence of the mountains in the distance.

4.4.8 Although major powerlines and main roads are a feature of the study area, its character is one of rural farmland and scattered but regularly occurring small-scale built form, predominantly comprising of farmsteads and small villages. Small woodlands are also commonplace across the surrounding landscape.

Landscape of the surrounding area

4.4.9 The topography within 1km of the Site is a gently undulating plateau, mostly between approximately 100m and 110m AOD, although there are two minor local high points of 154m AOD to the southwest and of 132m AOD to the east. Further to the northwest is a small but deeply incised wooded valley, into which the northern part of the study area drains into. The southern part of the study area drains to the southwest or to the northeast in broader shallow valleys.

4.4.10 Land use is predominantly pastoral agriculture, with regular shaped small to medium sized fields divided by a mixture of stone walls, hedgerows and post and wire fences. Although hedgerow trees are uncommon and the hedgerows are generally quite low, there are numerous small areas of woodland scattered across the area that regularly screen or contain views.

4.4.11 The Pentir Substation and its associated service buildings are situated adjacent to the northeastern extension of the Site. For the most part these features are surrounded by woodland, which contain them in views from the surrounding area.

4.4.12 The most prominent feature in the area is the Morgan Sindall construction compound that is situated immediately to the east of the Site, it is accessed along the Pentir Substation access track and comprises of a hardstanding containing stored materials, a carpark and some small buildings. The compound is surrounded by a security fence and has an earth bund, approximately 1.5m high, on its western side.

4.5 PUBLIC ACCESS

4.5.1 There is no public access to the Site and there are no public rights of way in its vicinity. The B4547, from which the Site is accessed on its southwestern side, is the only publicly accessible route near the Site.

4.6 LANDSCAPE BASELINE SUMMARY

4.6.1 The following elements of the landscape baseline are relevant to the assessment of effects of this proposal and are taken forward for assessment within this appraisal:

- The key characteristics of the National Landscape Character Areas (NLCA) that cover the Site and its context area;
- The characteristics, sensitivities and guidelines in LANDMAP assessments, which are taken into account as indicators of valued aspects of the landscape character;
- The key characteristics identified in the Gwynedd Landscape Strategy covering the Site and the study area;
- The landscape character of the context area of the Site, comprising of a small-scale pastoral agricultural landscape intersected with major power infrastructure and busy A roads;
- The wet and rough grassland character of the Site;
- The vegetation of the Site, which comprises of wet grassland and some scrub, which contributes to the character of the Site;
- The tree belt adjacent to the southwestern and southeastern Site boundary, which provides containment and screening for the Site; and
- The topography of the Site, which consist of a gentle south facing slope to a drain at its low point.

4.7 LANDSCAPE VALUE

4.7.1 The characteristics, sensitivities and guidelines in the existing character assessments at national and local level and the site-specific analyses carried out for the purposes of this LVA were taken into account as indicators of the aspects of the landscape important to the character and evaluated according to the criteria in **Appendix 1 Table A1-1** in order to determine the value of the landscape receptors.

4.7.2 The features/elements/characteristics identified as important or “key” to the landscape character of the site are:

- The character of **NLCA 03 Arfon**: the key characteristics of which include: a broad, gently undulating lowland and valley landform; a dramatic inland panorama of steeply rising mountains; pastoral land cover; and lowland – upland contrasts. Recorded as a Landscape of Outstanding Historic Interest in much of the study area. LANDMAP Visual and Sensory aspect area Bethel (between Clynnog and Bangor) GWNDDVS006, which has an overall evaluation of Moderate, covers the part of the NLCA that includes the Site and the majority of the study area. Aspect areas Cefn-du GWNDDVS012, which is also covered by the NLCA, covers the southeasternmost part of the study area and also has

an overall evaluation of Moderate. The overall evaluation for the Geological Landscape and Landscape Habitats aspects areas that cover the Site are also Moderate, with parts of the latter also being Low, while the Historic Landscape is overall evaluated as High. Overall, the character of NLCA 03 is considered to be of **medium** value;

- The character of **NLCA 06 Snowdonia**, the key characteristics of which include: a mountainous topography; landscape often defined by massive, angular skylines; moorland and blanket bog; slate mining heritage; sparsely populated; and a sublime, picturesque, iconic visual and sensory landscape of great drama. Recorded as a Landscape of Outstanding Historic Interest in the study area. The NCA is covered by Visual and Sensory aspect area Cefn-du GWNDDVS012 in the study area, which is overall evaluated as High. The overall evaluation for the Geological Landscape is High, for landscape Habitats and Historic Landscape is split between High and Outstanding. Overall, the character of LCA 04 is considered to be of **high** value.
- The character of **LCA 04 Caernarfon Coast and Plateau**, the key characteristics of which include: landforms influenced by glacial deposits; mixed settlements types; a range of coastal habitats and landscapes; and an important part of the setting of the Anglesey / Ynys Mon National Landscape. LANDMAP Visual and Sensory aspect area Bethel (between Clynnog and Bangor) GWNDDVS006, which has an overall evaluation of Moderate, covers part of the LCA that includes the Site. The overall evaluations for the Geological Landscape and Landscape Habitats aspect areas that cover the Site are also Moderate, with parts of the later also being Low, while the Historic Landscape has an overall evaluation of High. Overall, the character of LCA 04 is considered to be of **medium** value.
- The character of **LCA 01 Bangor Coastal Plain**, the key characteristics of which include: a narrow coastal plain; small, wooded valleys; landscape pattern largely reflects influence of Penrhyn Estate; vernacular boundaries; and strong visual links with the Menai Straits. LANDMAP Visual and Sensory aspect area Bethel (between Clynnog and Bangor) GWNDDVS006, which has an overall evaluation of Moderate, covers part of the LCA in the study area. The overall evaluations for the Geological Landscape aspect areas that cover the study area are also Moderate, while the Landscape Habitats is mostly split between Moderate and Low. The Historic Landscape has an overall evaluation of High. Overall, the character of LCA 04 is considered to be of **medium** value.
- The character of **LCA 02 Penisarwaun Plateau**, the key characteristics of which include: agricultural area; occupying an intermediate zone between coast on or around 100m contour; post glacial landforms; small, densely clustered settlements; and areas of woodlands and plantations. In the study area the LCA is covered by Landscape and Visual aspect areas Bethel (between Clynnog and Bangor) GWNDDVS006 and Cefn-du GWNDDVS012, both of which have an overall evaluation of Moderate. The overall evaluation for the Geological Landscape aspect areas that cover the LCA are High, Landscape Habitats is predominantly Low, and the Historic Landscape is split between being overall evaluated as High and Outstanding. Overall, the character of LCA 02 is considered to be of **medium** value.

- The character of the **North-Western Fringes of Snowdonia SLA**, which include rugged upland qualities, the open character of the uplands and hill summits which contrast with the enclosed small-scale farmland below, and its function as a distant backdrop to the Ynys Mon / Anglesey national Landscape. In the study area the SLA is covered by Landscape and Visual aspect area Waen-Pentir GWNDDVS011 which has an overall evaluation of Moderate. The overall evaluation for the Geological Landscape aspect area is High, the Landscape Habitats is a mix of Moderate and High, and the Historic Landscape is High with some as Outstanding outside of the study area. Overall, the character of the SLA is considered to be of **medium** value.
- **The character of the context area of the Site**, which extends to approximately 300m of the proposed ESS compound. The key characteristics of which include: pastoral farmland, small woodlands, scattered farmsteads, main roads and major electrical infrastructure. Several of the small woodlands are recorded as various types of Ancient Woodland. The area around the Site is covered by Landscape and Visual aspect area Bethel (between Clynnog and Bangor) GWNDDVS006 which has an overall evaluation of Moderate. The overall evaluation for the Geological Landscape is Moderate, Landscape Habitats is split between Moderate and Low, and the Historic Landscape is High. Overall, the character of the context area of the Site is considered to be of **medium** value.
- **The character of the Site**, which is formed by its wet and rough grassland with very occasional scattered young trees (birch and conifers) and some clumps of gorse. Although not ubiquitous, this land use type is relatively common in small areas across the study area. The neighbouring substation, its access road and major powerline, as well as the temporary construction compound to the east of the site, influence the character of the Site. The Site is covered by Landscape and Visual aspect area Bethel (between Clynnog and Bangor) GWNDDVS006 which has an overall evaluation of Moderate. The overall evaluation for the Geological Landscape is Moderate, Landscape Habitats is predominantly Moderate although the access road to the north is Low, and the Historic Landscape is High. Overall, the character of Site is considered to be of **medium** value.
- **The vegetation of the Site**, which comprises of wet grassland with rushes and is scattered with occasional small trees and clumps of gorse. This type of grassland is commonplace in small areas across the study area where the peaty soils are present, although it is a relatively small vegetation type. The Site is covered by Landscape and Visual aspect area Bethel (between Clynnog and Bangor) GWNDDVS006 which has an overall evaluation of Moderate. The overall evaluation for the Geological Landscape is Moderate, Landscape Habitats is predominantly Moderate although the access road to the north is Low, and the Historic Landscape is High. Overall, the character of Site is considered to be of **medium** value.
- **The topography of the Site**, which consist of a gently south facing slope that drains into a ditch that runs northwest to southeast, where the landform rises slightly towards the tree line on the southwestern Site boundary. Subtle landform and gentle slopes are

the predominantly landform in the context area of the Site and is considered to be of **low** value.

4.8 EFFECTS ON THE LANDSCAPE

4.8.1 This section examines the landscape effects arising as a result of the proposed development with reference to:

- the effects on landscape fabric within the site. Its features and qualities; and
- the effects on landscape character, including consideration of the effects on designated landscapes.

4.8.2 Landscape character is derived from the combination and pattern of landscape elements. The effects of proposed development on landscape character would arise from its relationship to these combinations and patterns, and thus the character of the landscape. Effects on the landscape features, qualities and character may occur where there are either direct or indirect physical changes to the landscape. Direct changes to landscape fabric would only occur within the application boundary.

4.8.3 The effect of the proposed development on landscape character will depend on key characteristics of the receiving landscape; the degree to which the proposed development is considered consistent with or at odds with them; and how the proposed development would be perceived within the setting, with perception being influenced by:

- the distance to the site;
- weather conditions; and
- the 'fit' of the proposed development within the landscape pattern and characteristics.

4.8.4 The appraisal covers the following scenarios:

- Construction phase - this includes site clearance, landform modelling, access track construction, ancillary structures on site, and the installation of the ESS units and associated infrastructure;
- Operation phase – the fully completed and operational development on the site; and
- Year 15 assess – when the proposed mitigation planting has begun to mature, and the site has become established in its environment.

4.8.5 Decommissioning of the proposed development is not considered within the assessment as it is considered long term and permanent, lasting greater than 25 years.

Sensitivity

4.8.6 Landscape sensitivity is a product of consideration of the value associated with the landscape receptor and its susceptibility to the changes likely to arise from the development proposals. For this informal appraisal the assessment of sensitivity is based on bringing value and susceptibility considerations together in one combined step, in accordance with the criteria set out in **Appendix 1**.

4.8.7 The receptors, their value and susceptibility are set out in the following table, with the resultant judgement of their sensitivity to the proposed development:

Table 4-3 Susceptibility and Sensitivity of Landscape Receptors

Receptor	Value	Susceptibility	Sensitivity
Landscape Character			
NLCA 03 Arfon	**Medium**	Very small part of the NLCA, proposals in character with their setting and would not add a new incongruous element to the character area in relation to its size that would alter its characteristics. Susceptibility: **Medium**	**Moderate**
NLCA 06 Snowdonia	**High**	The development proposals would not alter the overall character or quality of the NLCA due to separation, distance, the scale of the proposals, and the context of their setting. Susceptibility: **Low**	**Moderate**
LCA 04 Caernarfon Coast and Plateau	**Medium**	Small part of the character area would experience a direct change, although this would not alter the overall character or quality of the character area due to the existing context of the setting of the Site. Susceptibility: **Medium**	**Moderate**
LCA 01 Bangor Coastal Plain	**Medium**	The development proposals would not alter the overall character or quality of the NLCA due to separation, the scale of the proposals, and the context of their setting. Susceptibility: **Low**	**Low**
LCA 02 Penisarwaun Plateau	**Medium**	The development proposals would not alter the overall character or quality of the NLCA due to separation, the scale of the proposals, and the context of their setting. Susceptibility: **Low**	**Low**
The character of North-Western Fringes of Snowdonia SLA	**Medium**	The development proposals would not alter the overall character or quality of the SLA due to separation, the scale of the proposals, and the context of their setting. Susceptibility: **Low**	**Low**
The character of the context area of the Site	**Medium**	Development proposals would add additional built form and extend the influence of electrical infrastructure southwards, but at a local scale. The character and features of the Site would change. Susceptibility: **High**	**Moderate**
The character of the Site	**Medium**	Proposed development would create a direct change to the Site changing its character from farmland to built form. Although in character with its setting it would extend the influence of the electrical infrastructure, abet at the scale of the Site. Susceptibility: **High**	**Moderate**
Fabric and Features within the site			
The vegetation of the Site	**Medium**	The Site vegetation is common though not ubiquitous in the study area, not covered by any landscape designations, but would be largely removed to facilitate the proposed development. Susceptible to direct changes as a result as it covers the whole of the Site away from the substation access road. Susceptibility: **High**	**Moderate**

Receptor	Value	Susceptibility	Sensitivity
The topography of the Site	**Low**	Typical of the surrounding area as part of a gently undulating landscape. Not covered by any landscape designations, although part of a Landscape of Outstanding Historic Interest. Development platforms would create a direct change to the landform within the development footprint. Susceptibility: **High**	**Moderate**

Magnitude of Change

4.8.8 The magnitude of change considers the key features of the development, as describe in **section 3.0** and the degree to which aesthetic or perceptual aspects of the landscape are altered by these changes or by the structures associated with the development. The magnitude of change is described in **Table 4.4** below:

Table 4-4 Assessment of Landscape Magnitude of Change

Receptor	Magnitude of Change during construction, operation and Year 15
NLCA 03 Arfon	Construction: Construction activity and the resulting change in use of the land would occupy a very small part of the NLCA. Activity on Site would be comparable in activity and scale to the adjacent Morgan Sindall compound. Short term construction would create a permanent and irreversible change but contained to within the Site area. Magnitude of change: **Small** Start of Operation: Land use of part of the Site changed to built form, but in scale with existing adjacent energy infrastructure. Changes contained to within the Site and of small scale, but considered permanent and irreversible. Magnitude of change: **Small** Year 15: Proposals will have become established in their environment and be interpreted as part of the electrical infrastructure of their setting with reinstated grasslands establishing and screening vegetation at the Site entrance and SuDS planting maturing. Small scale change, limited to the Site and its immediate surroundings, considered permanent and irreversible. Magnitude of change: **Negligible**
NLCA 06 Snowdonia	Construction: Indirect effect as activity outside of the NCLA and in scale and character with its setting adjacent to substation and major powerline, although new built form added to the context area of the LCA. Short term construction period of a negligible scale to NLCA, although a permanent and irreversible one. Magnitude of change: **Negligible** Start of Operation: New built form within context area of NLCA, but in scale and context of its setting. Permanent and irreversible change but of a small scale and small area offset from the NLCA. Magnitude of change: **Negligible** Year 15: The ESS will have integrated into its surroundings with reinstated grasslands establishing and screening vegetation at the Site entrance and SuDS planting maturing. This would be in character with vegetation in its setting. Small scale change, limited to the Site and its immediate surroundings, considered permanent and irreversible. Magnitude of change: **Negligible**
LCA 04 Caernarfon Coast and Plateau	Construction: Construction activity in a small part of and on the edge of character area, would remove some open land and replace with new built form, but in scale with nearby Morgan Sindall compound and electrical infrastructure. Short term construction would create a permanent and irreversible change but contained to small area. Magnitude of change: **Small**

Receptor	Magnitude of Change during construction, operation and Year 15
	Start of Operation: New built form added to edge of the LCA, but in scale and in character with electrical infrastructure influences. Changes contained to within the Site and of small scale but considered permanent and irreversible. Magnitude of change: **Small** Year 15: The ESS will have integrated it into its setting and be interpreted as part of the nearby electrical infrastructure, the reinstated grasslands establishing and screening vegetation at the Site entrance and SuDS planting maturing. Small scale change, limited to the Site and its immediate surroundings, considered permanent and irreversible. Magnitude of change: **Small**
LCA 01 Bangor Coastal Plain	Construction: Indirect effect as activity and change in land use outside of LCA. Construction in scale and character with its setting adjacent to substation, Morgan Sindall compound, and major powerline, although new built form added to the context area of the LCA. Short term construction period and of a negligible scale to LCA, although a permanent and irreversible one. Magnitude of change: **Negligible** Operation: New built form within context area of LCA, but in scale and context with the electrical infrastructure in its setting. Permanent and irreversible change but of a small scale and small area outwith of the LCA. Magnitude of change: **Negligible** Year 15: The ESS will have become integrated into its surroundings and be in character with the electrical context of its setting, with reinstated grasslands establishing and screening vegetation at the Site entrance and SuDS planting maturing. Small scale change, limited to the Site and its immediate surroundings, considered permanent and irreversible. Magnitude of change: **Negligible**
LCA 02 Penisarwaun Plateau	Construction: Indirect effect as activity and change in land use outside of LCA. Construction in scale and character with its setting adjacent to substation, Morgan Sindall compound, and major powerline, although new built form added to the context area of the LCA. Short term construction period and of a negligible scale to LCA, although a permanent and irreversible one. Magnitude of change: **Negligible** Operation: New built form within context area of LCA, but in scale and context with the electrical infrastructure in its setting. Permanent and irreversible change but of a small scale and small area outwith of the LCA. Magnitude of change: **Negligible** Year 15: The ESS will have become integrated into its surroundings and be in character with the electrical context of its setting, with reinstated grasslands establishing and screening vegetation at the Site entrance and SuDS planting maturing. Small scale change, limited to the Site and its immediate surroundings, considered permanent and irreversible. Magnitude of change: **Negligible**
The character of North-Western Fringes of Snowdonia SLA	Construction: Development proposals outside of SLA and separation created by distance and intervening vegetation. Short term construction activity would create an indirect effect, cover a small area and be in scale with its surrounding. Magnitude of change: **Negligible** Operation: The ESS would be new built form within the context area of the SLA, however separation between them is formed by distance and vegetation. Permanent and irreversible change but of a small scale and small area outwith of the SLA. Magnitude of change: **Negligible** Year 15: The maturing of proposed vegetation and grassland within the Site would slightly soften the impact of the ESS within its setting, although intervening vegetation and distance would continue to be the defining features in creating separation between the ESS and the SLA. Small scale change, limited to the Site and its immediate surroundings, considered permanent and irreversible. Magnitude of change: **Negligible**

Receptor	Magnitude of Change during construction, operation and Year 15
The character of the context area of the Site (approximately 300m from the Site)	Construction: Small part of the context area would become a construction site and be of a notably different character to the surrounding farmland, but in context with adjacent Morgan Sindall compound and electrical infrastructure. Medium scale of change to within the Site boundary and immediate vicinity, construction of short term, but a permanent and irreversible change. Magnitude of change: **Medium** Operation: Additional energy infrastructure added to area, but in scale and character with existing substation and powerlines. Small scale change to wider area as changes contained within the Site, although permanent and considered to be irreversible. Magnitude of change: **Small** Year 15: The ESS will have become integrated into its surroundings, with reinstated grasslands establishing and screening vegetation at the Site entrance and SuDS planting maturing. with the ESS being interpreted as part of the electrical infrastructure of its setting. Permanent change, but of small scale in relation to context area, changes contained to Site and considered irreversible. Magnitude of change: **Small**
The character of the Site	Construction: Change in character and land use from farmland to a construction site. Short term activity but a permanent and large scale change to Site area and not considered to be reversible. Magnitude of change: **Great** Operation: The ESS features are in character with nearby substation, powerlines and Morgan Sindall compound, but contrasts with surrounding pastoral farmland. Medium scale change and contained to Site, permanent and not considered to be reversible. Magnitude of change: **Medium** Year 15: The ESS will have become established in its setting with reinstated grasslands establishing and screening vegetation at the Site entrance and SuDS planting maturing, and would be interpreted as part of the nearby electrical infrastructure. Built form in scale and context with existing energy infrastructure. Medium scale change and contained to Site, permanent and not considered to be reversible. Magnitude of change: **Medium**
The vegetation of the Site	Construction: All vegetation would be removed from the locations of the proposed ESS compound area, SuDS features, and the access track. Covering approximately half of the main part of the Site, the removal of vegetation would be necessary to facilitate the construction of the development platforms and access of the proposed development. Vegetation on the remainder of the Site would be retained. Short term construction activity would create a permanent and direct change to the vegetation on the Site, although to a small geographical area and in scale with adjacent workings. Magnitude of change: **Great** Start of Operation: Developed area of the Site would have changed in character to built form with no vegetation. SuDS features outside of this would be planted but the vegetation not yet established. Remainder of the Site would be retained in baseline conditions. This would cover a small geographic area and be of a small scale, although the change in land use is considered to be permanent. Magnitude of change: **Great** Year 15: Vegetation in the SuDS features, at the Site entrance and along the southwestern Site boundary will have become established and would be interpretated as part of the character of the area. Although there would be no vegetation within the proposed ESS compound, the established vegetation around it would soften its impact. A permanent change covering a small area and in scale with its surroundings. Magnitude of change: **Medium**

Receptor	Magnitude of Change during construction, operation and Year 15
The topography of the Site	Construction: Approximately half of the main part of the Site would be levelled to create the Site access track and development platform for the proposed ESS compound. This would cover a small geographical area, activity would be over a short period, and there would be a relatively small change in levels, although it would be a direct and permanent change to the Site. Magnitude of change: **Great** Start of Operation: Development planform and access track would contrast with the natural landform beyond their area, although the change in levels would not be large and would be in scale with their comparable features in their setting, they are considered permanent. Magnitude of change: **Great** Year 15: The establishment of the grassland vegetation around the proposed ESS compound area and track edges would assist in softening the contrast between the development areas and the surrounding landform, helping it be interpreted as part of its setting, as would the maturing of planting adjacent to the Site entrance and along the southwestern Site boundary. This would cover a small area and be of a small scale, although the topography would be permanently changed. Magnitude of change: **Medium**

Assessment of effects on the landscape

4.8.9 Consideration of the magnitude of the changes due to the proposals is combined with consideration of the sensitivity of landscape receptors affected by the proposals to assess the degree and nature of the effect due to the development.

4.8.10 The assessment conclusions are set out in the following table:

Table 4-5 Summary of Effects on the Landscape

Landscape Receptor/ Element	Sensitivity of receptor	Magnitude of change	Degree and nature of effects during construction	Degree and nature of effects at start of operation	Degree and nature of effects year 15 after start of operation
NLCA 03 Arfon	**Moderate**	Construction: **Small** Operation: **Small** Year 15: **Negligible**	**Minor Adverse**	**Minor Adverse**	**Negligible**
NLCA 06 Snowdonia	**Moderate**	Construction: **Negligible** Operation: **Negligible** Year 15: **Negligible**	**Negligible**	**Negligible**	**Negligible**
LCA 04 Caernarfon Coast and Plateau	**Moderate**	Construction: **Small** Operation: **Small** Year 15: **Small**	**Minor Adverse**	**Minor Adverse**	**Negligible**
LCA 01 Bangor Coastal Plain	**Low**	Construction: **Negligible** Operation: **Negligible** Year 15: **Negligible**	**Negligible**	**Negligible**	**Negligible**
LCA 02 Penisarwaun Plateau	**Low**	Construction: **Negligible** Operation: **Negligible** Year 15: **Negligible**	**Negligible**	**Negligible**	**Negligible**
The character of North-Western Fringes of Snowdonia SLA	**Low**	Construction: **Negligible** Operation: **Negligible** Year 15: **Negligible**	**Negligible**	**Negligible**	**Negligible**
The character of the context area of the Site	**Moderate**	Construction: **Medium** Operation: **Small** Year 15: **Small**	**Moderate Adverse**	**Minor Adverse**	**Minor Adverse**
The character of the Site	**Moderate**	Construction: **Great** Operation: **Medium** Year 15: **Medium**	**Moderate Adverse**	**Moderate Adverse**	**Moderate Adverse**

Landscape Receptor/ Element	Sensitivity of receptor	Magnitude of change	Degree and nature of effects during construction	Degree and nature of effects at start of operation	Degree and nature of effects year 15 after start of operation
The vegetation of the Site	**Moderate**	Construction: **Great** Operation: **Great** Year 15: **Medium**	**Moderate Adverse**	**Moderate Adverse**	**Moderate Adverse**
The topography of the Site	**Moderate**	Construction: **Great** Operation: **Great** Year 15: **Medium**	**Moderate Adverse**	**Moderate Adverse**	**Moderate Adverse**

Conclusions

4.8.11 No **Major Adverse** effects have been identified on assessed landscape receptors at any stage of the development proposals. This is due to a combination of factors, notably including the secluded nature of the Site, that there are no landscape designations within its immediate vicinity, and that it is adjacent to existing major electrical infrastructure.

4.8.12 **Moderate Adverse** effects have been identified on the character, vegetation and topography of the Site throughout the lifetime of the development. Although these effects are anticipated to reduce slightly over time as the Site becomes established in its setting with the establishment of grassland within the Site and the maturing of vegetation along the southwestern Site boundary and adjacent to the Site entrance, they are assessed as remaining as moderate adverse as the development proposals would have a direct impact on these features.

4.8.13 A **Moderate Adverse** effect has also been identified on the character of the context area of the Site during the construction period, although this is predicted to lessen to a **Minor Adverse** effect during operation and into the long term as the development proposals would become assimilated into their setting due to maturing vegetation and be interpreted in the context of the existing electrical infrastructure in their immediate setting.

4.8.14 **Minor Adverse** effects have been identified during the construction phase and at the start of operation on NLCA 03 Arfon and on LCA 04 Caernarfon Coast and Plateau as they would experience a direct change to a very small part of their area. In the long term the scale of this effect is anticipated to reduce to **Negligible** as the development proposals become integrated into their setting due to maturing vegetation and interpreted as part of the existing adjacent major electrical infrastructure.

4.8.15 The scale of effect on the remaining assessed character areas is **Negligible** throughout the lifetime the development proposals. This is due to the site being offset from their coverage, covering a small area and being in context and scale with existing adjacent features.

5.0 EFFECTS ON VISUAL AMENITY

5.1.1 This section deals with the effects on visual amenity, arising from changes in the views available to people in the surrounding area.

5.2 ASSESSMENT CRITERIA

5.2.1 The assessment process is described generally in section 1.3 The general methodology for assessing the effects in this report is set out in **Appendix 1**.

5.2.2 The degree of the likely visual effects of the proposed development is determined by relating the sensitivity of the receptors to the changes arising from the development proposals, and the degree and nature of the changes in the views available to people and in their visual amenity arising from the proposals.

5.3 VISUAL BASELINE

Zone of Theoretical Visibility (ZTV)

5.3.1 The ZTVs illustrated on **Figures LA.08-1** and **LA.08-2** illustrate the theoretical visibility of the proposed development within the study area. The ZTVs have been generated using a 1m resolution model derived from Welsh Government DTM LiDAR data. The proposed development is modelled at the following heights above existing ground level:

- ESS Units - 2.8m
- AUX Transformers - 2.2m
- Container units - 2.75m
- Water tank - 2.5m
- DNO control room - 5.6m
- Substation infrastructure - up to 6.8m
- Security Fence - 2.4m

5.3.2 Viewer height is set at 2m above existing ground level.

5.3.3 The ZTV on **Figure LA.08-2** has been generated using DSM LiDAR data incorporating surface features such as existing vegetation and buildings. Both ZTVs (**Figures LA.08-1** and **LA.08-2)** show theoretical visibility of the proposed development and that actual visibility may be affected by other intervening vegetation, buildings and topographic features.

5.3.4 For the visual impact appraisal, a ZTV study area of a 3km radius from the site was investigated and mapped (**Figure LA.08-3**). Potentially sensitive visual receptors include residents, people visiting areas covered by landscape designations, users of public footpaths, bridleways and cycle routes, and visitor attractions.

5.3.5 During the field study the ZTV was used as a starting point and features such as vegetation, buildings or localised topographic variation, which influence actual visibility, were identified during field studies. Representative viewpoints were then selected to inform the visual

impact assessment. The locations of viewpoints studied relate to the "receptors", that is, residents and users of the landscape, and locations from which they may have views towards or of the site.

Viewpoint study

5.3.6 The ZTV on **Figure LA.08-3** shows the location of the proposed development and the ZTV at a scale of 1:20,000 with the location of the proposed viewpoints shown, which were discussed with and agreed in writing with A. Rhys Roberts (Senior Development management Officer) at Gwynedd Council.

5.3.7 A total of six views were taken to illustrate the site and its appearance in publicly available views (**Figures LA.09-1** to **LA.09-6**) and are taken forward to the visual impact assessment.

5.3.8 Views of the site are available from limited locations due to the combination of screening vegetation and topography, either where relative elevation allows views over intervening features or where there are gaps between the screening vegetation. The key areas of visibility are:

- Views from the B4547 in proximity to the Site (VP01);
- Views from the high ground around Seion to the west of the Site (VP02);
- Views from the minor road past Ty'n-llwyn where gaps in the vegetation allow to the east of the Site (VP03);
- Views from the high ground around Pen Dinas to the southwest of the Site (VP04); and
- Views from the high ground in the far south and southeast of the study area (VP05 and VP06).

5.3.9 Views from within the site are also provided to illustrate the landform, vegetation and surrounding vegetation of the Site.

Table 5-1 Viewpoint details

View-point Ref	Location	Distance from site	Receptors represented/Reasons for selection
01	Opposite entrance to Pentir Substation and near to proposed Site entrance on B4547	20m West	Passersby on AB4547 Close to location of Site entrance In the Dinorwig Registered Landscape of Outstanding Historic Interest In ZTV
02	On minor road to Seion (adjacent to entrance to a farmstead)	520m West	Passersby on minor road In the Dinorwig Registered Landscape of Outstanding Historic Interest Nearby view from high ground to the west In ZTV
03	Minor road to north of Tŷ'n-llwyn	610m East	Passersby on minor road

View-point Ref	Location	Distance from site	Receptors represented/Reasons for selection
			In the Dinorwig Registered Landscape of Outstanding Historic Interest Nearby view to the east In ZTV
04	Route with public access over Pen Dinas	1.8km South	Users of route with public access In the Dinorwig Registered Landscape of Outstanding Historic Interest View from high ground in the southwest In ZTV
05	Next to POS and bus stop in Rhiwlas	2.2km Southeast	Passersby on minor / residential road In the Dinorwig Registered Landscape of Outstanding Historic Interest View from a residential area View from high ground in the southeast Users of public open space / bus stop In ZTV
06	Route with public access to north of Tynllidiart	2.8km Southeast	On the North Wales Pilgrim's Way Long distance footpath Route with public access Access land In a Special Landscape Area In the Dinorwig Registered Landscape of Outstanding Historic Interest Views from high ground in the southeast In ZTV

Table 5-2 Existing view descriptions

View-point Ref	Landscape context at viewpoint location	Existing view towards site
01	Around the viewpoint the land outside of the Site and its boundary tree belts is pastoral farmland. It is divided into small to medium sized fields by a mixture of post and wire fences and stone walls. The area is divided from the northwest to the southeast by the B4547, which is bordered by wide grass verges and stone walls, aside from along the tree belt on the Site boundary, where a post and wire fence is present. The topography is predominantly flat, gently sloping to a low point to the southeast. The wet grassland and rushes on the Site to the east of the viewpoint mark a change in the	The oblique view, which is only available to passersby travelling south-eastwards on the B4547, affords a view into the Site from the west, framed between the Pentir Substation access road and the tree belt along the southwestern Site boundary. The substation access road is lined with small birch trees, while the tree belt contains young beech and spruce, the former lining the roadside. The tree belt and angle of view screen views of the Site to receptors on the road travelling the opposite direction. In the view, the Site is partially filtered by some scrubby vegetation along the drain in its western part, although much of the

View-point Ref	Landscape context at viewpoint location	Existing view towards site
	groundcover, although it is repeated regularly further away. Likewise, although the tree belt along the Site boundary are the only notable trees around the viewpoint, there are numerous other copses and small woodlands in the surrounding landscape.	Site can be identified. Beyond, materials stored in the Morgan Sindall compound, which is surrounded by an earth bund, are visible below a major powerline, with a tall communications mast further away. High mountains to the east of Bethesda form the distant horizon in the view.
02	The viewpoint is located on the minor road that climbs the hill up to the hamlet of Seion. The viewpoint is at approximately 115m AOD, while the top of the hill reaches just over 150m AOD to the south. To the northwest of the viewpoint is a relatively large area of mixed woodland, while the remainder of the land cover is occupied by pastoral farmland, which is scattered with farmsteads and residential properties. Field boundaries are generally maintained hedgerows, although stone walls and post and wire fences are also present. Away from the woodland, larger trees are generally found in the curtilages of properties, although occasional hedgerow trees can also be found. The nearby farmstead may have oblique or filtered views available from it towards the Site. There is no public access away from the roads in the area.	A driveway to a farmstead allows for an open view across the surrounding countryside to passersby travelling down the hill from Seion. Small hedgerow lined fields occupy the foreground of the view on falling ground. At the foot of the slope and partly screened by hedgerows, scrub and trees, is the B4547. Beyond the road the Site is partly identifiable amid hedgerows and trees belts, its wet grassland and rushes contrasting with the pastoral farmland in its foreground. Beyond the Site, materials stored on the Morgan Sindall compound are prominent in the view, due to their contrast with the surrounding natural features. Also visible, but more difficult to see, is the major powerline that crosses the landscape just beyond the Site, and the Pentir Substation to the left of the view, although the latter is largely screened by trees. High mountains form the background to the view.
03	Regular shaped pastoral fields bordered by straight stone walls surround the viewpoint. This formal agricultural landscape pattern overlays a gently rolling and sinuous topography, reaching a highpoint of just over 130m AOD to the east of the viewpoint. A major powerline crosses the landscape to the north of the viewpoint while, Tŷ'n-llwyn, a collection of listed stone farm buildings arranged around a courtyard, is to the south. Similar to the field boundaries, the roads and tracks in the area are predominantly straight, the minor road is also the only public access in the area. Woodland around the Pentir Substations breaks up this formal patten to the west.	A field gate on the minor road on which the viewpoint is located provides on open view to the west and towards the Site. In the foreground a large pastoral field drops gradually towards the woodland that mostly contains the Pentir Substation. A gap in the woodland affords a view of the Morgan Sindall compound and the materials that are stored on it. Adjacent to this and prominent in the view, are a tall communications mast and a major power line. Beyond the tree belt on the southwestern Site boundary is visible, although the ground level of the Site itself is screened by earth bund and materials on the intervening compound. Pastoral farmland and farm buildings on the hilltop at Sion form the horizon of the view in the mid-distance.
04	The viewpoint is located on the slopes of Pen Dinas, a local highpoint at 170m AOD and the	Although hedgerows line much of the route that the viewpoint is located, at the viewpoint location

View-point Ref	Landscape context at viewpoint location	Existing view towards site
	location of a hillfort, which is a scheduled monument. A hedgerow lined green lane with public access crosses the northeastern side of the hill, where the viewpoint is located. Irregular shaped and medium sized pastoral fields border the lane and are also divided by maintained hedgerows. Mature trees are uncommon, although there are some small woodlands to the west and south. The viewpoint is located towards the top of the northeastern spur of the hill, with the land dropping steeply to the north and to the south. Even with winter vegetation the lane is overgrown, difficult to access, and showed no sign of regular use.	it is bordered by a bank and a post and wire fence, that allows for a filtered view through the latter towards the Site. The pastoral farmland in the foreground drops away quickly, offering a panoramic view of the landscape to the north and out towards Anglesey / Ynys Mon. The woodland around the Pentir Substation is notable in the mid-distance of the view, although most of the substation itself is screened. Also identifiable in the view are major power lines, materials stored on the Morgan Sindall compound, and the communications mast to the east of the Site. The tree belt along the southwestern Site boundary is visible to the left of the compound, the trees screening the ground level of the Site in the view.
05	The viewpoint is located in the centre of Rhiwlas, a small village situated as the land starts to rise from the Pentir plateau to the Snowdonia foothills. Where gaps between buildings allow, distance views to the north and west are possible. The village consists of a dense collection of largely detached houses, which notably contrast with the surrounding farmland. The farmland is a mixture pastoral fields and rough grazing, the latter containing rushes, gorse and scrubby vegetation. The field boundaries are mostly stone walls, which have been supplemented with post and wire fences in many places. There are few trees round the field boundaries or in the village, but there are several small woodlands in the surrounding area. To the north of the village, as the land flattens, trees and hedgerows become more common. The area is served by a good network of public footpaths and minor roads, and there is access land on the higher slopes to the east and south of the settlement.	The viewpoint is located on the main thoroughfare through the Rhiwlas settlement and adjacent to a small public open space and bus stop. The elevation is sufficient to afford views over the rooflines of the properties in the foreground, across the Pentir plateau and towards Anglesey / Ynys Mon. Similar framed views are available from roads elsewhere in the village and from residential properties. Beyond the built form in the foreground of the view, the Pentir plateau is seen as a patchwork of farmland and woodland on gently undulating topography. Prominent within this are pylons from major powerlines and the tall communications mast near to the Site. The woodland to the south and east of the Site screen both it and the adjacent Morgan Sindall compound in the view, while the nearby Pentir Substation is also screened by woodland. The gently rolling farmland of Anglesey / Ynys Mon forms the distant horizon in the view.
06	The viewpoint is located on a route with public access that is part of the North Wales Pilgrim's Way. The stone wall lined path crosses the steep northwestern slopes of Moelyci and affords panoramic views to the north and west. Below the viewpoint the land cover comprises	The wide panoramic view encompasses all of the Pentir plateau, which occupies the mid-distance of the view, the ground falling away steeply in the foreground. The plateau comprises of pastoral farmland interspersed with small woodlands and scattered settlement. In some areas hedgerow

View-point Ref	Landscape context at viewpoint location	Existing view towards site
	of rough grazing with steep stone wall lined fields. Above the viewpoint to the east are the very steep slopes of Moelyci, which are covered in a mixture of gorse and bracken and contain several small trees. There are several residential properties set within tree lined curtilages nearby to the south at Tynllidiart, and to the southwest at Carreg y Gath.	trees are common, while in other the fields are divided by maintained hedgerows or stone walls. Pylons from major powerlines are identifiable across much of the area, although the Pentir Substation is largely screened by woodland. More prominent in the view are the stored materials on the Morgan Sindall compound and the adjacent tall communications mast. These features help identify the location of the Site which is evident to their left and partly screened by woodland. Anglesey / Ynys Mon and Holyhead Mountain provide the distance backdrop to the view.

5.4 VISUAL RECEPTORS

5.4.1 The assessment of visual effects is described by considering how the different groups of "visual receptors" may be affected. The following is a review of the viewers (the visual receptors) and the views available to them at the selected representative locations:

Table 5-3 Visual receptors represented by each viewpoint and views available to them

View-point Ref	People in settlements and residential properties	Users of public rights of way and public access areas	Road users	Views from other landscapes of interest
01	-	-	Passersby on the B4547	Landscape of Outstanding Historic Interest
02	-	-	Passersby on minor road	Landscape of Outstanding Historic Interest
03	-	-	Passersby on minor road	Landscape of Outstanding Historic Interest
04	-	Users of route with public access	-	Landscape of Outstanding Historic Interest
05	Residents in Rhiwlas who have similar views	Users of Public open Space	Passersby on minor road	Landscape of Outstanding Historic Interest
06	-	Route with public access and on access land (also part of the North Wales Pilgrim's Way)	-	Special Landscape Area (also a Landscape of Outstanding Historic Interest)

5.5 VISUAL BASELINE SUMMARY

5.5.1 A summary of the visual baseline information to be taken into account as part of the detailed assessment of the effects on visual amenity is as follows:

- The visibility of users of routes with public access in the study area;
- The visibility of walkers doing the North Wales Pilgrim's Way;
- The visibility of walkers using access land in the southeast of the study area;
- The visibility of passersby on the B4547 adjacent to the Site;
- The visibility of users of minor roads in the vicinity of the Site;
- The visibility of residents in Rhiwlas who have views that include the Site; and
- The visibility or receptors visiting the area for it historic interest or special landscape qualities.

5.6 EFFECTS ON VISUAL AMENITY

The visual appraisal covers the scenarios described in section 4.8.4.

Sensitivity

5.6.1 The susceptibility of viewers is affected by factors such as the distance to the viewer, the relative number of viewers affected, and the importance of the site in the overall view. The context of the viewpoint may also contribute to its ability to accommodate change; for example, a view from a residential property or from a valued landscape might be regarded as less able to accommodate change than a view from an industrial context. **Table A1-8** provides examples of High, Moderate and Lesser sensitivity, demonstrating how the contributing factors are interpreted.

5.6.2 The sensitivity of the visual receptors is assessed as follows in **Table 5-4**:

Table 5-4 Sensitivity of Visual Receptors

Receptor	Value	Susceptibility	Sensitivity
Residential			
Residents in Rhiwlas who have views that include the Site – VP05	Mid-distance views towards the Site, which are a mixture of open, filtered, framed and oblique, across the Pentir plateau towards the Site, which is partially screened by vegetation, within Landscape of Outstanding Historic Interest, considered to be **High** value	Residents are of **High** susceptibility to changes in their visual amenity	**High**
Public Rights of Way and areas of public access			
Users of route with public access – VP04	Glimpsed and partly filtered mid-distance views from a short section or path, within Landscape of Outstanding Historic Interest, considered to be **Medium** value	Walkers on unpromoted routes are of **Medium** susceptibility to changes in their visual amenity	**Moderate**

Receptor	Value	Susceptibility	Sensitivity
Users of Public Open Space – VP05	Partially screened and framed mid-distance views towards the Site, within Landscape of Outstanding Historic Interest, considered to be **Medium** value	People involved in outdoor recreation, whose attention is likely to be focused on nearby activity, are of **Medium** susceptibility to changes in their visual amenity	**Moderate**
Users of route with public access and access land – VP06	Open mid-distance views that include a partly filtered view of the Site, users include walkers on the North Wales Pilgrim's Way, within SLA and Landscape of Outstanding Historic Interest, considered to be **High** value	Walkers using a promoted route or access land in a designated landscape are of **High** susceptibility to changes in their visual amenity	**High**
Road users			
Passersby on B4547 - VP01	Glimpsed but near views into the Site, existing view includes pylons and communications mast, within Landscape of Outstanding Historic Interest, considered to be **Medium** value	Passersby on roads are of **Low** susceptibility to changes in their visual amenity	**Lesser**
Passersby on minor road - VP02	Glimpsed view towards the Site, ground level of Site partially screened by vegetation, within Landscape of Outstanding Historic Interest, considered to be **Medium** value	Passersby on roads are of **Low** susceptibility to changes in their visual amenity	**Lesser**
Passersby on minor road - VP03	Glimpsed view towards the Site, which is seen in combination with neighbouring electrical infrastructure, within Landscape of Outstanding Historic Interest, considered to be **Medium** value	Passersby on roads are of **Low** susceptibility to changes in their visual amenity	**Lesser**
Passersby on minor road - VP05	Framed view towards the Site, which is heavily filtered by vegetation, within SLA and Landscape of Outstanding Historic Interest, considered to be **Medium** value	Passersby on roads are of **Low** susceptibility to changes in their visual amenity	**Lesser**
Other landscapes of interest			
Visitors to landscape of Outstanding Historic Interest – VP01 to VP06	Views range from near to mid-distance and from open to heavily filtered, no designated historic features either within the Site or at any viewpoints, considered to be **Medium** value.	Visitors to a historic landscape are considered to be of **Medium** susceptibility to susceptibility to changes in their visual amenity	**Moderate**
Visitors to Special Landscape Area – VP06	Open mid-distance views that include a partly filtered view of the Site, also within Landscape of Outstanding Historic Interest, considered to be **Medium** value	Visitors to a locally designated are considered to be of **Medium** susceptibility to susceptibility to changes in their visual amenity	**Moderate**

Magnitude of Change

5.6.3 The representative views are described below with an analysis of the degree and nature of changes in them resulting from the development, to inform the effects appraisal.

Table 5-5 View with development & magnitude of change

View-point Ref	View and magnitude of change during construction, operation (at completion) and Year 15
VP01 20m west	Construction: Passersby travelling southwards on the B4547 would have a glimpsed, oblique and framed view into the Site as they travel on a short section of the road. A similar view is not available to passersby travelling northwards, with only the Site entrance not being screened by trees. The passersby would see construction activity associated with the Site entrance. Levelling works in the centre of the Site and the installations of the ESS units. This activity would be short-term and occupy a small part of the view, however, for most road users the focus of their view would be on the impending high mountains of Snowdonia in the distance. Construction activity would form a permanent but a small scale of change to a small part of the view, but in proximity to the viewpoint. Magnitude of change: **Medium** Start of Operation: Following the completion of construction and the start of the operational phase of the proposed ESS, passersby travelling southwards would have a glimpsed and oblique view of the site entrance and of some of the proposed ESS units on the Site. These would be seen in the context of the major powerline, its pylons and the tall communications mast beyond the Site. The addition of the proposed development to the view would be in scale with its setting, cover a small part of the view, although the change is considered to be permanent and irreversible. Magnitude of change: **Medium** Year 15: Proposed vegetation along the edge of the B4547 and adjacent to the Site entrance will have become established and would assist in screeding the proposed ESS in the view. Any parts of the proposed development that may be visible would be interpreted as being part of the wider Pentir Substation facility and would be unlikely to be identifiable in their own right. The proposed ESS would occupy a small part of a glimpsed view and be of a scale comparable to its setting. The facility is considered to form a permanent and irreversible change. Magnitude of change: **Small**
VP02 520m west	Construction: Passersby on the minor road would have a brief and oblique view towards the Site. However, the Site is partially filtered in the view and passersby are most likely to have their attention focused on the bend in the road rather than looking obliquely towards the Site. Due to the glimpsed view and the intervening vegetation filtering the Site in the view, it is likely that few, if any, passersby would observe the construction activity on the Site. The construction activity occupies a very small part of the view, is in scale with its setting and would be over a short period, although it would form a permanent and irreversible change. Magnitude of change: **Small** Start of Operation: Following the completion of construction there is potential for the ESS units to be partially visible amid the intervening vegetation, similar to the manner in which the materials stored on the adjacent Morgan Sindall compound are. However, due to being a more muted colour they would be less prominent in the view. The addition of the ESS units to the view would be of a small scale

View-point Ref	View and magnitude of change during construction, operation (at completion) and Year 15
	and occupy a small part of it. Although considered to be a permanent and irreversible addition. Magnitude of change: **Small** Year 15: Changes in the view likely to occur by this time are the maturing of intervening vegetation and the establishment of the proposed development into its environment. This would reduce the visibility of the ESS unt further in the view, making them difficult to identify at the distance. Although a permanent edition to the view, the proposed ESS would be in scale with its setting and occupy a very small part of a view that is dominated by the mountains in the distance. Magnitude of change: **Negligible**
VP03 610m east	Construction: During the construction phase activity on the Site would be notably less prominent in the view than current activity is on the intervening Morgan Sindall compound, the Site lying behind the compound and largely being screened by the earth bund to the west of the compound. Construction activity on the Site would be of a similar scale to the existing activity in the view and although it would create a permanent change to the Site, it would not be apparent from the viewpoint. Magnitude of change: **Negligible** Start of Operation: There is potential for some of the ESS units to be partially visible above the intervening bund around the Morgan Sundall compound, although this would only be the upper part, and they would be seen against the backdrop of the trees on the southwestern Site boundary. Any future activity on the Morgan Sindall compound would also be more prominent in the view that the proposed development. The completed development would create a small scale of change to the view, cover a small geographical area, and be in scale with is setting, although be a permanent change. Magnitude of change: **Negligible** Year 15: Any elements of the development proposals that may be visible will have become established in their setting and would not be prominent in the view. Although a permanent addition to the view, the proposed ESS would occupy a small part of it and be in scale with its setting. Magnitude of change: **Negligible**
VP04 1.8km south	Construction: It is unlikely that anything other than an occasional vehicle or crane movement would be visible from the viewpoint during the construction period, due to distance and the screening effect of the tree belt along the site boundary. This, together with the size and scale of the proposals in the view, and seasonal vegetation along the side of the path, would mean that there would be no apparent change in the view during the construction period to receptors at the viewpoint. Magnitude of change: **Negligible** Start of Operation: The completion of construction would see the removal of the potentially visible aspects of the development proposals from the Site. Intervening vegetation, scale and distance would mean that the proposed ESS would not be identifiable in the view, although its addition would be a permanent change. Magnitude of change: **No Change** Year 15:

View-point Ref	View and magnitude of change during construction, operation (at completion) and Year 15
	As per the start of the operational period, the intervening vegetation is anticipated to continuing the development proposals in the view, preventing there being any discernible change in it to receptors at the viewpoint. Magnitude of change: **No Change**
VP05 2.2km southeast	Construction: The screening effect of intervening trees and woodland would mean that the only elements of construction that may be visible to receptors at or near to the viewpoint would be occasional crane or vehicle movements, the vegetation screening both the rest of the construction activity and the Site. The scale of the development proposals is small compared to the scale of the view, and they occupy a small part of it, making the location of the Site difficult to identify. Magnitude of change: **Negligible** Start of Operation and at Year 15: The completion of construction activity on the Site would remove the potentially visible aspects of the development proposals from the view. Intervening trees, both in the landscape and around the Site boundary, would continue to screen the proposed ESS in the views available to receptors in Rhiwlas, both at the start of the Site operation and into the long term at Year 15. Although a permanent addition to the Site, the proposed ESS would be screened in the view, be relatively distant and small in comparison to the scale of the view, and be in scale and character with its setting. Magnitude of change: **No Change**
VP06 2.8km southeast	Construction: The elevation of the viewpoint allows for views over the trees and woodland of the Pentir plateau and for the Site to be identifiable in the view. The site is located between the Morgan Sindall compound and the Site boundary tree belt, both which help to make it identifiable but reduce its visibility. Construction activity would be seen in the context of activity at the adjacent compound, which it would be in scale with. The short-term construction period of the proposed ESS would create a permanent change to the view, although it would only impact a very small part of a wide panoramic view. Magnitude of change: **Small** Start of Operation and Year 15: With mitigation measures on the Site not being applicable at the distance of the viewpoint and in terms of the scale of the view, the changes to the view occurred due to the addition of the ESS to the Site are expected to remain constant following the completion of construction and into the long-term. Any elements of the proposed ESS that would be visible would be interpreted in the scale and context of the nearby Pentir Substation and the Morgan Sindall compound and it would not add a new readily identifiable feature to the view. This would create a permanent but small-scale change to the view and occupy a very small part of it. Magnitude of change: **Negligible**

Assessment

5.6.4 The visual appraisal has been informed by the ZTV study shown on **Figure LA.08-1** to **LA.08-3**. It identified a number of locations from which the proposed development might be theoretically visible. A selection of representative views to illustrate the views available at a range of distances and for different receptors are identified and described in **Table 5-2** and the sensitivity of the viewers (visual receptors) represented defined in **Table 5-4** above.

5.6.5 The following table sets out the assessment of effects on the visual amenity of the identified viewers likely to be affected by the proposals:

Table 5-6 Assessment of visual effects

Ref. VPs	Viewers/ Visual Receptors & Sensitivity	Magnitude of change	Degree & nature of effect – construction phase	Degree & nature of effect – start of operation	Degree & nature of effect – year 15 of operation
VP01	Passersby on the B4547 - **Lesser**	Construction: **Medium** Operation: **Medium** Year 15: **Small**	**Moderate Adverse**	**Moderate Adverse**	**Minor Adverse**
	Visitors to Landscape of Outstanding Historic Interest - **Moderate**	Construction: **Medium** Operation: **Medium** Year 15: **Small**	**Moderate Adverse**	**Moderate Adverse**	**Minor Adverse**
VP02	Passersby on minor road - **Lesser**	Construction: **Small** Operation: **Small** Year 15: **Negligible**	**Minor Adverse**	**Minor Adverse**	**Negligible**
	Visitors to Landscape of Outstanding Historic Interest - **Moderate**	Construction: **Small** Operation: **Small** Year 15: **Negligible**	**Minor Adverse**	**Minor Adverse**	**Negligible**
VP03	Passersby on minor road - **Lesser**	Construction: **Negligible** Operation: **Negligible** Year 15: **Negligible**	**Negligible**	**Negligible**	**Negligible**
	Visitors to Landscape of Outstanding Historic Interest - **Moderate**	Construction: **Negligible** Operation: **Negligible** Year 15: **Negligible**	**Negligible**	**Negligible**	**Negligible**
VP04	Users of route with public access - **Moderate**	Construction: **Negligible** Operation: **No Change** Year 15: **No Change**	**Negligible**	**None**	**None**

Ref. VPs	Viewers/ Visual Receptors & Sensitivity	Magnitude of change	Degree & nature of effect – construction phase	Degree & nature of effect – start of operation	Degree & nature of effect – year 15 of operation
	Visitors to Landscape of Outstanding Historic Interest - **Moderate**	Construction: **Negligible** Operation: **No Change** Year 15: **No Change**	**Negligible**	**None**	**None**
VP05	Residents in Rhiwlas - **High**	Construction: **Negligible** Operation: **No Change** Year 15: **No Change**	**Minor Adverse**	**None**	**None**
	Users of Public open Space - **Moderate**	Construction: **Negligible** Operation: **No Change** Year 15: **No Change**	**Negligible**	**None**	**None**
	Passersby on minor road - **Lesser**	Construction: **Negligible** Operation: **No Change** Year 15: **No Change**	**Negligible**	**None**	**None**
	Visitors to Landscape of Outstanding Historic Interest - **Moderate**	Construction: **Negligible** Operation: **No Change** Year 15: **No Change**	**Negligible**	**None**	**None**
VP06	Route with public access and on access land walkers on the North Wales Pilgrim's Way - **High**	Construction: **Small** Operation: **Negligible** Year 15: **Negligible**	**Minor Adverse**	**Negligible**	**Negligible**
	Visitors to Landscape of Outstanding Historic Interest and SLA - **Moderate**	Construction: **Small** Operation: **Negligible** Year 15: **Negligible**	**Minor Adverse**	**Negligible**	**Negligible**

Conclusions

5.6.6 No **Major Adverse** effects on the amenity of visual receptors have been identified at any stages of the proposed development. The well screened nature of the Site and lack of open views towards it from the nearby landscape is a contributing factor in this, as is when it would be visible, it would be seen in the context of the adjacent existing major electrical infrastructure and would be unlikely to be identifiable in its own right.

5.6.7 **Moderate Adverse** effects have been assessed as being experienced by visual receptors at VP01 during both the construction period and at the start of the operational phase. The proximity of the viewpoint and the visibility of the Site entrance contribute to this. However, in the long term as screening vegetation near to the Site entrance establishes and the Site become integrated into its setting, the scale of effect experienced by these visual receptors is assessed as changing to **Minor Adverse**.

5.6.8 **Minor Adverse** construction and start of operation effects have been identified on visual receptors at VP02. This is a view that would be experienced by few visual receptors and as soon as screen vegetation starts to establish and the Site becomes integrated into its setting, it is assessed that the scale of effect would reduce to **Negligible** in the long term.

5.6.9 **Minor Adverse** construction effects have also been identified on residents at VP05 and on visual receptors at VP06, which includes walkers on the North Wales Pilgrim's Way. Although construction activity would be visible to these receptors, it would be distant and occupy a very small part of the view. Following the completion of construction activity on the Site, the development proposals would be interpreted as part of the adjacent electrical infrastructure of, which they would be difficult to visual separate from, reducing the scale of effect to **Negligible**.

5.6.10 The location of the proposed development within the context of existing electrical infrastructure, and the existing screening around the Site created by trees, assists in all other assessed visual receptors experiencing a scale of effect as **Negligible** to **None**.

6.0 CUMULATIVE ASSESSMENT

6.1.1 To be completed.

7.0 SUMMARY AND CONCLUSIONS

7.1.1 This Landscape and Visual Appraisal (LVA) has considered the likely effects of the proposed development on the landscape character and visual amenity within a 2km to 3km study area, depending on topography and vegetation in the surrounding area.

7.1.2 The proposed development at the Site is for an Energy Storage System (ESS) on land between the B4547 and the Pentir Substation. Mitigation measures proposed to be incorporated in the scheme include the reestablishment of grassland in areas around the proposed compound, the creation and planting of SuDS features, woodland edge planting along the southwestern Site boundary and screen planting adjacent to the Site entrance. These planting proposals aim to assist in integrating the development proposals into their setting while simultaneously aiming to retain the baseline habitats found on the Site.

7.1.3 The methodology used for assessing the potential effects on landscape character and visual amenity were based on the recommendations in GLIVA3[10]. The application of the guidance document established an appropriate scope for this assessment to be undertaken. Gwynedd Council were also consulted on the viewpoint selection.

7.2 SUMMARY OF FINDINGS

Landscape assessment

7.2.1 No **Major Adverse** effects have been identified on assessed landscape receptors at any stage of the development proposals. This is due to a combination of factors, notably including the secluded nature of the Site, that there are no landscape designations within its immediate vicinity, and that it is adjacent to existing major electrical infrastructure.

7.2.2 **Moderate Adverse** effects have been identified on the character, vegetation and topography of the Site throughout the lifetime of the development. Although these effects are anticipated to reduce slightly over time as the Site becomes established in its setting with the establishment of grassland within the Site and the maturing of vegetation along the southwestern Site boundary and adjacent to the Site entrance, they are assessed as remaining as moderate adverse as the development proposals would have a direct impact on these features.

7.2.3 A **Moderate Adverse** effect has also been identified on the character of the context area of the Site during the construction period, although this is predicted to lessen to a **Minor Adverse** effect during operation and into the long term as the development proposals would become assimilated into their setting due to maturing vegetation and be interpreted in the context of the existing electrical infrastructure in their immediate setting.

7.2.4 **Minor Adverse** effects have been identified during the construction phase and at the start of operation on NLCA 03 Arfon and on LCA 04 Caernarfon Coast and Plateau as they would experience a direct change to a very small part of their area. In the long term the scale of

[10] Guidelines for Landscape and Visual Impact Assessment 3rd Edition published by The Landscape Institute and the Institute of Environmental Management & Assessment in 2013

this effect is anticipated to reduce to **Negligible** as the development proposals become integrated into their setting due to maturing vegetation and interpreted as part of the existing adjacent major electrical infrastructure.

7.2.5 The scale of effect on the remaining assessed character areas is **Negligible** throughout the lifetime the development proposals. This is due to the site being offset from their coverage, covering a small area and being in context and scale with existing adjacent features.

Visual assessment

7.2.6 No **Major Adverse** effects on the amenity of visual receptors have been identified at any stages of the proposed development. The well screened nature of the Site and lack of open views towards it from the nearby landscape is a contributing factor in this, as is when it would be visible, it would be seen in the context of the adjacent existing major electrical infrastructure and would be unlikely to be identifiable in its own right.

7.2.7 **Moderate Adverse** effects have been assessed as being experienced by visual receptors at VP01 during both the construction period and at the start of the operational phase. The proximity of the viewpoint and the visibility of the Site entrance contribute to this. However, in the long term as screening vegetation near to the Site entrance establishes and the Site become integrated into its setting, the scale of effect experienced by these visual receptors is assessed as changing to **Minor Adverse**.

7.2.8 **Minor Adverse** construction and start of operation effects have been identified on visual receptors at VP02. This is a view that would be experienced by few visual receptors and as soon as screen vegetation starts to establish and the Site becomes integrated into its setting, it is assessed that the scale of effect would reduce to **Negligible** in the long term.

7.2.9 **Minor Adverse** construction effects have also been identified on residents at VP05 and on visual receptors at VP06, which includes walkers on the North Wales Pilgrim's Way. Although construction activity would be visible to these receptors, it would be distant and occupy a very small part of the view. Following the completion of construction activity on the Site, the development proposals would be interpreted as part of the adjacent electrical infrastructure of, which they would be difficult to visual separate from, reducing the scale of effect to **Negligible**.

7.2.10 The location of the proposed development within the context of existing electrical infrastructure, and the existing screening around the Site created by trees, assists in all other assessed visual receptors experiencing a scale of effect as **Negligible** to **None**.

7.3 DESIGNATED LANDSCAPES

7.3.1 There are no nationally designated landscapes in the study area, with Eryri National Park and Ynys Mon National Landscape being 6.5km and 3.6km from the Site respectively, and the Dinorwig Slate Quarry Mountain Landscape WHS being 3.6km.

7.3.2 There are 3 SLAs between 1.4km and 2.1km of the Site, although the North-Western Fringes of Snowdonia SLA is the only one of these that extends into the context area of the Site to the southeast.

7.3.3 However, the assessment determined that due to distance and intervening vegetation that landscape and visual receptors would not experience an impact greater than Minor Adverse at any stage of the development proposals.

7.4 CONCLUSIONS

7.4.1 Development on the Site is unlikely to result in Major Adverse effects on the landscape of the area or on visual amenity. Due to its location adjacent to existing major electrical infrastructure features, the containment of the Site by existing trees belts, the absence of designated landscape features in or adjacent to the Site, and the topography and vegetation in the surrounding landscape, whose gentle undulations and numerous small woodlands create separation and restrict the availability of views, landscape and visual effects are likely to be limited.

8.0 REFERENCES

- The Landscape Institute, Institute of Environmental Management and Assessment, (2013) Guidelines for Landscape and Visual Impact Assessment (Third Edition);
- The Landscape Institute, Advice Note 06/19 Visual Representation of Development Proposals (2019);
- https://datamap.gov.wales/;
- Natural Resources Wales. National Landscape Character Areas: https://naturalresources.wales/evidence-and-data/maps/nlca/?lang=en;
- Historic Wales: https://historic-wales-rcahmw.hub.arcgis.com;
- Future Wales: The National Plan 2040;
- Anglesey and Gwynedd Joint Local Development Plan 2011 - 2026;
- Weather information website: https://www.metoffice.gov.uk/research/climate/maps-and-data/location-specific-long-term-averages/gcmnuetjg;
- Ordnance Survey Mapping, 1:25,000 (www.emapsite.co.uk); and
- Google 2025. Google Maps Aerial photography http://maps.google.co.uk/maps

APPENDICES

APPENDIX 1 - METHODOLOGY

GENERAL METHODOLOGY

Although not an 'EIA' project the methodology used in this informal appraisal has been based upon the recommendations in Guidelines for Landscape and Visual Impact Assessment 3rd Edition published by The Landscape Institute and the Institute of Environmental Management & Assessment in 2013 (GLVIA3). As advised in the Guidelines, the general approach and process can be applied to non-EIA assessments, or "Appraisals". The Landscape Institute's Statement of Clarification 1/13 also advises that it is not required in an Appraisal to establish whether the effects arising are or are not significant. However, the degree and nature of the effects identified is assessed.

LANDSCAPE EFFECTS ASSESSMENT

Establishing the landscape baseline

Baseline studies for assessing the landscape effects included a mix of desk study and field work to identify and record the character of the landscape and the elements, features and aesthetic and perceptual factors which contribute to it.

The elements that make up the landscape in the study area were recorded, including:

- physical influences - geology, soils, landform, drainage and water bodies;
- land cover, including different types of vegetation and patterns and types of tree cover;
- the influence of human activity, such as, land use and management, the character of settlements and buildings, the pattern and type of fields and enclosure; and
- the aesthetic and perceptual aspects of the landscape, e.g.: its scale, complexity, openness, tranquillity, wildness.

The overall character of the landscape in the study area was considered, including the particular combinations of elements and aesthetic and perceptual aspects that make each distinctive, usually by identification as key characteristics of the landscape. Evidence about change in the landscape was considered, including the condition of the different landscape types and/or areas, and their constituent parts and evidence of current pressures causing change in the landscape.

Landscape value

The European Landscape Convention promotes taking account of all landscapes, including ordinary or undesignated landscapes. The relative value attached to the landscape was

considered at the baseline stage to inform the judgments about the effects likely to occur, whether to areas of landscape as a whole or to individual elements, features and aesthetic or perceptual dimensions, at the community, local, national or international levels.

Landscape designation is a starting point in understanding landscape value but value may also be attached to undesignated landscapes. Special Qualities, reasons for designation, relevant policies in management plans or designation-specific policies in development plans, were consulted in assessing the relative value of the landscape within designated areas.

Areas of landscape whose character is judged to be intact and in good condition, and where scenic quality, wildness or tranquillity, and natural or cultural heritage features make a particular contribution to the landscape, or where there are important associations, are likely to be highly valued. For "ordinary, everyday landscapes", the judgement was based upon the degree to which they are representative of typical character, the intactness of the landscape and the condition of its elements, scenic quality, sense of place, aesthetic and perceptual qualities.

In Wales, the evaluation of the five aspects of the landscape described in LANDMAP was used, in conjunction with the criteria in Table A1- 1 below, where appropriate.

When determining the landscape value the following elements were considered, in addition to consideration of values associated with designations:

- The importance of the landscape, or the perceived value of the landscape to users or consultees, as indicated by, for example, international, national or local designations;
- The importance of elements or components of the landscape in the landscape character of the area or in their contribution to the landscape setting of other areas;
- Intrinsic aesthetic characteristics, scenic quality or sense of place, including providing landscape setting to other places;
- Cultural associations in the arts or in guides to the area, or popular use of the area for recreation, where experience of the landscape is important;
- The presence and scale of detractors in the landscape and the degree to which they are susceptible to improvement or upgrading; and
- Conservation interests: The presence of features of wildlife, earth science or archaeological or historical and cultural interest can add to the value of the landscape as well as having value in their own right.

The following table indicates the criteria used to determine the Landscape value:

Table A1- 1 Indicative criteria to determine landscape value

Value	Criteria
High Value	Landscapes subject to international, national or local designations, and non-designated landscapes where the following considerations apply: Areas of landscape whose character is judged to be intact and in good condition; Scenic quality, wildness or tranquillity, and/or natural or cultural heritage features make a particular contribution to the landscape;

Value	Criteria
	There are important cultural and artistic associations; They are representative of typical character of the area or have a character or elements that are valued for their rarity; Particular components may be identified as important contributors to the landscape character; The landscape is valued for recreational activities where experience of the landscape is important.
Low Value	Areas of landscape whose character is in poor condition; Scenic quality, wildness or tranquillity, and/or natural or cultural heritage features are not key characteristics of the landscape; Cultural and artistic associations are absent; They are not representative of typical character of the area, but are also not valued for rarity; Particular components may be identified as important contributors to the landscape character; There is little scope for recreational activities where experience of the landscape is important.

Where the value falls between high and low, an intermediate level of value is assigned, e.g. “medium”.

The landscape baseline report aims to:

- describe, map and illustrate the character of the landscape of both the wider study area and the Site and its immediate surroundings;
- identify and describe the individual elements and aesthetic and perceptual aspects of the landscape, particularly those that are key characteristics contributing to its distinctive character;
- indicate the condition of the landscape, including the condition of landscape elements or features;
- project forward drivers and trends in change and how they may affect the landscape over time, in the absence of the proposal; and
- evaluate the landscape and, where appropriate, its components, aesthetic and perceptual aspects, particularly the key characteristics.

Assessing the Landscape Effects

The baseline information about the landscape was combined with understanding of the details of the proposal to identify and describe the landscape effects. The landscape receptors were identified, that is, the components or aspects of the landscape likely to be affected, such as, overall character or key characteristics, individual elements or features, or specific aesthetic or perceptual aspects.

Interactions between the landscape receptors and the components or characteristics of the development at its different stages were considered: construction and operation, and the different types of effect: direct and indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, adverse and beneficial.

Landscape effects considered included:

- change in and/or partial or complete loss of elements, features or aesthetic or perceptual aspects that contribute to the character and distinctiveness of the landscape;
- addition of new elements or features that will influence the character and distinctiveness of the landscape; and
- combined effects of these changes on overall character.

The landscape effects were categorised as adverse, beneficial, or negligible in their consequences for the landscape, judged from the degree to which the proposal fits with existing character and the contribution the development makes to the landscape in its own right, even if in contrast to existing character.

The assessment of the landscape effects was based on assessment of the sensitivity of the landscape receptors and the magnitude of the change in the landscape arising from the proposal.

Sensitivity of the landscape receptors

The sensitivity of landscape receptors combines judgments of their susceptibility to the type of change arising from the development proposal and the value attached to the landscape.

Susceptibility to change means the ability of the landscape receptor to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.

The value attached to the landscape receptors was established in the baseline study.

When determining the landscape susceptibility the following elements were considered:

- The ability of the landscape receptor to accommodate the proposed development without undue consequences for the maintenance of the landscape character and/or the achievement of landscape planning policies and strategies;
- The degree to which the changes arising from the development would alter the overall character, quality/condition of a particular landscape type or area;
- The degree to which the changes arising from the development would alter individual elements or features or aesthetic and perceptual aspects important to the landscape character; and
- Existing landscape studies may identify the sensitivity of the landscape type or area or its characteristics to the general type of development that is proposed.

The following table indicates the criteria used to determine the Landscape susceptibility:

Table A1- 2 Criteria for landscape susceptibility

Susceptibility	Criteria
High Susceptibility	The changes arising from the type of development would alter the overall character, quality/condition of a particular landscape type or area.

Susceptibility	Criteria
	The changes arising from the type of development would alter or remove individual elements or features or aesthetic and perceptual aspects important to, or add new elements incongruous to, the landscape character. The type of development would compromise the achievement of landscape planning policies and strategies for the landscape. The changes arising from the type of development would alter or remove elements or features or aesthetic and perceptual aspects important to the landscape character, or add new elements that would reinforce the key characteristics of the landscape character.
Low Susceptibility	The changes arising from the type of development would not alter the overall character, quality/condition of a particular landscape type or area. The type of development would not compromise the achievement of landscape planning policies and strategies for the landscape. The changes arising from the type of development would not alter or remove individual elements or features or aesthetic and perceptual aspects important to, or add new elements incongruous to, the landscape character.

Where the susceptibility identified falls between high and low, an intermediate level of susceptibility is assigned, e.g. “medium”. The basis for the scale of susceptibility assigned to the landscape receptor is linked back to evidence from the baseline study.

Table A1-3 illustrates indicative criteria for assessing landscape sensitivity combining susceptibility and value. These are the criteria against which receptors are considered in order to arrive at a judgement as to their sensitivity, but it is not necessary for all the criteria set out for a category to apply.

Table A1- 3 Indicative criteria for assessing landscape sensitivity

Category	Indicative criteria
High sensitivity	A highly valued landscape e.g. of national or international importance, whose character or key characteristics are very susceptible to change; Aspects of the landscape character are highly valued as “key characteristics” and, often identified as susceptible to change in national or local character assessments; The landscape character is highly valued as intact and in good condition and particularly vulnerable to disturbance; A highly valued landscape with no or limited potential for substitution or replacement.
Moderate sensitivity	A landscape of local importance or value, whose character or key characteristics are susceptible to change; Other characteristics of the landscape character also valued in national or local character assessments and susceptible to change; The landscape character is valued for moderate condition and not particularly vulnerable to disturbance; A moderately valued landscape with some potential for substitution or replacement.
Lesser sensitivity	No or little evidence of value or importance attached to the landscape area, its features or characteristics;

Category	Indicative criteria
	Few features, characteristics or qualities susceptible to disturbance or particularly susceptible to improvement or upgrading Good potential for substitution or replacement

Magnitude of Landscape Change

Effects on landscape receptors are assessed in terms of size or scale, the geographical extent of the area influenced, and its duration and reversibility.

Table A1- 4 Considerations for assessing magnitude of landscape change

Consideration	Indicative criteria
Size or scale of change	Categorised on a scale of Large, Medium, Small, Negligible or None, based upon: The extent of existing landscape elements that will be lost (or added), the proportion of the total extent that this represents and the contribution of that element to the character of the landscape; The degree to which aesthetic or perceptual aspects of the landscape are altered either by removal of existing components of the landscape or additions of new ones; Whether the effect changes the key characteristics of the landscape, which are critical to its distinctive character.
Geographical area over which the landscape would be changed	Categorised on a scale of: Small: at site level, within the development site itself or at the level of the immediate setting of the site; Medium: at the scale of the landscape type or character area within which the proposal lies; Large: where the development influences several landscape types or character areas.
The duration of the changes	The durations of changes due to the development are categorised as: Short term: zero to five years; Medium term: five to ten years; Long term: ten to twenty-five years; Permanent: more than twenty-five.
Reversibility	The prospect and the practicality of the effect being reversed within twenty-five years.

Indicative criteria used to determine the magnitude of change is as follows:

Table A1- 5 Indicative criteria for assessing magnitude of landscape change

Magnitude of Change	Landscape Change
Great change	Major size or scale of change, affecting the landscape type or character of the area within which the proposal lies or extending over the wider area; likely to be longer term or permanently, with low prospect of reversibility

Magnitude of Change	Landscape Change
Medium change	Intermediate size or scale of change, affecting part of the landscape type or character of the area within which the proposal lies, or larger scale of change at the level of the site or immediate context; likely to continue into the medium term, with good prospect of reversibility
Small change	A minor proportion of the extent of the character type or area is affected or smaller scale of change over a larger extent; the changes occur at the level of the site or immediate context, and likely to be short term and reversible.
Negligible/no change	No apparent change to landscape characteristics

While GLVIA3 includes the duration of the change in the consideration of the magnitude of change, in some cases a major size or scale of change of shorter duration may be considered a “great change”.

Degree of Landscape Effects

Final conclusions about the degree of effect, whether adverse or beneficial, relate the separate judgements about sensitivity of the receptors and magnitude of the changes combined, based upon the following indicative considerations and criteria:

Table A1- 6 Indicative criteria for assessing landscape effects

Landscape effect	Indicative criteria
Major	Highly sensitive landscape completely degraded or greatly changed, with little or no scope for mitigation; Great improvement, sufficient to upgrade overall landscape character. Irreversible adverse or beneficial effects, over an extensive area, on elements and/or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes.
Moderate	Medium change to moderately sensitive landscape or its character; lesser change to higher sensitivity landscape or greater change to less sensitive landscape.
Minor	Small or limited adverse change to the existing landscape or its character; greater change to less sensitive landscape; Considerable scope for mitigation; Small improvement to the existing landscape. Reversible adverse or beneficial effects of short duration, over a restricted area, on elements and/or aesthetic and perceptual aspects that contribute to, but are not key characteristics of the character of landscapes of community value.
Negligible	No perceptible change to the existing landscape or its character; The change is difficult to discern.

Intermediate conditions may be described, such as Moderate-Major, where the criteria for Moderate may be exceeded but not qualify as Major. Where magnitude of change is “None”, the effect would correspondingly be “None”.

Effects may be adverse or beneficial. In some instances, the effect may be offset by other considerations, for example, through the mitigation or landscape proposals, and the resulting effect may be neither beneficial nor adverse.

VISUAL EFFECTS ASSESSMENT

Establishing the visual baseline

Baseline studies for visual effects establish:

- the area in which the development may be visible;
- the different groups of people who may experience views of the development;
- the location where they will be affected;
- the nature of the views at those points; and
- the different groups of people who may be affected by the changes in views or visual amenity.

The potential areas where the site and development proposal are likely to be visible were mapped. Landscape components affecting visibility, like buildings, walls, fences, trees, hedgerows, woodland and banks, were identified through field surveys and mapped where relevant.

The people within the area who may be affected by the changes in views and visual amenity – the visual receptors – were identified, for example:

- people living in the area;
- people passing through on roads and the local lanes;
- people visiting promoted landscapes or attractions; and
- people engaged in recreation of different types, including users of public rights of way, bridleways and access land.

Where relevant, views that form part of the experience and enjoyment of the landscape were noted, for example, from promoted paths, tourist or scenic routes and associated viewpoints.

The proposed viewpoints selected were discussed with the local authority, and informed by the visual appraisal, field surveys, and by desk based research on various issues, for example, access and recreation, valued landscapes, tourist attractions and destinations, popular vantage points, and relative distribution of population. Viewpoints were selected to represent the experience of different types of visual receptors.

The details of viewpoint locations were mapped and catalogued, sufficient to allow someone else to return to the location and record the same view. Photography was carried out in accordance with the Landscape Institute, Advice Note 06/19 Visual Representation of Development Proposals (2019).

The baseline report aims to describe, map and illustrate:

- the type of people (visual receptors) likely to be affected, making clear the activities they are likely to be involved in when enjoying the view;
- details of the viewpoints and of the visual receptors likely to be affected at each;
- the nature, composition and characteristics of the existing view, noting any particular horizontal or vertical emphasis, and any key foci; existing views have been illustrated in annotated photographs identifying important components of the view.
- elements, such as landform, buildings or vegetation, which may interrupt, filter or otherwise influence the views;
- whether or how the view may be affected by seasonal or weather variation.

Assessing the Visual Effects

Predicting and describing visual effects

The baseline information about the visual receptors was combined with understanding of the details of the proposal to identify and describe the visual effects, considering:

- changes in views and visual amenity arising from elements of the development;
- the distance of the viewpoint from the development and whether the viewer would focus on the development due to its scale and proximity or whether the development would be only a small or minor element in a panoramic view;
- whether the view is stationary or transient or one of a sequence of views;
- the nature of the changes: changes in the skyline, creation of a new visual focus in the view, introduction of new elements, changes in visual simplicity or complexity, alteration of visual scale or the degree of visual enclosure; and
- seasonal differences in effects, arising from the varying degree of screening and/or filtering of views by vegetation in summer and winter.

Categorising the visual effects as adverse or beneficial (or neutral) in their consequences for views and visual amenity was based on judgments about whether the changes affect the quality of the visual experience, and the nature of the existing views and the nature of the changes to the views.

The visual effects were assessed, based on assessment of the nature of the visual receptors and their sensitivity, and the nature of the effect on views and visual amenity, that is, the magnitude of visual change.

Sensitivity of the visual receptors

The people or groups of people likely to be affected at a specific viewpoint – the visual receptors – are assessed in terms of their susceptibility to change in views and visual amenity and the value attached to particular view locations and views.

The susceptibility of visual receptors to changes in views and visual amenity is a function of the occupation or activity of people experiencing the view at particular locations and the extent to which their attention or interest is focused on the views or the visual amenity they experience at

particular locations. The context of the location also contributes to susceptibility, for example, people viewing from residential properties or from a valued landscape are likely to be more susceptible to change than people viewing from an industrial context. **Table A1-7** illustrates indicative criteria used to determine visual receptor susceptibility:

Table A1- 7 Indicative criteria to determine visual receptor susceptibility

Susceptibility	Criteria
High Susceptibility	Residents at home. People engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focused on the landscape and on particular views. Visitors to designated landscapes, heritage assets, or other attractions, where views of the surroundings are an important contributor to the experience. Communities where views contribute to the landscape setting enjoyed by residents in the area.
Low Susceptibility	People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape. People at their place of work whose attention may be focused on their work or activity not on their surroundings and where the setting is not important to the quality of working life. Travellers on road, rail or other transport routes, except along recognised scenic routes, where awareness of views is likely to be high.

Where the susceptibility identified falls between high and low, an intermediate level of susceptibility is assigned, e.g. “medium”. The basis for the scale of susceptibility assigned to the visual receptor is linked back to evidence from the baseline study.

Judgments were made about the value attached to the views identified, taking account of recognition, for example, in relation to heritage assets, or through planning designations, appearance in guidebooks or on tourist maps, promotion of particular locations or provision of facilities provided for their enjoyment, such as parking places, sign boards and interpretive material, or references to them in literature or art.

The sensitivity of visual receptors to change is categorised as high, moderate or lesser, in accordance with the criteria set out below.

Table A1- 8 Indicative criteria for visual sensitivity

Category	Indicative criteria
High sensitivity	Viewers in residential or community properties. Views experienced by many viewers. Daily, prolonged or sustained views available over a long period, or where the view of the landscape is an important attractant. A view from a landscape, recreation facility or route valued nationally or internationally for its visual amenity.
Moderate sensitivity	Viewers in residential or community properties with partial or largely screened views of the site.

Category	Indicative criteria
	Frequent open views available. Viewers are pursuing activities such as sports or outdoor work, where the landscape is not the principal reason for being there or the focus of attention is only partly on the view. A view from other valued landscapes, or a regionally important recreation facility or route.
Lesser sensitivity	A view of low importance or value, or where the viewer's attention is not focused their surroundings. A view from a landscape of moderate or less importance, or a locally important recreation facility. Occasional open views or glimpsed views available; passing views available to travellers in vehicles. A view available to few viewers.

Magnitude of visual change

The visual effects identified are evaluated in terms of size or scale, the geographical extent of the area influenced, duration and reversibility.

Table A1- 9 Considerations for assessing magnitude of visual change

Consideration	Indicative criteria
Size or scale of change	Categorised on a scale of major, moderate, minor or none, based upon: The degree of the loss or addition of features in the view; The extent of changes in the composition of the view, including the proportion of the view occupied by the proposed development; The degree of contrast or integration of the changes with the existing or remaining landscape elements and characteristics; The nature of the view of the proposed development, whether full, partial or glimpsed, or the relative amount of time over which it will be experienced.
Geographical area over which the changes would be experienced	The geographic extent reflects: The extent of the area over which the changes would be visible; The angle of view in relation to the main activity of the receptor; The distance of the viewpoint from the proposed development.
The duration of the changes	Categorised as: Short term: zero to five years; Medium term: five to ten years; Long term: ten to twenty-five years Permanent: more than twenty-five.
Reversibility	The prospect and the practicality of the effect being reversed within twenty-five years, or within a generation

Indicative criteria used to determine the magnitude of change is as follows:

Table A1- 10 Indicative criteria for assessing magnitude of visual change

Magnitude of Change	Visual Change
Great change	Major size or scale of change, affecting a large proportion of the angle of the view, or affecting views from a wide area; continuing into the longer term or permanently, with low prospect of reversibility.
Medium change	Intermediate size or scale of change, affecting part of the angle of the view, or affecting some views from the wider area, or larger scale of change in views from within the immediate context of the site; continuing into the medium term, with good prospect of reversibility.
Small change	A minor proportion of the angle of view is affected or the contribution of the changed elements or characteristics to the composition of the view is not important; the changes are viewed from longer distances, are short term and reversible.
Negligible/no change	Barely perceptible change or the change is difficult to discern; No change in the view or the changes due to the development are out of view.

Judging the overall significance of visual effects

Final conclusions about the degree of visual effects, whether adverse or beneficial, relate the separate judgements about sensitivity of the receptors and magnitude of the changes, as illustrated in the indicative criteria shown in **Table A1-11**:

Table A1- 11 Indicative criteria for assessing visual effects

Visual effect	Indicative criteria
Major	Great change or visual intrusion experienced by highly sensitive viewers or from highly sensitive public viewpoints; The proposal would cause a great deterioration in the existing view available to highly sensitive viewers; Great improvement in the view, sufficient to upgrade overall visual amenity. Large scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view, especially where affecting people who are particularly sensitive to changes in views and visual amenity or people at recognised and important viewpoints or from recognised scenic routes.
Moderate	Medium change or visual intrusion experienced by moderately sensitive viewers; Smaller change to higher sensitivity viewers or greater change to less sensitive viewers.
Minor	Small or localised visual intrusion in the existing view, especially for less sensitive viewers. Small or localised reduction in visual intrusion, or improvement in the view. Reversible short term changes, in views available to people for whom the view of the landscape is not the principle focus of interest.

Visual effect	Indicative criteria
Negligible	Negligible change in the view or the change is difficult to discern even for a highly sensitive viewer.

In addition to these criteria, in some instances the effect may be discernible or greater, but offset by other considerations, for example, through the mitigation or landscape proposals for the development, and the resulting effect is neither beneficial nor adverse.

APPENDIX 2 – POLICY

ANGLESEY AND GWYNEDD JOINT LOCAL DEVELOPMENT PLAN 2011 - 2026

Strategic Policy PS 5: Sustainable Development

Development will be supported where it is demonstrated that they are consistent with the principles of sustainable development. All proposals should:

1. Alleviate the causes of climate change and adapting to those impacts that are unavoidable in accordance with Strategic Policy PS 6;
2. Give priority to effective use of land and infrastructure, prioritizing wherever possible the reuse of previously developed land and buildings within the development boundaries of Sub Regional Centre, Urban and Local Service Centres, Villages or in the most appropriate places outside them in accordance with Strategic Policy PS 17, PS 13 and PS 14;
3. Promote greater self-containment of Centres and Villages by contributing to balanced communities that are supported by sufficient services; cultural, arts, sporting and entertainment activities; a varied range of employment opportunities; physical and social infrastructure; and a choice of modes of travel;
4. Protect, support and promote the use of the Welsh language in accordance with Strategic Policy PS 1;
5. Preserve and enhance the quality of the built and historic environment assets (including their setting), improving the understanding, appreciation of their social and economic contribution and sustainable use of them in accordance with Strategic Policy PS 20;
6. Protect and improve the quality of the natural environment, its landscapes and biodiversity assets, including understanding and appreciating them for the social and economic contribution they make in accordance with Strategic Policy PS 19;
7. Reduce the effect on local resources, avoiding pollution and incorporating sustainable building principles in order to contribute to energy conservation and efficiency; using renewable energy; reducing / recycling waste; using materials from sustainable sources; and protecting soil quality;
8. Reduce the amount of water used and wasted; reducing the effect on water resources and quality; managing flood risk and maximizing use of sustainable drainage schemes; and progressing the objectives of the Western Wales River Basin Water Management Plan.

Proposals should also where appropriate:

9. Meet the needs of the local population throughout their lifetime in terms of their quality, types of tenure and affordability of housing units in accordance with Strategic Policy PS 16;
10. Promote a varied and responsive local economy that encourages investment and that will support Centres, Villages and rural areas in accordance with Strategic Policy PS 13;
11. Support the local economy and businesses by providing opportunities for lifelong learning and skills development in accordance with Strategic Policy PS 13;

12. Reduce the need to travel by private transport and encourage the opportunities for all users to travel when required as often as possible by means of alternative modes, placing particular emphasis on walking, cycling and using public transport in accordance with Strategic Policy PS 4;
13. Promote high standards of design that make a positive contribution to the local area, accessible places, that can respond to future requirements and that reduce crime, antisocial behaviour and the fear of crime in accordance with Policy PCYFF 3.

Strategic Policy PS 6: Alleviating and Adapting to the Effects of Climate Change

In order to alleviate the effects of climate change, proposals will only be permitted where it is demonstrated that they have fully taken account of and responded to the following:

1. The energy hierarchy:
   i. Reducing energy demand;
   ii. Energy efficiency;
   iii. Using low or zero carbon energy technologies wherever practical, viable and consistent with the need to engage and involve communities; protect visual amenities, the natural, built and historic environment and the landscape.
2. Reducing greenhouse gas emissions, help to reduce waste and encourage travel other than by car.

In order to adapt to the effects of climate change, proposals will only be permitted where it is demonstrated with appropriate evidence that they have fully taken account of and responded to the following:

3. Implementing sustainable water management measures in line with the objectives in the Western Wales River Basin Management Plan;
4. Locating away from flood risk areas, and aim to reduce the overall risk of flooding within the Plan area and areas outside it, taking account of a 100 years and 75 years of flood risk in terms of the lifetime of residential and non-residential development, respectively, unless it can be clearly demonstrated that there is no risk or that the risk can be managed;
5. Be able to withstand the effects of climate change as much as possible because of its high standards of sustainable design, location, layout and sustainable building methods (in line with Policy PCYFF 3);
6. Safeguarding the best and most versatile agricultural land, promoting allotments, support opportunities for local food production and farming in order to reduce the area's contribution to food miles;
7. Ensuring that the ability of landscapes, environments and species to adapt to the harmful effects of climate change is not affected, and that compensatory environments are provided if necessary;

8. Aim for the highest possible standard in terms of water efficiency and implement other measures to withstand drought, maintain the flow of water and maintain or improve the quality of water, including using sustainable drainage systems (in line with Policy PCYFF 6).

Policy PCYFF 3: Design and Place Shaping

All proposals will be expected to demonstrate high quality design which fully takes into account the natural, historic and built environmental context and contributes to the creation of attractive, sustainable places. Innovative and energy efficient design will be particularly encouraged.

Proposal, including extensions and alterations to existing buildings and structures will only be permitted provided they conform to all of the following criteria, where relevant:

1. It complements and enhances the character and appearance of the site, building or area in terms of siting, appearance, scale, height, massing and elevation treatment;
2. It respects the context of the site and its place within the local landscape, including its impact on important principal gateways into Gwynedd or into Anglesey, its effects on townscape and the local historic and cultural heritage and it takes account of the site topography and prominent skylines or ridges;
3. It utilises materials appropriate to its surroundings and incorporates hard and soft landscaping and screening where appropriate, in line with Policy PCYFF 4;
4. It achieves and creates attractive, safe places and public spaces, taking account of 'Secured by Design' principles (including where appropriate natural surveillance, visibility, well lit environments and areas of public movement);
5. It plays a full role in achieving and enhancing a safe and integrated transport and communications network promoting the interests of pedestrians, cyclists and public transport and ensures linkages with the existing surrounding community;
6. Its drainage systems are designed to limit surface water run-off and flood risk and prevent pollution;
7. The layout and design of the development achieves inclusive design by ensuring barrier free environments, allowing access by all and making full provision for people with disabilities;

Policy PCYFF 4: Design and Landscaping

All proposals should integrate into their surroundings. Proposals that fail to show (in a manner appropriate to the nature, scale and location of the proposed development) how landscaping has been considered from the outset as part of the design proposal will be refused. A landscape scheme should, where relevant:

1. Demonstrate how the proposed development has given due consideration to the Landscape Character Area Assessment or Seascape Character Area Assessment;
2. Demonstrate how the proposed development respects the natural contours of the landscape;
3. Demonstrate how the proposed development respects and protects local and strategic views;

4. Respect, retain and complement any existing positive natural features, landscapes, or other features on site;
5. Identify trees, hedgerows, water courses and topographical features to be retained;
6. Provide justification for circumstances where the removal/loss of existing trees, hedgerows, water courses and topographical features cannot be avoided and provides details of replacements;
7. Provide details of any proposed new landscaping together with a phased programme of planting;
8. Demonstrate that any proposed new planting includes plants and trees of mainly native species of local provenance and does not include any non-native invasive species;
9. Ensure that selection of species and planting position of any trees allows for them to grow to their mature height without detriment to nearby buildings, services and other planting; and
10. Provide permeable hard surface landscaping.

Strategic Policy PS 7: Renewable Energy Technology

The Councils will seek to ensure that the Plan area wherever feasible and viable realises its potential as a leading area for initiatives based on renewable or low carbon energy technologies by promoting:

1. Renewable energy technologies within development proposals which support energy generation from a variety of sources which include biomass, marine, waste, water, ground, solar and wind, including micro generation;
2. Free-standing renewable energy technology development

This will be achieved by:

3. Ensuring that installations in areas covered by international or national landscape designations and visible beyond their boundaries, or areas of local landscape value, in accordance with Strategic Policy PS 19 do not individually or cumulatively compromise the objectives of the designations especially with regard to landscape character, and visual impact;
4. Ensuring that installations in accordance with PS 19 do not individually or cumulatively compromise the objectives of international, national and local nature conservation designations;
5. Supporting installations outside designated areas provided that the installation would not cause significant demonstrable harm to landscape character, biodiversity, or amenity of residential or holiday accommodation, either individually or cumulatively.

To lessen the visual impact of new overhead lines associated with such installations, especially in sensitive locations, the lines should be placed underground unless this causes significant harm to other acknowledged interests or the viability of the scheme, which cannot be negated or mitigated.

Policy ADN 3: Other Renewable Energy and Low Carbon Technologies

Proposals for renewable and low carbon energy technologies, other than wind or solar, which contribute a low carbon future will be permitted, provided that the proposal conforms to the following criteria:

1. All impacts on landscape character, heritage assets and natural resources have been adequately mitigated, ensuring that the special qualities of all locally, nationally and internationally important landscape, biodiversity and heritage designations, including, where appropriate, their settings are conserved or enhanced;
2. That the proposal does not have a significant unacceptable effect on visual amenities;
3. That the proposal is mitigated to ensure that there aren't any significant unacceptable effects on sensitive uses located nearby;
4. Where appropriate, that the proposal does not have a significant unacceptable effect on the quality and supply of water;
5. Where appropriate, existing buildings or previously developed land is used;
6. That the development does not have cumulative unacceptable effect with any prominent features in the landscape or townscape;
7. Where required, the equipment and associated infrastructure are removed from the site in accordance with a restoration and aftercare scheme submitted to and agreed by the Local Planning Authority.

Where necessary, proposals should be informed by the landscape and visual impact assessment.

Strategic Policy PS 19: Conserving and where Appropriate Enhancing the Natural Environment

The Councils will manage development so as to conserve and where appropriate enhance the Plan area's distinctive natural environment, countryside and coastline, and proposals that have a significant adverse effect on them will be refused unless the need for and benefits of the development in that location clearly outweighs the value of the site or area and national policy protection for that site and area in question. When determining a planning application, consideration will need to be given to the following:-

1. Safeguard the Plan area's habitats and species, geology, history, the coastline and landscapes;
2. Protect or where appropriate enhance sites of international, national, regional and local importance and, where appropriate, their settings in line with National Policy;
3. Have appropriate regard to the relative significance of international, national or local designations in considering the weight to be attached to acknowledged interests, ensuring that any international or national responsibilities and obligations are fully met in accordance with National Policy;
4. Protect or enhance biodiversity within the Plan area and enhance and/or restore networks of natural habitats in accordance with the Local Biodiversity Action Plans and Policy AMG 5;
5. Protect or enhance biodiversity through networks of green/ blue infrastructure;

6. Safeguard internationally, nationally and locally protected species;
7. Protect, retain or enhance the local character and distinctiveness of the individual Landscape Character Areas (in line with Policy AMG 2) and Seascape Character Areas (in line with Policy AMG 4);
8. Protect, retain or enhance trees, hedgerows or woodland of visual, ecological, historic cultural or amenity value.

Policy AMG 2: Special Landscape Areas

When considering a proposal within Special Landscape Areas (SLA), as identified by the Proposals Map and listed below, there will be a need to appropriate consideration to the scale and nature of the development ensuring that there is no significant adverse detrimental impact on the landscape. The development should aim to maintain, enhance or restore the recognised character and qualities of the SLA.

The proposal should have regard to the relevant 'Statement of Value and Significance'.

Where appropriate, the Councils will require a Landscape and Visual Impact Assessment in order to consider the impact of the development on the designated area.

In exceptional circumstances, where development is necessary and could result in significant impact on the landscape, appropriate mitigation and compensation measures should be provided.

Policy AMG 3: Protecting and Enhancing Features and Qualities that are Distinctive to the Local Landscape Character

Proposals that would have significant adverse impact upon landscape character as defined by the Landscape Character Areas included within the current Landscape Strategy for the relevant authority, must demonstrate through a landscape assessment how landscape character has influenced the design, scale, nature and site selection of the development.

A proposal will be granted provided it doesn't have significant adverse impact upon features and qualities which are unique to the local landscape in terms of visual, historic, geological, ecological or cultural aspects. Measures should be taken to ensure that the development does not:

1. Cause significant adverse impact to the character of the built or natural landscape;
2. Fail to harmonise with, or enhance the landform and landscape;
3. Lose or fails to incorporate traditional features, patterns, structures and layout of settlements and landscape of both the built and natural environment.

Particular emphasis will be given to the landscapes identified by the Landscape Character Areas as being of high and outstanding quality because of a certain landscape quality or a combination of qualities. Additional consideration will also be given to development that directly affect the landscape character and setting of the AONBs or the National Park.

Policy AMG 5: Local Biodiversity Conservation

Proposals must protect and, where appropriate, enhance biodiversity that has been identified as being important to the local area by:

a. Avoiding significant harmful impacts through the sensitive location of development.
b. Considering opportunities to create, improve and manage wildlife habitats and natural landscape including wildlife corridors, stepping stones, trees, hedges, woodlands and watercourses.

A proposal affecting sites of local biodiversity importance will be refused unless they can conform with all of the following criteria:-

1. That there are no other satisfactory alternative sites available for the development.
2. The need for the development outweighs the importance of the site for local nature conservation;
3. That appropriate mitigation or compensation measures are included as part of the proposal.

Where necessary, an Ecological Assessment which highlights the relevant local biodiversity issues should be included with the planning application.

APPENDIX 3 – LANDMAP

Landscape Assessment, following the LANDMAP methodology, has been undertaken for Gwynedd. The assessment uses the Natural Resources Wales (NRW) / Wales Landscape Partnership Group approach which separates the defining aspects of the landscape into five categories, or aspect layers: geological, habitats, historic, cultural, and visual & sensory. It considers the relationship that exist between people and places; how people have given meaning to places through time and how the physical landscape has shaped their actions, or how their actions have shaped the landscape.

Summarised descriptions for the most relevant aspect areas to the site and its context are outlines below for all five aspect layers. The findings of the LANDMAP studies have formed the basis of the landscape and visual baseline within this appraisal. The evaluations of the LANDMAP aspect areas are mapped on **Figures LA.05-6** to **Figure LA.05-9**.

Whilst all LANDMAP aspect areas have been considered, for the purposes of this LVA, the main focus is on the most relevant aspect areas to the Development Site and its context. LANDMAP Guidance Note 46 outlines criteria that can be used to identify the relevant aspect areas when determining the Study Area in the compilation of a LVIA. The guidance comprises of a series of filters to existing LANDMAP evidence to help focus the detailed assessment of potentially sensitive landscape and visual receptors on the aspect areas most likely to be affected. The filtering process described within Guidance Note 46 is undertaken below, with aspect areas that have been selected to inform determining the value of landscape receptors in the LVA, in accordance with the methodology, recorded in **Table 4.2**.

In determining the study area, the guidance allows for flexibility in relation to the vertical height of proposed structures, with an approximate ratio between the maximum height of the structure and the distance to include in a search area typically being 1:150. This allows for structure less than 25m in height to have a search area of 3km and a study area of 2km.

USING LANDMAP AT THE SEARCH AREA STAGE OF ASSESSMENT

Filters are applied, as illustrated below, to existing LANDMAP evidence to help focus the detailed assessment of potentially sensitive landscape and visual receptors on the aspect areas most likely to be affected.

Geological Landscape, Landscape Habitats and Cultural Landscape Services

Filter 1 Identify all LANDMAP aspect areas that overlap fully or partially or are adjacent to the development site boundary, these are most likely to undergo change.

Filter 2 Identify Geological Landscape aspect areas from filter 1 that record a special relationship with other aspect areas in the LANDMAP survey question 2. Include any extra aspect areas identified.

Filter 3 If a Zone of Theoretical Visibility (ZTV) map is available, retain all filtered aspect areas that are visible with the development.

Filter 4 Retaining all aspect areas in which the development is located irrespective of their evaluation, also identify and retain those aspect areas that are visible and are evaluated as outstanding or high in:

- Geological Landscape survey question 33 and/or rarity/uniqueness question 31
- Landscape Habitats survey question 45 and/or connectivity/cohesion question 42

Cultural Landscape Services does not include landscape evaluation information, retain all aspect areas identified from filter 1 or 3.

Complete detailed LVIA of final filtered LANDMAP aspect areas.

Visual & Sensory and Historic Landscape

Filter 1 Identify all LANDMAP aspect areas within the search area.

Filter 2 If a Zone of Theoretical Visibility (ZTV) map is available, retain all filtered aspect areas that are visible with the development up to the limit of the search area.

Filter 3 Retaining all aspect areas in which the development is located irrespective of their evaluation, also identify and retain filtered aspect areas that are evaluated as outstanding or high in:

- Visual & Sensory overall evaluation (survey question 50), and/or scenic quality (question 46) and/or character (question 48) if the overall evaluation is moderate
- Historic Landscape overall evaluation (survey question 40)

  Also identify and retain filtered aspect areas that are evaluated as moderate or low in:

- Visual & Sensory overall evaluation (survey question 50) and there is potential for a large magnitude of change and opportunities for restoration and enhancement
- Historic Landscape overall evaluation (survey question 40) and there is potential for a large magnitude of change and opportunities for restoration and interpretation

Filter 4 Retain all filter 3 aspect areas that are within the study area plus those aspect areas outside the study area that might contain highly sensitive visual receptors within the search area.

Complete detailed LVIA of final filtered LANDMAP aspect areas.

GEOLOGICAL LANDSCAPE

For LANDMAP Geological Landscape, the site is located in aspect area **Bangor GWNDDGL110** (**Figures LA.05-2** and **LA.07-7**). The aspect area is classified as Lowland plateau (Level 3), the

rarity/uniqueness is evaluated as Moderate, and it has an overall evaluation of Moderate, as it "includes Cambro-Ordovician geology with potential stratigraphical significance, also igneous rocks including granite, although no notable sites recorded".

A strip running southwest to northeast across the study area, and to the southeast of the Site, is covered by GL aspect area **Talybont GWNDDGL109**. The aspect area is classified as Lowland plateau (Level 3), the rarity/uniqueness is evaluated as Outstanding, and it has an overall evaluation of High, as it "includes nationally important site for early Ordovician stratigraphy (Afon Seiont SSSI), also includes significant features of importance for glacial geomorphology".

The southeasternmost part of the study area is covered by GL aspect area **Moel Rhiwen GWNDDGL108**. The aspect area is classified as Lowland plateau (Level 3), the rarity/uniqueness is evaluated as High, and it has an overall evaluation of High, as it "includes nationally important site for Quaternary studies, also significant for Cambrian stratigraphy".

Table A3-1 LANDMAP – Geological Landscape aspect area filters

Aspect Area and Unique ID	Filter 1: Overlap or adjacent to site	Filter 2: Special relationship	Filter 3: In ZTV	Filter 4: High or Outstanding	Included in search stage of assessment	Used to inform landscape value
Bangor GWNDDGL110	Yes	No	Yes	Yes – covers Site	Yes	**Yes**
Talybont GWNDDGL109	No	No	No	-	Yes	**No –** not in ZTV
Moel Rhiwen GWNDDGL108	No	No – not in the search area	Yes	Yes – High in Rarity / Uniqueness and High Overall Evaluation	Yes	**No –** sufficient separation from site

LANDSCAPE HABITATS

The majority of the Site, including the proposed ESS compound, is located in Landscape Habitats aspect area **N/A GWNDDLH683 (Figures LA.05-3** and **LA.07-8)**, while part of the cable route to the north is located in aspect area **N/A GWNDDLH653**, the former is classified as Mosaic (Level 3) and the latter as Improved Grassland (Level 3). Aspect area GWNDDLH683 has an overall evaluation of Moderate as the "area is of more ecological value than the surrounding area of improved grassland, the Broadleaved woodland being of value as is the small area of Purple moor grass priority habitat. Much of the area is planted however and the commonest habitat type is coniferous plantations which is of relatively low value". Aspect area GWNDDLH653 has an overall evaluation of Low as "a common, much altered habitat that is low in ecological value".

Table A3-2 LANDMAP – Landscape Habitats aspect area filters

Aspect Area and Unique ID	Filter 1: Overlap or adjacent to Site	Filter 2: Special relationship	Filter 3: In ZTV	Filter 4: High or Outstanding	Included in search stage of assessment	Used to inform landscape value
N/A GWNDDLH683	Yes	No	Yes	No	Yes – covers Site	**Yes**
N/A GWNDDLH653	Yes	No	Yes	No	Yes – covers Site	**Yes**

HISTORIC LANDSCAPE

The Site and much of the eastern part of the study area is situated in the Historic Landscape aspect area of **Pentir GWNDDHL002 (Figures LA.05-4** and **LA.07-9)**, which is classified as Regular Fieldscapes (Level 3) and is evaluated overall as High (no justification for the overall evaluation is given).

Most of the northwestern part of the study area is covered by HL aspect area **Northern Arfon plateau GWNDDHL024**, which is classified as Irregular Fieldscapes (Level 3) and is evaluated overall as High as it "of regional value as a strong estate landscape in which earlier systems remain apparent".

The eastern southern part of the study area is covered by HL aspect area **Gwaun GWNDDHL902**, which is classified as Regular Fieldscapes (Level 3) and is evaluated overall as Outstanding as it "of national importance as a remarkable post-Medieval landscape of small enclosures and woods".

The western southern part of the study area is covered by HL aspect area **Llanddeiniolen/Dinorwic GWNDDHL853**, which is classified as Irregular Fieldscapes (Level 3) and is evaluated overall as Outstanding as it "of national importance as an enigmatic landscape dominated by the great hillfort of Dinas Dinorwic".

The southeasternmost part of the study area is covered by HL aspect area **Hillslopes below Moel y Ci/Rhiwen GWNDDHL85**1, which is classified as Irregular Fieldscapes (Level 3) and is evaluated overall as Outstanding as it "of national importance as a rich multi-period landscape of relict archaeology, which requires greater study".

A small area on the southeastern edge of the study area is covered by HL aspect area **Rhiwlas GWNDDHL554**, which is classified as Nucleated Settlement (Level 3) and is evaluated overall as Moderate as of "no more than local importance due to 1960s urban-type developments".

The northwestern edge of the study area is covered by HL aspect area **Vaynol GWNDDHL750**, which is classified as Designed (Level 3) and is evaluated overall as Outstanding as "of national value as a major patrician landscape with deep roots".

A small area on the western edge of the study area is covered by HL aspect area **Y Felinheli (Port Dinorwic) GWNDDHL762**, which is classified as Nucleated Settlement (Level 3) and is evaluated overall as Outstanding as "of national value as an estate port and estate village".

To the north of the study area is HL aspect area **Bangor GWNDDHL030**, which is classified as Non-nucleated Settlement (Level 3) and is evaluated overall as High as "Bangor is an historic cathedral city with prehistoric scheduled monuments and many listed buildings".

To the north and east of the study area is HL aspect area **Bangor mountain GWNDDHL610**, which is classified as Non-nucleated Settlement (Level 3) and is evaluated overall as Moderate "as an area of high grounds set apart from the city".

Table A3-3 ANDMAP – Historic Landscape aspect area filters

Aspect Area and Unique ID	Filter 1: In search area	Filter 2: In ZTV	Filter 3: Covers Site or High or Outstanding	Filter 4: Highly sensitive visual receptors	Included in search stage of assessment	Used to inform landscape value
Pentir GWNDDHL002	Yes	Yes	Yes – covers Site	Yes – covers Site	Yes	**Yes**
Northern Arfon plateau GWNDDHL024	Yes	Yes	Yes – High Overall Evaluation	Yes – within study area	Yes	**Yes**
Gwaun GWNDDHL902	Yes	No	-	-	-	**No**
Llanddeiniolen / Dinorwic GWNDDHL853	Yes	Yes	Yes – Outstanding Overall Evaluation	Yes – within study area	Yes	**Yes**
Hillslopes below Moel y Ci/Rhiwen GWNDDHL851	Yes	Yes	Yes – Outstanding Overall Evaluation	Yes – within study area	Yes	**Yes**
Rhiwlas GWNDDHL554	Yes	Yes	No	Yes - residents	Yes	**Yes**
Vaynol GWNDDHL750	Yes	No	-	-	-	**No**
Y Felinheli (Port Dinorwic) GWNDDHL762	Yes	No	-	-	-	**No**

Aspect Area and Unique ID	Filter 1: In search area	Filter 2: In ZTV	Filter 3: Covers Site or High or Outstanding	Filter 4: Highly sensitive visual receptors	Included in search stage of assessment	Used to inform landscape value
Bangor GWNDDHL030	Yes	No	-	-	-	**No**
Bangor mountain GWNDDHL610	Yes	No	-	-	-	**No**

CULTURAL LANDSCAPE SERVICES

Cultural Landscape Services (CLS) now supersedes the Cultural Landscape aspect layer, which was updated in 2020. CLS responds to "Recent environment and well-being legislation and developments in current thinking relating to culture suggest the dataset would benefit from a different approach to mapping if revisited..."[11] The data for CLS uses data from the other four aspect layers and provide no overall evaluations for each aspect area (**Figure LA.05-5**).

The aspect area that covers the Site is **Bethel (between Clynnog and Bangor) GWNDDCLS008**, which is classified as Open Rolling Lowland (Level 3). No additional information is available on cultural, perceptual and sensory qualities, art/artistic expressions associated with the landscape/area, folklore/ legends associated with the landscape/area, or events/traditions associated with the landscape/area.

The southern part of the study area is covered by CLS aspect area **Waen-Pentir GWNDDCLS015**, which is classified as Hillside & Scarp Slopes Grazing (Level 3).

The northwestern edge of the study area is covered by CLS aspect area **Vaynol Estate GWNDDCLS007**, which is classified as Mosaic Rolling Lowland (Level 3).

Table A3-4 LANDMAP - Cultural Landscape Services aspect area filters

Aspect Area and Unique ID	Filter 1: Overlap or adjacent to Site	Filter 2: Special relationship	Filter 3: In ZTV	Filter 4: Identified in Filter 1 or 3	Included in search stage of assessment	Used to inform landscape value
Bethel (between Clynnog and Bangor) GWNDDCLS008	Yes	N/A	Yes	N/A	Yes – covers Site	**Yes**
Waen-Pentir GWNDDCLS015	No	N/A	Yes	N/A	Yes – in ZTV	**Yes**

[11] LANDMAP Cultural Landscape Services, Report No 336, prepared by E.K Naumann, Dr K Metcalf, Environmental Systems, Cyfoeth Naturiol Cymru/Natural Resources Wales

Aspect Area and Unique ID	Filter 1: Overlap or adjacent to Site	Filter 2: Special relationship	Filter 3: In ZTV	Filter 4: Identified in Filter 1 or 3	Included in search stage of assessment	Used to inform landscape value
Vaynol Estate GWNDDCLS007	No	N/A	No	N/A	No	**No**

VISUAL & SENSORY ASPECT

The Site is located within LANDMAP Visual and Sensory aspect area **Bethel (between Clynnog and Bangor) GWNDDVS006 (Figures LA.05-1** and **LA.07-6)**, which is classified as Open Rolling Lowland (Level 3). The overall evaluation of the aspect area is Moderate as "some relatively attractive views from selected viewpoints, but generally none free of presence of detractor. However, also contains sufficient lesser qualities (moderate character/visual unity) to make this rolling farmland of local importance".

The southeastern part of the study area as the land starts to rise is covered by V&S aspect area **Waen-Pentir GWNDDVS011**, which is classified as Hillside & Scarp Slopes Grazing (Level 3). The overall evaluation of the aspect area is Moderate as "some attractive views from a few viewpoints, in themselves of high value, compromised by the presence of visual detractors in the majority of views. upland farmland characterised by small/medium scale drystone wall bounded fields of local importance".

The parkland to the northwest of the study area is covered by V&S aspect area **Vaynol Estate GWNDDVS005**, which is classified Mosaic Rolling Lowland (Level 3). The overall evaluation of the aspect area is High as an "attractive mature parkland with many existing original features, not least high estate stone wall, with picturesque views within and some glimpsed views out. Would be outstanding if estate had not been compromised by intrusive development within and adjacent".

V&S aspect area **Y Felinheli GWNDDVS025** is situated to the west of the study area and is classified Urban (Level 3). The overall evaluation of the aspect area is Moderate as it has "redeeming features of good setting and areas of historic interest".

V&S aspect area **Bangor GWNDDVS002** is situated to the north of the study area and is classified Urban (Level 3). The overall evaluation of the aspect area is Moderate as a "fairly attractive town with no great detractors or distinctions".

The hills to the southeast of the study area are covered by V&S aspect area **Cefn-du GWNDDVS012**, which is classified as Upland Grazing (Level 3). The overall evaluation of the aspect area is High as "relatively unspoilt with attractive views to mountains and coast. Seen from most parts of coastal lowlands."

Table A3-5 LANDMAP - Visual and Sensory aspect area filters

Aspect Area and Unique ID	Filter 1: In search area	Filter 2: In ZTV	Filter 3: Covers Site or High or outstanding	Filter 4: Highly sensitive visual receptors	Included in search stage of assessment	Used to inform landscape value
Bethel (between Clynnog and Bangor) GWNDDVS006	Yes	Yes	Yes – covers Site	Yes – In study area	Yes – In study area	Yes
Pentir GWNDDVS011	Yes	Yes	No	No	No	No
Vaynol Estate GWNDDVS005	Yes	No	No	No	No	No
Y Felinheli GWNDDVS025	Yes	No	No	No	No	No
Bangor GWNDDVS002	Yes	No	No	No	No	No
Cefn-du GWNDDVS012	Yes	Yes	Yes – High overall	Yes – Residents and users of access land	Yes – meets all criteria	Yes

APPENDIX 4 - LIST OF FIGURES