

Assessment of the impact of the proposed development of the Dyffryn/Ogwen Valley and Dinorwig registered historic landscapes

Introduction

The Register of Historic Landscapes is an advisory, non-statutory register. It provides information on and raises the awareness of a selection of the most important and significant landscape areas in Wales to aid their protection and conservation.

In *Planning Policy Wales 2018* the Welsh Government's objectives include protecting historic landscapes on the register. This document states that the implications of developments which meet the criteria for Environmental Impact Assessment on registered historic landscapes must be considered. In the mineral planning authority's scoping opinion (dated 29 January 2019) Cadw stated they would require assessment of the impact of the proposed development on registered historic landscapes.

A Guide to Good Practice on Using the Register of Landscapes of Historic Interest in the Development Process provides a staged process for assessing the significance of the impact of development on registered historic landscapes (ASIDOHL2). This process has been used to assess the implications of the proposed development on the two registered historic landscapes located within 3km: 'Dyffryn/Ogwen Valley' and 'Dinorwig'.

The following assessment included two enlargements to existing tips within the quarry that are no longer part of the current planning application

ASIDOHL2 Stage 1

Compilation of an introduction of essential, contextual information

The first stage of the assessment is to gather information and provide an introduction. This is divided into nine sections.

(a) A brief summary description of the development, with a map at the appropriate scale showing its location in relation to the historic landscape area on the Register.

The proposed development is a small lateral extension of an existing active slate workings at Penrhyn Quarry, Bethesda. The original proposals (2019) that were discussed with CADW also involved a revision to the tipping arrangements within the current quarry workings. A revised scheme was designed in December 2021 that retained the permitted design for tipping. This ASIDOHL 2 assessment has not been revised as it represents a ‘worst-case’ scenario for the effects of tipping upon the landscape, an assessment that has not previously been carried out for the permitted quarry.

However, for the purposes of the EIA, only the effects of the proposed lateral extension has been assessed.

The extension area will measure 2.3ha of which 1.3ha will be extraction.

The proposed development site is located within the Ogwen Valley registered historic landscape, with the Dinorwig registered historic landscape about 310m to the west.

Using GIS data provided by Gwynedd Historic Environment Record and visual scanning of published Arfon Historic Landscape Character information (<http://www.heneb.co.uk/hlc/arfon.html>; accessed 28 October to 18 November 2019), 17 character areas were identified within 3km of the centre point of the proposed development area (listed below). Of these, 14 are partly or completely within the zones of theoretical visibility for the extension and tips (ZTV; marked with an asterisk below).

8 Allt Ddu

*11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine

*12 Bethesda and Llanllechid

*14 Penrhyn Quarry

15 Pen isa'r Nant

16 Nant Ffrancon - valley floor

*17 Nant Ffrancon – valley slopes

*32 Ogwen valley

*33 Mynydd Llandygai

*36 Unenclosed mountain (north Carneddau)

*37 Enclosed fields above Bethesda

*38 Fieldscape around Llanllechid

*40 Sling

*41 Moel y Ci/Gwaen Gynfi unenclosed uplands

*42 Gwaen Gynfi enclosed area

*52 Telford's Road

*53 Hillslopes below Moel y Ci / Rhiwen

The development will directly affect three of the historic character areas. The proposed tips are in 14 Penrhyn Quarry, 41 Moel y Ci/Gwaen Gynfi unenclosed uplands and 36 Unenclosed mountain (North Carneddau). The proposed extension is within 41 Moel y Ci/Gwaen Gynfi unenclosed uplands. These three character areas are included in the ASIDOHL2 assessment.

In discussions with Neil Maylan of Cadw it was agreed that eight character areas immediately adjacent to character areas 14, 36 and 41 and within the extension and tips' ZTV should be included in the ASIDOHL assessment (Appendix A: Consultations). These are:

- 11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine
- 12 Bethesda and Llanllechid
- 17 Nant Ffrancon – valley slopes
- 32 Ogwen Valley
- 33 Myndd Llandygai (quarry village)
- 37 Enclosed fields above Bethesda
- 40 Sling
- 53 Hillslopes below Moel y Ci/Rhiwen.

Although outside the ZTV, 15 Pen isa'r Nant was also included, on the basis it is immediately adjacent to character area 14.

Figure 1 shows the boundaries of the registered historic landscapes, historic characterisation areas and the development site.

(b) A statement about the context in which the ASIDOHL2 is being done.

As part of an Environmental Impact Assessment/Environmental Statement.

(c) If relevant, a brief summary of the planning history of the site

Refer to the Planning Statement.

(d) References to related assessments

SLR Consulting 2015 *Penrhyn Quarry Environmental Statement Viewpoint A-K*, SLR Consulting drawings PQR 6/6 to 6/16.

SLR Consulting 2015 *Penrhyn Quarry Environmental Statement Penrhyn Quarry – Volume 2A*. Chapter 12: Archaeology

SLR Consulting 2015-19 *Penrhyn Quarry North Western Extension: Zone of Theoretical Visibility*, SLR Consulting drawings NWE 6/5 to 6/16 and PQR 6/5.

(e) A summary of national, regional and local planning policies in relation to historic landscapes in the development area

See Chapter 8

(f) In the relevant cases, an indication of the provisional status of any Historic Character Areas

Not applicable.

(g) An indication of the confidence levels of which the ASIDOHL2 is based and any resulting limits assigned to impact predictions.

The ASIDOHL2 assessment has been undertaken solely as a desk-based exercise, based on the sources listed in section (i) below.

The terminology used in the register entries for registered historic landscapes varies, as does the structure of the entries themselves. This makes it difficult to assess registered historic landscapes on a comparative basis.

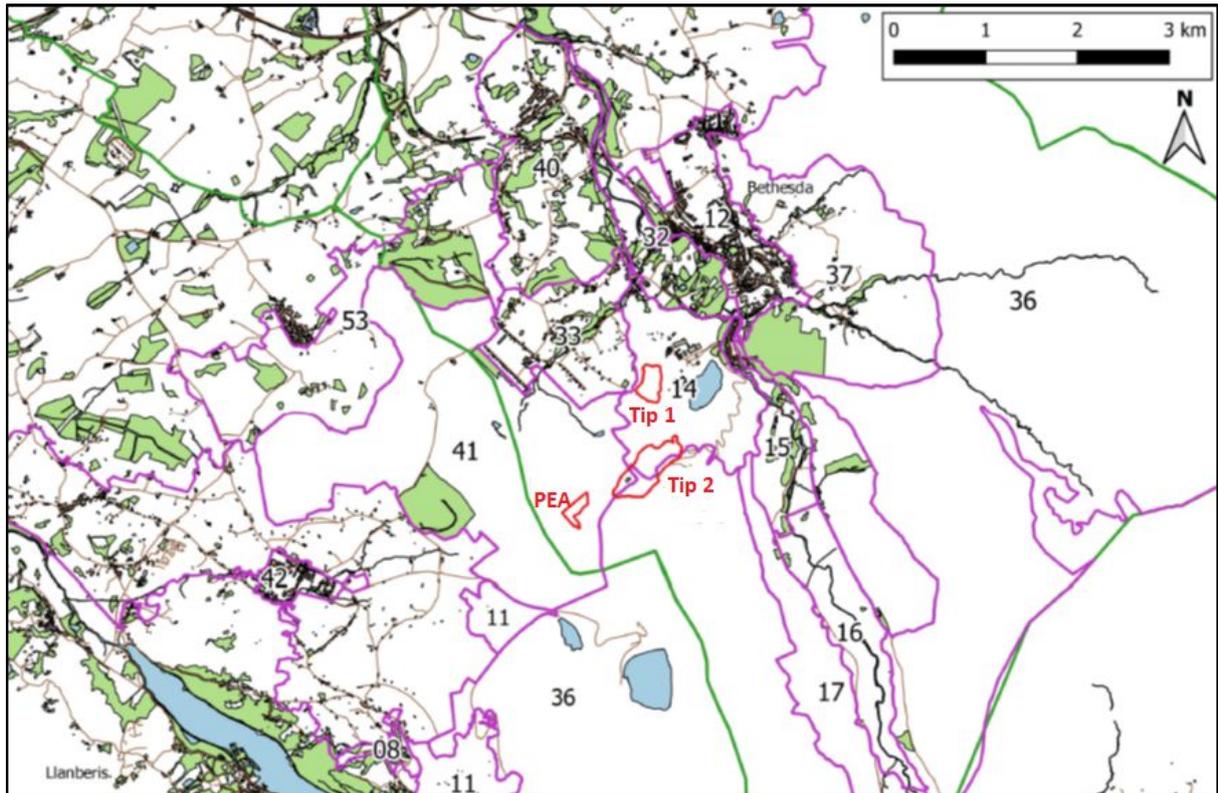


Figure 1 Historic Landscape Character Areas (edged purple) within 3km of the Site. The boundary between the Ogwen Valley and Dinorwig Registered Historic Landscape is shown by a green line

Some of the published descriptions of the historic character area are short with little detail. This makes it difficult to locate some of the features mentioned in the descriptions and assess the documentation relating to each area.

(h) A statement on the qualifications and experience of the person(s) responsibly for undertaking the ASIDOHL2.

The ASIDOHL2 has been produced by David Robertson and Andrew Josephs of Andrew Josephs Associates (AJA). AJA was contracted to prepare the cultural heritage chapter of the Environment Statement, including the ASIDOHL2, by SLR Consulting Limited, on behalf of Welsh Slate (Breedon Trading) Limited.

David Robertson has worked as a heritage consultant since August 2018, writing desk-based assessments, preparing Environment Statement chapters and providing advice on the historic environment implications of a broad range of developments. He is currently archaeologist at the Forestry Commission. Prior to this he was a historic environment planning officer for Norfolk County Council Historic Environment Service for 12 years and led on rural heritage for the Association of Local Government Archaeological Officers (from January 2017). He holds a BA in Geography and History from the University of Wales Aberystwyth and a MA in Archaeology from Reading University and is a full Member of the Chartered Institute for Archaeologists.

Andrew Josephs is Managing Director of AJA, a consultancy specialising in archaeology and cultural heritage founded in 2002. He has extensive experience of all periods and facets of cultural heritage, including the authorship of over 800 Heritage Statements, the majority under the EIA Regulations.

He was previously Principal Consultant (Director of Heritage and Archaeology) at AMEC and Wardell Armstrong, where he started in 1992, becoming one of the UK's first consultants in the post-PPG16 era of developer-funded archaeology. Prior to 1992, he worked as a field-based archaeologist and researcher for universities and units in the UK, Europe and the USA. For a time, he was visiting lecturer in EIA at the University of Nottingham. He graduated from the University of Wales Lampeter in 1985.

(i) A description of the process used, work undertaken, the area over which impacts have been assessed, sources consulted, site visits, and an indication of the ASIDOHL2 stages undertaken.

ASIDOHL2 stages 1-5 have been undertaken as a desk-based exercise. A concluding statement has been produced.

Copies of the historic landscape citation and descriptions of the registered historic landscape and historic character areas within 3km of the proposed development are included in Appendices 1-2.

A draft of this ASIDOHL2 assessment was agreed with Neil Maylan of Cadw on 26 November 2019.

Sources consulted:

Cadw 2019 *Cof Cymru*, <https://cadw.gov.wales/advice-support/cof-cymru> (accessed 9-14 October 2019, including the register entries for all 58 of Wales' Registered Historic Landscapes).

Cadw 2019 *Dinorwig Registered Historic Landscape Full Report*, [https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=&id=HLW%20\(Gw\)%206](https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=&id=HLW%20(Gw)%206) (accessed 29 October 2019)

Cadw 2019 *Ogwen Valley Registered Historic Landscape Full Report*, [https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=&id=HLW%20\(Gw\)%2010](https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=&id=HLW%20(Gw)%2010) (accessed 28 October 2019)

Cooke, R. & Davidson, A. 2010 *G2087 Proposed Quarry Realignment, Penrhyn Quarry, Bethesda: Archaeological Survey*, Gwynedd Archaeological Trust report 837.

Countryside Council for Wales, Cadw & Welsh Assembly Government 2007 *Guide to Good Practice on using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process*, https://cadw.gov.wales/sites/default/files/2019-05/LandscapesRegisterGoodPractice_EN_0.pdf (accessed 7-16 October 2019)

Google Earth 2019 *Google Earth Pro/Street View*.

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon*, <http://www.heneb.co.uk/hlc/arfon.html> (accessed 28 October to 18 November 2019)

Gwynedd Council 2019 *The Slate Landscape of Northwest Wales: Nomination as a World Heritage Site – Management Plan for Public Engagement*, Gwynedd Council report.

Hopewell, D. 2009 G2087 *Proposed Quarry Realignment, Penrhyn Quarry, Bethesda: Archaeological Assessment*, Gwynedd Archaeological Trust report 837.

National Library of Scotland no date, *Map Images*, <https://maps.nls.uk/> (accessed 11 November 2019).

Reilly, S. 2018 *Quarry Realignment Project, Penrhyn Quarry, Bethesda, Gwynedd: Archaeological Evaluation and Survey*, Gwynedd Archaeological Trust report 1423.

SLR Consulting 2015, *Penrhyn Quarry Environmental Statement Viewpoint A-K*, SLR Consulting drawings PQR 6/6 to 6/16.

SLR Consulting 2015-19, *Penrhyn Quarry North Western Extension: Zone of Theoretical Visibility*, SLR Consulting drawings NWE 6/5, NWE 6/6 and PQR 6/5.

ASIDOHL2 Stage 2

Description and quantification of the direct, physical impacts of the development on the Historic Character Area(s) affected

<i>Historic Landscape Area:</i>		<i>Historical Character Area:</i>		
Ogwen Valley - HLW (Gw) 10		Arfon - 14 Penrhyn Quarry		
<i>ASIDOHL2 Stage 2: Assessment of Direct, Physical Impacts on Historic Character Area:</i>				
<i>Development:</i>				
A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. The whole of tip 2 and part of Tip 1 tip are within this historic character area.				
<i>Absolute Impact (Loss of Area):</i>		<i>Magnitude & Score:</i>		
Tip 2: 8.2ha affected but no loss of area. Part of Tip 1: About 11.2ha affected but no loss of area. Total: About 19.4ha		Slight – 1		
About 8.6% of the historic character area will be directly affected. As the footprints of the tips will not increase, 0% will be lost.				
<i>Relative and Landscape Impacts (Loss of Known Characteristic or Elements) & Scores</i>				
<i>Element/% Loss</i>	<i>Category</i>	<i>Magnitude</i>	<i>Landscape Value</i>	<i>Landscape Value Effect</i>
a. Major slate quarry, including incline planes, galleries and ancillary structures, about 8.6%	A – 4 (this score reflects the quarry's inclusion in the historic character area and sections of it within the World Heritage site; Gwynedd Council 2019).	Slight - 2	High – defining feature of historic character area – 5	Very slightly reduced - 1
b. 19 th and 20 th - century quarry machinery, 0%	-	No direct impact	-	No direct impact
c. Felin Fawr workshops (scheduled monument CN297), 0%	-	No direct impact	-	No direct impact
<i>Overall magnitude of direct physical impacts:</i>				
13, moderate				

This overall score only includes scores for elements that will be directly affected (element a). Those elements not directly affected are mentioned in the table above for reference but are not included in the overall score (elements b and c).

Notes:

Historic character area 14 Penrhyn Quarry measures 2.258km² (225.8ha).

The key elements assessed are all mentioned in the historic character area description produced by Gwynedd Archaeological Trust (no date).

Both tips are already in existence.

Although tipping will take place within the existing major slate quarry, this will not result in the loss of any incline planes, galleries or historic machinery.

Compiled by: David Robertson

Date: 11-19 November 2019 (hectarages updated 22nd February 2022)

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10		<i>Historical Character Area:</i> Arfon – 36 Unenclosed mountain (North Carneddau)		
<i>ASIDOHL2 Stage 2: Assessment of Direct, Physical Impacts on Historic Character Area:</i>				
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. Part of Tip 1 is within this character area.				
<i>Absolute Impact (Loss of Area):</i> Part of Tip 1: About 9.1ha affected but no loss of area (as the footprint on the tip will not increase). About 0.1% of the historic character area will be directly affected. This is all within the existing Penrhyn Quarry.		<i>Magnitude & Score:</i> Very slight – 1		
<i>Relative and Landscape Impacts (Loss of Known Characteristic or Elements) & Scores</i>				
<i>Element/% Loss</i>	<i>Category</i>	<i>Magnitude</i>	<i>Landscape Value</i>	<i>Landscape Value Effect</i>
a. Mountainside, 0%	-	No direct impact	-	No direct impact
b. Prehistoric settlement and agriculture, 0%	-	No direct impact	-	No direct impact
c. Medieval deserted settlements, 0%	-	No direct impact	-	No direct impact
d. Complex post medieval sheepfolds, 0%	-	No direct impact	-	No direct impact
e. Mining and quarrying trials, 0%	-	No direct impact	-	No direct impact
<i>Overall magnitude of direct physical impacts:</i> 1 – Very Slight This overall score only includes the loss of area score only. Those elements not directly affected are mentioned in the table above for reference but are not included in the overall score (elements a-e).				
<i>Notes:</i> Historic character area 36 Unenclosed Mountain is 85.096km ² (8509.6ha).				

The key elements assessed are all mentioned in the historic character area description produced by Gwynedd Archaeological Trust (no date).

Tip 1 is already in existence. The fact part of the existing Penrhyn quarry is within this historic character area is not currently mentioned in its historic character area description.

Compiled by: David Robertson

Date: 19 November 2019 (hectarages updated 22nd February 2022)

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10		<i>Historical Character Area:</i> Arfon – 41 Moel y Ci/Gwaen Gynfi unenclosed uplands		
<i>ASIDOHL2 Stage 2: Assessment of Direct, Physical Impacts on Historic Character Area:</i>				
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. The extension and part of Tip 1 area within this character area.				
<i>Absolute Impact (Loss of Area):</i> Extension: 1.3ha (to be lost) Part of Tip 1: About 3.2ha affected but not lost (as the footprint on the tip will not increase). Total: About 6.3ha About 0.4% of the character area will be lost to the extension.		<i>Magnitude & Score:</i> Very slight – 1		
<i>Relative and Landscape Impacts (Loss of Known Characteristic or Elements) & Scores</i>				
<i>Element/% Loss</i>	<i>Category</i>	<i>Magnitude</i>	<i>Landscape Value</i>	<i>Landscape Value Effect</i>
a. Unenclosed upland, 0.4% (the extension)	A – 4 (this score reflects the upland is the dominant element in the historic character area).	Very slight - 1	High – defining feature of historic character area – 5	Very slightly reduced - 1
b. Small holdings and early turbaries, 0%	-	No direct impact	-	No direct impact
c. Early 19 th -century water catchment systems for Penrhyn Quarry, 0%	-	No direct impact	-	No direct impact
d. Forestry, 0%	-	No direct impact	-	No impact
e. Prehistoric and medieval archaeological remains, including a possible medieval hafod (upland summer dwelling, PRN12327), an 18 th -century multi-cellular sheepfold (PRN29989), and	C - 2	Very slight - 1	Low – not a defining feature of historic character area (as not mentioned in historic character area	Very slightly reduced - 1

<p>prehistoric enclosures and structures (PNR1707 & 5380) (Hopewell 2009; Cooke & Davidson 2010; Reilly 2018). 0.42% (the extension).</p>			<p>description) – 2</p>	
<p><i>Overall magnitude of direct physical impacts:</i></p> <p>10 – moderate</p> <p>This overall score only includes scores for elements that will be directly affected (elements a and e). Those elements not directly affected are mentioned in the table above for reference but are not included in the overall score (elements b-d).</p>				
<p><i>Notes:</i></p> <p>Historic character area 41 Moel y Ci/Gwaen Gynfi unenclosed uplands is 7.419km² (741.9ha).</p> <p>The four key elements assessed (a-d) are all mentioned in the historic character area description produced by Gwynedd Archaeological Trust (no date). A fifth element has been identified during previous research (including Hopewell 2009; Cooke & Davidson 2010; Reilly 2018).</p> <p>Tip 1 is already in existence. The fact part of the existing Penrhyn quarry is within this historic character area is not currently mentioned in its historic character area description.</p> <p>The extension will not result in the loss of any small holdings, water catchment systems or turbaries.</p> <p>In 2009 Gwynedd Archaeological Trust concluded ‘<i>the small additional land take of the quarry [including the proposed extension] would not produce a significant impact on any of the key historic landscape characteristics and only a very slight impact on the open character of the area</i>’ (Hopewell 2009, 4).</p> <p>The extension will result in the loss of prehistoric, possible medieval and post medieval archaeological remains but these are not currently considered a key element of the historic character area. This is because they do not feature in the area’s description (Gwynedd Archaeological Trust nd).</p>				
<p><i>Compiled by:</i> David Robertson</p>			<p><i>Date:</i> 11-19 November 2019 (22nd February 2022)</p>	



2016 satellite image of the 18th-century multi-cellular sheepfold overlying and adjacent to prehistoric enclosures (Google Earth 2019). The existing quarry is to right. The linear feature with a curved corner in the centre of the image is a modern quarry road and drainage leat.

<i>Historic Landscape Area:</i>		<i>Historical Character Area:</i>		
Dinorwig - HLW (Gw) 6 Ogwen Valley - HLW (Gw) 10		Arfon - 11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine 12 Bethesda and Llanllechid 15 Pen isa'r Nant 17 Nant Ffrancon – valley slopes 32 Ogwen valley 33 Mynydd Llandygai 37 Enclosed fields above Bethesda 40 Sling 53 Hillslopes below Moel y Ci / Rhiwen		
ASIDOHL2 Stage 2: Assessment of Direct, Physical Impacts on Historic Character Area:				
<i>Development:</i>				
A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.				
<i>Absolute Impact (Loss of Area):</i>		<i>Magnitude & Score:</i>		
0ha, 0% of historic character area/areas lost		None		
<i>Relative and Landscape Impacts (Loss of Known Characteristic or Elements) & Scores</i>				
<i>Element/% Loss</i>	<i>Category</i>	<i>Magnitude</i>	<i>Landscape Value</i>	<i>Landscape Value Effect</i>
None, 0%	N/A	N/A	N/A	N/A
<i>Overall magnitude of direct physical impacts:</i>				
None				
<i>Notes:</i>				
As the proposed development will have no direct impact on these nine character areas, one combined form was compiled for them.				
<i>Compiled by:</i> David Robertson		<i>Date:</i> 11 November 2019		

Based on ASIDOHL2 TABLE 4 in Countryside Council for Wales, Cadw & Welsh Assembly Government 2007 *Guide to Good Practice on using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process*.

ASIDOHL2 Stage 3

Descriptions and quantifications of the indirect impacts of the development on the Historic Character Area(s) affected

<i>Historic Landscape Area:</i>		<i>Historical Character Area:</i>
Ogwen Valley - HLW (Gw) 10		Arfon – 14 Penrhyn Quarry
ASIDODL2 Stage 3a:		
<i>Assessment of Indirect, Physical Impacts on Historic Character Area:</i>		
<i>Development:</i>		
A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. The whole of tip 2 and part of Tip 1 are within this historic character area.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Increased risk of exposure, erosion, disturbance, decay, dereliction or other detrimental change during or consequent to the development.	N/A	N/A
Likelihood of increased management needs to maintain elements during or consequent to the development.	N/A	N/A
Severance, fragmentation, dislocation or alteration of functional connections between related elements during or consequent to the development.	N/A	N/A
Frustration or cessation of historic landscape practices during or consequent to the development.	N/A	N/A
Frustration of access leading to decreased opportunities for education, understanding or enjoying amenity of elements during or consequent to the development.	N/A	N/A
<i>Notes:</i>		
Average score: N/A (0)		
The proposal will result in changes to roads and ramps within the existing quarry but this will not result in indirect physical impacts on historic features.		
<i>Compiled by:</i> David Robertson		<i>Date:</i> 11-19 November 2019

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10		<i>Historical Character Area:</i> Arfon – 36 Unenclosed mountain (North Carneddau)
<i>ASIDODL2 Stage 3a:</i> <i>Assessment of Indirect, Physical Impacts on Historic Character Area:</i>		
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. Part of Tip 1 is within this character area.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Increased risk of exposure, erosion, disturbance, decay, dereliction or other detrimental change during or consequent to the development.	N/A	N/A
Likelihood of increased management needs to maintain elements during or consequent to the development.	N/A	N/A
Severance, fragmentation, dislocation or alteration of functional connections between related elements during or consequent to the development.	N/A	N/A
Frustration or cessation of historic landscape practices during or consequent to the development.	N/A	N/A
Frustration of access leading to decreased opportunities for education, understanding or enjoying amenity of elements during or consequent to the development.	N/A	N/A
<i>Notes:</i> Average score: N/A (0)		
<i>Compiled by:</i> David Robertson		<i>Date:</i> 13 November 2019

<i>Historic Landscape Area:</i> Dinorwig - HLW (Gw) 6 Ogwen Valley - HLW (Gw) 10		<i>Historical Character Area:</i> Arfon – 41 Moel y Ci/Gwaen Gynfi unenclosed uplands
<i>ASIDODL2 Stage 3a:</i> <i>Assessment of Indirect, Physical Impacts on Historic Character Area:</i>		
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. The extension and part of Tip 1 area within this character area.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Increased risk of exposure, erosion, disturbance, decay, dereliction or other detrimental change during or consequent to the development.	N/A	N/A
Likelihood of increased management needs to maintain elements during or consequent to the development.	N/A	N/A
Severance, fragmentation, dislocation or alteration of functional connections between related elements during or consequent to the development.	N/A	N/A
Frustration or cessation of historic landscape practices during or consequent to the development: Grazing of unenclosed uplands across 3.1ha/0.42% of the historic character area.	A – 4 (this score reflects the fact grazing is the dominant and historic land management practice in this historic character area).	Very slight - 1
Frustration of access leading to decreased opportunities for education, understanding or enjoying amenity of elements during or consequent to the development.	N/A	N/A
<i>Notes:</i> Average score: 5		
<i>Compiled by:</i> David Robertson		<i>Date:</i> 11 November 2019

<p><i>Historic Landscape Area:</i></p> <p>Dinorwig - HLW (Gw) 6 Ogwen Valley - HLW (Gw) 10</p>		<p><i>Historical Character Area:</i></p> <p>Arfon – 11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine 12 Bethesda and Llanllechid 15 Pen isa'r Nant 17 Nant Ffrancon – valley slopes 32 Ogwen valley 33 Mynydd Llandygai 37 Enclosed fields above Bethesda 40 Sling 53 Hillslopes below Moel y Ci / Rhiwen</p>
<p>ASIDODL2 Stage 3a: <i>Assessment of Indirect, Physical Impacts on Historic Character Area:</i></p>		
<p><i>Development:</i></p> <p>A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.</p>		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Increased risk of exposure, erosion, disturbance, decay, dereliction or other detrimental change during or consequent to the development.	N/A	N/A
Likelihood of increased management needs to maintain elements during or consequent to the development.	N/A	N/A
Severance, fragmentation, dislocation or alteration of functional connections between related elements during or consequent to the development.	N/A	N/A
Frustration or cessation of historic landscape practices during or consequent to the development.	N/A	N/A
Frustration of access leading to decreased opportunities for education, understanding or enjoying amenity of elements during or consequent to the development.	N/A	N/A
<p><i>Notes:</i></p> <p>Average score: N/A (0)</p> <p>As the proposed development will have no indirect physical impact on the nine historic landscape character areas under consideration, one combined form was compiled.</p>		
<p><i>Compiled by:</i> David Robertson</p>		<p><i>Date:</i> 11 November 2019</p>

Based on ASIDOHL2 TABLE 6 in Countryside Council for Wales, Cadw & Welsh Assembly Government 2007 *Guide to Good Practice on using the Register of Historic Interest in Wales in the Planning and Development Process*.

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10		<i>Historical Character Area:</i> Arfon – 14 Penrhyn Quarry
ASIDODL2 Stage 3b: <i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. The whole of tip 2 and part of Tip 1 are within this historic character area.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Visual impacts: <u>views from</u> the following elements to the extension and tips will or may be altered: a. Major slate quarry b. 19 th and 20 th -century machinery NOTE: There is no inter-visibility between the development and the c. Felin Fawr workshops.	a. Category A (national importance) – 4 b. Category U (ungraded) - 1	a. Very slight - 1 b. Very slight - 1
Visual impacts: <u>views to</u> the following elements from the proposed tips and extension will or may be altered: a. Major slate quarry b. 19 th and 20 th -century machinery NOTE: There is no inter-visibility between the development and the c. Felin Fawr workshops.	a. Category A (national importance) – 4 b. Category U (ungraded) - 1	a. Very slight - 1 b. Very slight - 1
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	Average value of element sensitivity: 2.5	Very slight - 1
Visual impact of the development itself in relation to the existing character of the area considering its appearance.	Average value of element sensitivity: 2.5	Very slight - 1

Notes:

Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council no date) and data in Cof Cymru.

There are historic and current incline planes, galleries and tips within and therefore currently visible from and when looking into this historic character area. Adding to two existing tips will be minor visual addition, against the background of the rest of the quarry. The proposal includes reducing the current profile of existing and some historic tips.

Average score for indirect visual impact: 3.5

Combined indirect impact score: 3.5 (on scale of 20)

Combined indirect impact score: 5 (on scale of 28) = slight

Compiled by: David Robertson

Date: 11-13 November 2019

<i>Historic Landscape Area:</i>		<i>Historical Character Area:</i>
Dinorwig - HLW (Gw) 6 Ogwen Valley - HLW (Gw) 10		Arfon – 36 Unenclosed mountain (North Carneddau)
ASIDODL2 Stage 3b: <i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i>		
A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. Part of Tip 1 is within this character area.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Visual impacts: <u>views from</u> the following elements to the extension and tips will or may be altered: a. Mountain side b. Prehistoric settlement and agriculture. One scheduled hut circle settlement is within the ZTV; this is more than 3km from the centre point of the proposal area. None of the following are scheduled monuments and located within the ZTV: c. Medieval deserted settlements d. Complex post medieval sheepfolds e. Mining and quarrying trials	a. Category A (national importance) – 4 b. Category A (national importance) – 4	a. Very slight - 1 b. Very slight - 1
Visual impacts: <u>views to</u> the following elements from the proposed tips and extension will or may be altered: a. Mountain side b. Prehistoric settlement and agriculture	a. Category A (national importance) – 4 b. Category A (national importance) – 4	a. Very slight - 1 b. Very slight - 1
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	Average value of element sensitivity: 4	Very slight - 1
Visual impact of the development itself in relation to the existing character of the area considering its appearance.	Average value of element sensitivity: 4	Very slight - 1

Notes:

Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council no date) and data in Cof Cymru.

The extension and tips will be visible from a number of locations within this historic character area but not the whole of it.

Historic and current tips are currently visible from this historic character area (SLR Consulting 2015, viewpoints B and F, for example).

Average score for indirect visual impact: 5

Combined indirect impact score: 5 (on scale of 20)

Combined indirect impact score: 7 (on scale of 28) = slight

Compiled by: David Robertson

Date: 13 November 2019

<i>Historic Landscape Area:</i>		<i>Historical Character Area:</i>
Dinorwig - HLW (Gw) 6 Ogwen Valley - HLW (Gw) 10		Arfon – 41 Moel y Ci/Gwaen Gynfi unenclosed uplands
ASIDODL2 Stage 3b: <i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i>		
A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. The extension and part of Tip 1 area within this character area.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Visual impacts: <u>views from</u> the following elements to the extension and tips will or may be altered: a. Unenclosed upland b. Small holdings or early turbaries c. Early 19 th -century water catchment systems d. Forestry e. Prehistoric and medieval archaeological remains	a. Category A (national importance) – 4 b. Category C (local importance) – 2 c. Category C (local importance) – 2 d. Category D (minor site/feature) - 1 e. Category C (local importance) – 2	a. Very slight - 1 b. Very slight – 1 c. Very slight – 1 d. Very slight -1 e. Lost - 6
Visual impacts: <u>views to</u> the following elements from the proposed extension and tips will or may be altered: a. Unenclosed upland b. Small holdings or early turbaries c. Early 19 th -century water catchment systems d. Forestry e. Prehistoric and medieval archaeological remains	a. Category A (national importance) – 4 b. Category C (local importance) – 2 c. Category C (local importance) – 2 d. Category D (minor site/feature) - 1 e. Category C (local importance) – 2	a. Very slight - 1 b. Very slight – 1 c. Very slight – 1 d. Very slight -1 e. Lost - 6
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	Average value of element sensitivity: 2.2	Very slight - 1
Visual impact of the development itself in relation to the existing character of the area considering its appearance.	Average value of element sensitivity: 2.2	Very slight - 1

Notes:

Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council no date) and data in Cof Cymru.

The extension and tips will be visible from much of this historic character area but not the whole of it

The proposal will not result in additional visual impact on this historic character area; historic and modern incline planes, galleries and tips are already visible from it (SLR Consulting 2015, viewpoint C, for example). The existing visual impact of tips will continue, with the extension slightly altering the location of some of the visual impact.

Average score for indirect visual impact: 4.03

Combined indirect impact score: 9.03 (on scale of 20)

Combined indirect impact score: 13 (on scale of 28) = moderate

Compiled by: David Robertson

Date: 11-19 November 2019

<i>Historic Landscape Area:</i>		<i>Historical Character Area:</i>
Dinorwig - HLW (Gw) 6		Arfon – 11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine
ASIDODL2 Stage 3b: <i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i>		
A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. The extension is about 0.97km distant from the nearest part of this historic character area.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Visual impacts: <u>views from</u> the following elements to the extension and tips will or may be altered: a. Northern outlying quarry, which first appears on the 1953 6-inch Ordnance Survey map (it is not shown on those published in 1888, 1901 or 1920; National Library of Scotland nd). The main Dinorwic quarry is outside the ZTV.	a. Category C (regional importance) – 2	a. Very slight - 1
Visual impacts: <u>views to</u> the following elements from the proposed extension and tips will or may be altered: a. Northern outlying quarry	a. Category C (regional importance) – 2	a. Very slight - 1
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	Average value of element sensitivity: 2	Very slight - 1
Visual impact of the development itself in relation to the existing character of the area considering its appearance.	Average value of element sensitivity: 2	Very slight - 1
<i>Notes:</i>		
Assessment based on Zone of Theoretical Visibility produced by SLR Consulting, Google Earth/Street View, historic character area description (Gwynedd Council no date), data in Cof Cymru and historic maps published online by the National Library of Scotland.		
The extension and tips will be visible from much of this historic character area.		

The proposal will not result in additional visual impact on this historic character area; the existing quarry and tips are already visible from it (Google Earth 2019). The existing visual impact of tips will continue, with the extension slightly altering the location of some of the visual impact.

Average score for indirect visual impact: 3

Combined indirect impact score: 3 (on scale of 20)

Combined indirect impact score: 4 (on scale of 28) = slight

Compiled by: David Robertson

Date: 11-13 November 2019

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10		<i>Historical Character Area:</i> 12 Bethesda and Llanllechid
ASIDODL2 Stage 3b: <i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Visual impacts: <u>views from</u> the following elements to the tips will or may be altered: a. Slate quarry town, established from 1820 onwards, including some tiny lanes and other areas of regular planning. b. 1830s satellite village of Caellwyngrydd, with a spinal road and radiating contour lanes. c. Chapels – Bethesda (Grade II), Bethania (Grade II), Jerusalem (Grade I) d. Glanogwen church (Grade II).	a. Category A (national importance) – 4 b. Category A (national importance) – 4 c. Category A (regional/national importance) – 3.5 d. Category B (regional importance) – 3	a. Very slight - 1 b. Very slight – 1 c. Very slight – 1 d. Very slight -1
Visual impacts: <u>views to</u> the following elements from the proposed tips will or may be altered: a. Slate quarry town, established from 1820 onwards, including some tiny lanes and other areas of regular planning. b. 1830s satellite village of Caellwyngrydd, with a spinal road and radiating contour lanes. c. Chapels – Bethesda (Grade II), Bethania (Grade II), Jerusalem (Grade I) d. Glanogwen church (Grade II).	a. Category A (national importance) – 4 b. Category A (national importance) – 4 c. Category A (regional/national importance) – 3.5 d. Category B (regional importance) – 3	a. Very slight - 1 b. Very slight – 1 c. Very slight – 1 d. Very slight -1
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	Average value of element sensitivity: 3.625	Very slight - 1
Visual impact of the development itself in relation to the existing character of the area considering its appearance.	Average value of element sensitivity: 3.625	Very slight - 1

Notes:

Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru.

Most of this historic character area is within the ZTV but the proposed tips will only be visible from parts of it, due to trees and buildings obstructing views. Where the proposed tips are visible they will merge into the mass of the existing quarry and tips (SLR Consulting 2015, viewpoint J, for example; Google Earth 2019, image below, for example).

There is no inter-visibility between this historic character area and the proposed extension site (SLR Consulting 2019).

Average score for indirect visual impact: 4.625

Combined indirect impact score: 4.625 (on scale of 20)

Combined indirect impact score: 6 (on scale of 28) = slight

Compiled by: David Robertson

Date: 13 November 2019



Glanogwen church and the view beyond, roughly south towards the existing quarry, from Pant Glas (Google Earth 2019). The locations of tips 2 and Tip 1 are not in this view.

<i>Historic Landscape Area:</i>		<i>Historical Character Area:</i>
Ogwen Valley - HLW (Gw) 10		15 Pen isa'r Nant
ASIDODL2 Stage 3b:		
<i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i>		
A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. Tip 1 is about 0.73km from this historic character area, with tip 2 about 1.1km distant.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Visual impacts: <u>views from</u> the following elements to the extension and tips will or may be altered: None Unaffected, as outside the ZTV for the tips and extension: picturesque landscape, Ogwen Bank (the Penrhyn family's bijou retreat; reused as a caravan park, river bridges at Ceunant and Ogwen Bank, late 18 th /early 19 th -century farms.	N/A	N/A
Visual impacts: <u>views to</u> the following elements from the proposed extension will or may be altered: None Unaffected, as outside the ZTV for the tips and extension: picturesque landscape, Ogwen Bank (the Penrhyn family's bijou retreat; reused as a caravan park, river bridges at Ceunant and Ogwen Bank, late 18 th /early 19 th -century farms.	N/A	N/A
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	N/A	N/A

Visual impact of the development itself in relation to the existing character of the area considering its appearance.	N/A	N/A
<p><i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View and data in Cof Cymru.</p> <p>The northern most part of this historic character area is within the existing quarry.</p> <p>This historic character area is within the ZTV for the existing quarry but not the ZTVs for the proposed tips or extensions (SLR Consulting 2015-19).</p> <p>Average score for indirect visual impact: 0</p> <p>Combined indirect impact score: 0 (on scale of 20) Combined indirect impact score: 0 (on scale of 28) = very slight</p>		
<i>Compiled by:</i> David Robertson	<i>Date:</i> 14 November 2019	

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10		<i>Historical Character Area:</i> 17 Nant Ffrancon – valley slopes
ASIDODL2 Stage 3b: <i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. Tip 1 is within about 0.5km of this historic character area. The part of the historic character nearest to the proposal area and within the ZTV is about 850m from tip 2.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Visual impacts: <u>views from</u> the following elements to the tips will or may be altered: a. Sheepwalks with irregular enclosures on western side of the valley. b. Unenclosed mountains	a. Category B (regional importance) – 3 b. Category B (regional importance) – 3	a. Very slight - 1 b. Very slight – 1 c. Very slight – 1
Visual impacts: <u>views to</u> the following elements from the proposed tips will or may be altered: a. Sheepwalks with irregular enclosures on western side of the valley. b. Unenclosed mountains	a. Category B (regional importance) – 3 b. Category B (regional importance) – 3	a. Very slight - 1 b. Very slight – 1 c. Very slight – 1 d. Very slight -1
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	Average value of element sensitivity: 3	Very slight - 1
Visual impact of the development itself in relation to the existing character of the area considering its appearance.	Average value of element sensitivity: 3	Very slight - 1
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. The tips might be visible from the eastern valley slopes (they are in the ZTV) but not those on the west. Trees and woodland will partly obscure views from/to the lower slopes. The extension will to be concealed by tips and hills (SLR Consulting 2019; Google Earth 2019, image below, for example). Where tips are visible, they will merge into the mass of the existing quarry and tips (Google Earth 2019).		

Average score for indirect visual impact: 4

Combined indirect impact score: 4 (on scale of 20)

Combined indirect impact score: 6 (on scale of 28) = slight

Compiled by: David Robertson

Date: 13 November 2019



View from the lower slopes (from the A5 road at around SH 6331 6489 where there is a gap in roadside trees), looking roughly southwest towards the existing quarry and southern tip (Google Earth 2019). The site of the extension is behind the hill and tips.

<i>Historic Landscape Area:</i>		<i>Historical Character Area:</i>
Ogwen Valley - HLW (Gw) 10		32 Ogwen valley
ASIDODL2 Stage 3b: <i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i>		
<p>A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.</p> <p>Tip 2 is within about 0.6km of this historic character area.</p>		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
<p>Visual impacts: <u>views from</u> the following elements to the proposed tips will or may be altered:</p> <p>a. Narrow wooded valley</p> <p>Cochwillan mill is more than 3km from the proposal areas so has not been considered. Coetmor Mill does not appear to be listed.</p>	a. Category A (national importance) – 4	a. Very slight - 1
<p>Visual impacts: <u>views to</u> the following elements from the proposed tips will or may be altered:</p> <p>a. Narrow wooded valley</p>	a. Category A (national importance) – 4	a. Very slight - 1
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	Average value of element sensitivity: 4	Very slight - 1
Visual impact of the development itself in relation to the existing character of the area considering its appearance.	Average value of element sensitivity: 4	Very slight - 1
<i>Notes:</i>		
<p>Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru.</p> <p>There is no inter-visibility between this historic character area and the proposed extension site (SLR Consulting 2019).</p> <p>There are a few places in this historic character area where there are views of existing tips (Google Earth 2009; image below, for example). In many places trees tend to block views. The historic</p>		

character area will be visible from the highest tips. If/where the proposed tips are visible, they will merge into the mass of the existing quarry and tips.

Average score for indirect visual impact: 5

Combined indirect impact score: 5 (on scale of 20)

Combined indirect impact score: 7 (on scale of 28) = slight

Compiled by: David Robertson

Date: 13 November 2019



View from Coed-y-parc (at around SH 6161 6640, where there is a gap in roadside trees), looking roughly south towards the existing quarry and site of tip 2 (Google Earth 2019).

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10		<i>Historical Character Area:</i> 33 Mynydd Llandygai
<i>ASIDODL2 Stage 3b:</i> <i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. Tip 2 is within about 25m of this historic character area. Tip 1 is just over 600m distant, with the proposed extension around 900m away.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Visual impacts: <u>views from</u> the following elements to the extension and tips will or may be altered: a. Mid 19th-century industrial/slate quarry workers' settlement, with row of vernacular/polite houses and long allotments separated by slate fences/walls. A selection of houses and fences/walls are listed at Grade II.	a. Category A (national importance) – 4	a. Very slight - 1
Visual impacts: <u>views to</u> the following elements from the proposed extension and tips will or may be altered: a. 19th-century industrial/slate quarry workers' settlement, with row of vernacular/polite houses and long allotments separated by slate fences/walls. A selection of houses and fences/walls are listed at Grade II.	a. Category A (national importance) – 4	a. Very slight - 1
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	Average value of element sensitivity: 4	Very slight - 1
Visual impact of the development itself in relation to the existing character of the area considering its appearance.	Average value of element sensitivity: 4	Very slight - 1

Notes:

Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru.

The current and historic quarry and tips are visible from this historic character area (SLR Consulting, viewpoint D; Google Earth 2019, image below, for example).

The proposed extension and tips will be visible from this historic character area (SLR Consulting, viewpoint D).

Average score for indirect visual impact: 5

Combined indirect impact score: 5 (on scale of 20)

Combined indirect impact score: 7 (on scale of 28) = slight

Compiled by: David Robertson

Date: 14 November 2019



Tip 2, looking east from the southern edge of the historic character area (at around SH 6139 6519).

<i>Historic Landscape Area:</i>		<i>Historical Character Area:</i>
Ogwen Valley - HLW (Gw) 10		37 Enclosed fields above Bethesda
<i>ASIDODL2 Stage 3b:</i> <i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i>		
<p>A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.</p> <p>Tip 2 is within about 920m of this historic character area.</p>		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
<p>Visual impacts: <u>views from</u> the following elements to the extension and tips will or may be altered:</p> <p>a. Small irregular fields of at least three phases, many of 18th-century date.</p> <p>b. Relict prehistoric and medieval settlements (including scheduled monuments CNF144 and CNF263).</p> <p>c. Small scattered farms on the margins of enclosed land (including Tan-y-garth bach, an 18th-century grade II listed cottage).</p> <p>d. Winding paths and narrow tracks.</p>	<p>a. Category A (national importance) – 4</p> <p>b. Category A (national importance) – 4</p> <p>c. Category C (regional importance) – 3</p> <p>d. Category C (local importance) - 1</p>	<p>a. Very slight - 1</p> <p>b. Very slight – 1</p> <p>c. Very slight – 1</p> <p>d. Very slight -1</p>
<p>Visual impacts: <u>views to</u> the following elements from the proposed extension will or may be altered:</p> <p>a. Small irregular fields of at least three phases, many of 18th-century date.</p> <p>b. Relict prehistoric and medieval settlements.</p> <p>c. Small scattered farms on the margins of enclosed land.</p> <p>d. Winding paths and narrow tracks.</p>	<p>a. Category A (national importance) – 4</p> <p>b. Category A (national importance) – 4</p> <p>c. Category C (regional importance) – 3</p> <p>d. Category C (local importance) - 1</p>	<p>a. Very slight - 1</p> <p>b. Very slight – 1</p> <p>c. Very slight – 1</p> <p>d. Very slight -1</p>
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	Average value of element sensitivity: 3	Very slight - 1

Visual impact of the development itself in relation to the existing character of the area considering its appearance.	Average value of element sensitivity: 3	Very slight - 1
<p><i>Notes:</i></p> <p>Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru.</p> <p>The current tips and quarry and proposed tips are visible from most of this historic character area. The extension will be visible from a restricted section (SLR Consulting 2015-19; Google Earth 2019, images below, for example).</p> <p>The proposed tips and extension will merge into the mass of the existing quarry and tips.</p> <p>Average score for indirect visual impact: 4</p> <p>Combined indirect impact score: 4 (on scale of 20)</p> <p>Combined indirect impact score: 6 (on scale of 28) = slight</p>		
<i>Compiled by:</i> David Robertson	<i>Date:</i> 14 November 2019	



View from the historic character area (from around SH 6339 6698), looking southwest towards the existing quarry and tips and the proposal area (Google Earth 2019).



View from the historic character area (from around SH 6295 6702), looking southwest towards the existing quarry and tips and the proposal area (Google Earth 2019).

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10		<i>Historical Character Area:</i> 40 Sling
<i>ASIDODL2 Stage 3b:</i> <i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. Tip 2 is within about 980m of this historic character area.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Visual impacts: <u>views from</u> the following elements to the extension and tips will or may be altered: None Unaffected: open fields of pre-modern sheep walks, early slate quarrying sites, 19 th -century housing.	N/A	N/A
Visual impacts: <u>views to</u> the following elements from the proposed extension will or may be altered: Unaffected: open fields of pre-modern sheep walks, early slate quarrying sites, 19 th -century housing.	N/A	N/A
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its appearance.	N/A	N/A
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru.		

Inter-visibility between the proposed tips and this historic character area is very limited, with trees and woods restricting views across most of the ZTV (SLR Consulting 2015-19; Google Earth 2019, image below, for example).

Average score for indirect visual impact: 0

Combined indirect impact score: 0 (on scale of 20)

Combined indirect impact score: 0 (on scale of 28) = very slight

Compiled by: David Robertson

Date: 14 November 2019



View from the historic character area (from around SH 6079 6698), looking roughly southeast towards the existing quarry and tips and the proposal area (Google Earth 2019).

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10		<i>Historical Character Area:</i> 53 Hillslopes below Moel y Ci / Rhiwen
<i>ASIDODL2 Stage 3b:</i> <i>Assessment of Indirect, Visual Impacts on Historic Character Area:</i>		
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings. The proposed extension and Tip 1 are about 2.2km from this historic character area. This part of the historic character area is within the ZTV.		
<i>Impacts</i>	<i>Category & Score</i>	<i>Magnitude & Score</i>
Visual impacts: <u>views from</u> the following elements to the extension and tips will or may be altered: a. Small irregular fields b. Forestry Outside the ZTV: scheduled archaeological sites, prehistoric field boundaries, 20 th -century military camp.	a. Category A (national importance) – 4 b. Category C (local importance) – 2	a. Very slight - 1 b. Very slight – 1
Visual impacts: <u>views from</u> the following elements to the extension and tips will or may be altered: a. Small irregular fields b. Forestry Outside the ZTV: scheduled archaeological sites, prehistoric field boundaries, 20 th -century military camp.	a. Category A (national importance) – 4 b. Category C (local importance) – 2	a. Very slight - 1 b. Very slight – 1
Impact on visual connections between related elements, by occlusions, obstructions etc.	N/A	N/A
Creation of inappropriate visual connections between elements not intended to be inter-visible originally.	N/A	N/A
Visual impact of the development itself in relation to the existing character of the area considering its form.	Average value of element sensitivity: 3	Very slight - 1
Visual impact of the development itself in relation to the existing character of the area considering its appearance.	Average value of element sensitivity: 3	Very slight - 1

Notes:

Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru.

Inter-visibility between the proposed tips and this historic character area is very limited, with only two small sections adjacent to historic character areas 33 and 40 within the ZTV (SLR Consulting 2015-19; Google Earth 2019, image below, for example).

The proposed tips and extension will merge into the mass of the existing quarry and tips.

Average score for indirect visual impact: 4

Combined indirect impact score: 4 (on scale of 20)

Combined indirect impact score: 6 (on scale of 28) = slight

Compiled by: David Robertson

Date: 14 November 2019



View from the western part of the historic character area within the ZTV (from around SH 5993 6623, adjacent to historic character area 33), looking roughly southeast towards the existing quarry and tips and the proposal area (Google Earth 2019).

Based on ASIDOHL2 TABLE 7 in Countryside Council for Wales, Cadw & Welsh Assembly Government 2007 *Guide to Good Practice on using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process*.

ASIDOHL2 Stage 4

Evaluation of the relative importance of the Historic Character Area(s) directly and/or indirectly affected by the development

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10						<i>Historical Character Area:</i> Arfon - 14 Penrhyn Quarry				
ASIDODL2 Stage 4a&b: <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/V good</i>	<i>High/Good</i>	<i>Mod/Med</i>	<i>Low</i>	<i>Poor/None</i>	<i>V High/V good</i>	<i>High/Good</i>	<i>Mod/Med</i>	<i>Low</i>	<i>Poor/None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>					√		√			
<i>Representativeness</i>				√					√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>			√						√	
<i>Survival</i>			√				√			
<i>Condition</i>			√				√			
<i>Coherence</i>	√					√				
<i>Integrity</i>			√					√		
<i>Potential</i>			√					√		
<i>Amenity</i>		√					√			
<i>Associations</i>		√					√			
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix 3 contains the further details of the assessment of the whole historic landscape.										
<i>Compiled by:</i> David Robertson						<i>Date:</i> 14 November 2019				

<i>Historic Landscape Area:</i> Dinorwig – HLW (Gw) 6 Ogwen Valley - HLW (Gw) 10						<i>Historical Character Area:</i> Arfon – 36 Unenclosed mountain (North Carneddau)				
<i>ASIDODL2 Stage 4a&b:</i> <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>					√		√			
<i>Representativeness</i>			√						√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>				√					√	
<i>Survival</i>	√					√				
<i>Condition</i>		√					√			
<i>Coherence</i>	√					√				
<i>Integrity</i>		√					√			
<i>Potential</i>		√					√			
<i>Amenity</i>			√					√		
<i>Associations</i>					√					√
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix 3 contains the further details of the assessment of the whole historic landscape. The area directly affected is all within the existing Penrhyn Quarry. The area indirectly affected is mountain side.										
<i>Compiled by:</i> David Robertson						<i>Date:</i> 14 November 2019				

<i>Historic Landscape Area:</i> Dinorwig – HLW (Gw) 6 Ogwen Valley - HLW (Gw) 10						<i>Historical Character Area:</i> Arfon – 41 Moel y Ci/Gwaen Gynfi unenclosed uplands				
<i>ASIDODL2 Stage 4a&b:</i> <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>					√		√			
<i>Representativeness</i>		√							√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>				√					√	
<i>Survival</i>	√					√				
<i>Condition</i>		√					√			
<i>Coherence</i>	√					√				
<i>Integrity</i>		√					√			
<i>Potential</i>		√					√			
<i>Amenity</i>			√					√		
<i>Associations</i>					√					√
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix 3 contains the further details of the assessment of the whole historic landscape. The area directly affected by the extension is unenclosed upland with archaeological remains. The area affected by Tip 1 is part of the existing Penrhyn Quarry. The area indirectly affected is unenclosed upland and forestry.										
<i>Compiled by:</i> David Robertson						<i>Date:</i> 14 November 2019				

<i>Historic Landscape Area:</i> Dinorwig – HLW (Gw) 6						<i>Historical Character Area:</i> Arfon – 11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine				
ASIDODL2 Stage 4a&b: <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/V good</i>	<i>High/Good</i>	<i>Mod/Med</i>	<i>Low</i>	<i>Poor/None</i>	<i>V High/V good</i>	<i>High/Good</i>	<i>Mod/Med</i>	<i>Low</i>	<i>Poor/None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>					√		√			
<i>Representativeness</i>		√							√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>					√				√	
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>		√					√			
<i>Integrity</i>		√					√			
<i>Potential</i>			√					√		
<i>Amenity</i>			√					√		
<i>Associations</i>					√				√	
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix 3 contains the further details of the assessment of the whole historic landscape. The area indirectly affected is a disused 20 th -century quarry.										
<i>Compiled by:</i> David Robertson						<i>Date:</i> 18 November 2019				

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10						<i>Historical Character Area:</i> 12 Bethesda and Llanllechid				
<i>ASIDODL2 Stage 4a&b:</i> <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>					√		√			
<i>Representativeness</i>		√							√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>	√							√		
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>	√						√			
<i>Integrity</i>		√					√			
<i>Potential</i>		√					√			
<i>Amenity</i>		√					√			
<i>Associations</i>		√					√			
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix 3 contains the further details of the assessment of the whole historic landscape. The area indirectly affected includes a slate quarry town, a satellite village, chapels and a church.										
<i>Compiled by:</i> David Robertson						<i>Date:</i> 18 November 2019				

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10					<i>Historical Character Area:</i> 15 Pen isa'r Nant					
<i>ASIDODL2 Stage 4a&b:</i> <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>	√					√				
<i>Representativeness</i>					√					√
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>					√					√
<i>Survival</i>			√				√			
<i>Condition</i>		√					√			
<i>Coherence</i>				√			√			
<i>Integrity</i>			√				√			
<i>Potential</i>			√							√
<i>Amenity</i>			√							√
<i>Associations</i>				√					√	
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix 3 contains the further details of the assessment of the whole historic landscape. The northern part of this character area is within the existing quarry, which is covered by the above scores. None of the character area will be affected by the development.										
<i>Compiled by:</i> David Robertson					<i>Date:</i> 18 November 2019					

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10						<i>Historical Character Area:</i> 17 Nant Ffrancon – valley slopes				
<i>ASIDODL2 Stage 4a&b:</i> <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>					√		√			
<i>Representativeness</i>	√								√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>				√					√	
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>	√						√			
<i>Integrity</i>		√					√			
<i>Potential</i>		√					√			
<i>Amenity</i>			√				√			
<i>Associations</i>		√					√			
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix 3 contains the further details of the assessment of the whole historic landscape. The proposed development will indirectly affect sheepwalk and unenclosed mountains.										
<i>Compiled by:</i> David Robertson						<i>Date:</i> 18 November 2019				

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10						<i>Historical Character Area:</i> 32 Ogwen valley				
<i>ASIDODL2 Stage 4a&b:</i> <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>					√		√			
<i>Representativeness</i>			√						√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>					√				√	
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>	√					√				
<i>Integrity</i>		√					√			
<i>Potential</i>		√					√			
<i>Amenity</i>		√					√			
<i>Associations</i>		√					√			
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix 3 contains the further details of the assessment of the whole historic landscape. The proposed development will indirectly affect narrow wooded valley.										
<i>Compiled by:</i> David Robertson						<i>Date:</i> 18 November 2019				

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10						<i>Historical Character Area:</i> 33 Mynydd Llandygai				
<i>ASIDODL2 Stage 4a&b:</i> <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>					√		√			
<i>Representativeness</i>		√							√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>		√							√	
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>		√					√			
<i>Integrity</i>		√					√			
<i>Potential</i>		√					√			
<i>Amenity</i>		√					√			
<i>Associations</i>			√					√		
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix C contains the further details of the assessment of the whole historic landscape. The proposed development will indirectly affect a 19 th -century industrial settlement.										
<i>Compiled by:</i> David Robertson						<i>Date:</i> 18 November 2019				

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10						<i>Historical Character Area:</i> 37 Enclosed fields above Bethesda				
<i>ASIDODL2 Stage 4a&b:</i> <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>					√		√			
<i>Representativeness</i>		√							√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>		√					√			
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>		√					√			
<i>Integrity</i>		√					√			
<i>Potential</i>	√					√				
<i>Amenity</i>		√					√			
<i>Associations</i>					√					√
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix 3 contains the further details of the assessment of the whole historic landscape. The proposed development will indirectly affect irregular fields of three phases, relict prehistoric and medieval settlements, small scattered farms and winding paths and narrow tracks.										
<i>Compiled by:</i> David Robertson						<i>Date:</i> 18 November 2019				

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10						<i>Historical Character Area:</i> 40 Sling				
ASIDODL2 Stage 4a&b: <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>					√		√			
<i>Representativeness</i>		√							√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>				√					√	
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>		√					√			
<i>Integrity</i>		√					√			
<i>Potential</i>			√					√		
<i>Amenity</i>				√					√	
<i>Associations</i>			√					√		
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix 3 contains the further details of the assessment of the whole historic landscape. Restricted inter-visibility means very little, if any, of this character area will be affected by the development.										
<i>Compiled by:</i> David Robertson						<i>Date:</i> 18 November 2019				

<i>Historic Landscape Area:</i> Ogwen Valley - HLW (Gw) 10						<i>Historical Character Area:</i> 53 Hillslopes below Moel y Ci / Rhiwen				
ASIDODL2 Stage 4a&b: <i>Evaluation of the Relative Importance of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:</i>										
<i>Development:</i> A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.										
<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	<i>(a) Whole of Historic Character Area</i>					<i>(b) Whole of Historic Landscape Area on Register</i>				
<i>Criterion:</i>										
<i>Rarity</i>					√		√			
<i>Representativeness</i>				√					√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area description									
<i>Group value</i>				√					√	
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>		√					√			
<i>Integrity</i>		√					√			
<i>Potential</i>		√					√			
<i>Amenity</i>		√						√		
<i>Associations</i>			√					√		
<i>Notes:</i> Assessment based on viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings, Google Earth/Street View, historic character area description (Gwynedd Council nd) and data in Cof Cymru. Appendix 3 contains the further details of the assessment of the whole historic landscape. The proposed development will indirectly affect small irregular fields and forestry.										
<i>Compiled by:</i> David Robertson						<i>Date:</i> 18 November 2019				

Based on ASIDOHL2 TABLE 9 in Countryside Council for Wales, Cadw & Welsh Assembly Government 2007 *Guide to Good Practice on using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process*.

ASIDODL2 Stage 4c:

Evaluation of the Relative Importance in the National Context, of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:

Development:

A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.

<i>Value</i>	<i>V</i> <i>High/</i> <i>V</i> <i>good</i>	<i>High/</i> <i>Good</i>	<i>Mod/</i> <i>Med</i>	<i>Low</i>	<i>Poor/</i> <i>None</i>	<i>V</i> <i>High/</i> <i>V</i> <i>good</i>	<i>High/</i> <i>Good</i>	<i>Mod/</i> <i>Med</i>	<i>Low</i>	<i>Poor/</i> <i>None</i>
<i>In relation to:</i>	14 Penrhyn Quarry					36 Unenclosed mountain (north Carneddau)				

Criterion:

<i>Rarity</i>				√					√	
<i>Representativeness</i>		√						√		
<i>Documentation</i>	Not assessed, as no relevant information in historic character area descriptions									
<i>Group value</i>			√						√	
<i>Survival</i>			√			√				
<i>Condition</i>			√				√			
<i>Coherence</i>	√					√				
<i>Integrity</i>			√				√			
<i>Potential</i>			√				√			
<i>Amenity</i>		√						√		
<i>Associations</i>		√								√

Notes:

Assessment based on key elements of historic character area (as listed in Stages 2 and 3; Gwynedd Council nd; Appendix 2), data in *Cof Cymru* (including the register entries for all 58 of Wales' registered historic landscapes), viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings and Google Earth/Street View.

14 Penrhyn Quarry

Just under a half of Wales' registered historic landscapes include quarries or mines (around 45%). Other examples include Blaenau Ffestiniog, Nantlle Valley, Transfynydd Basin and Cwn Prysor, and Upland Ceredigion.

36 Unenclosed mountain (north Carneddau)

- Mountains are mentioned in the register entries for about a fifth of registered historic landscapes.
- Prehistoric archaeological remains are mentioned in the register entries for about 70% of registered historic landscapes.

Compiled by: David Robertson

Date: 18 November 2019

ASIDODL2 Stage 4c:

Evaluation of the Relative Importance in the National Context, of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:

Development:

A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.

<i>Value</i>	<i>V</i> <i>High/</i> <i>V</i> <i>good</i>	<i>High/</i> <i>Good</i>	<i>Mod/</i> <i>Med</i>	<i>Low</i>	<i>Poor/</i> <i>None</i>	<i>V</i> <i>High/</i> <i>V</i> <i>good</i>	<i>High/</i> <i>Good</i>	<i>Mod/</i> <i>Med</i>	<i>Low</i>	<i>Poor/</i> <i>None</i>
<i>In relation to:</i>	41 Moel y Ci/Gwaen Gynfi unenclosed uplands					11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine				

Criterion:

<i>Rarity</i>				√					√	
<i>Representativeness</i>				√					√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area descriptions									
<i>Group value</i>				√					√	
<i>Survival</i>	√						√			
<i>Condition</i>		√					√			
<i>Coherence</i>	√						√			
<i>Integrity</i>		√					√			
<i>Potential</i>		√						√		
<i>Amenity</i>			√					√		
<i>Associations</i>					√				√	

Notes:

Assessment based on key elements of historic character area (as listed in Stages 2 and 3; Gwynedd Council nd; Appendix 2), data in *Cof Cymru* (including the register entries for all 58 of Wales' registered historic landscapes), viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings and Google Earth/Street View.

41 Moel y Ci/Gwaen Gynfi unenclosed uplands

- Moorland is mentioned in the register entries for about 14% of registered historic landscapes.
- Mountains are mentioned in the register entries for about a fifth of registered historic landscapes.
- Hills are mentioned in the register entries for about a quarter of registered historic landscapes.

11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine

Just under a half of Wales' registered historic landscapes include quarries or mines (around 45%).

Compiled by: David Robertson

Date: 18 November 2019

ASIDODL2 Stage 4c:

Evaluation of the Relative Importance in the National Context, of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:

Development:

A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.

<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	12 Bethesda and Llanllechid					15 Pen isa'r Nant				

Criterion:

<i>Rarity</i>				√					√	
<i>Representativeness</i>		√							√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area descriptions									
<i>Group value</i>			√							√
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>		√					√			
<i>Integrity</i>		√					√			
<i>Potential</i>		√								√
<i>Amenity</i>		√								√
<i>Associations</i>		√							√	

Notes:

Assessment based on key elements of historic character area (as listed in Stages 2 and 3; Gwynedd Council nd; Appendix 2), data in *Cof Cymru* (including the register entries for all 58 of Wales' registered historic landscapes), viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings and Google Earth/Street View.

12 Bethesda and Llanllechid

- Towns are mentioned in the register entries for just over 30% of registered historic landscapes.
- Chapels are mentioned in the register entries for about 10% of registered historic landscapes.
- Churches are mentioned in the register entries for just under 20% of registered historic landscapes.

15 Pen isa'r Nant

Just under a half of Wales' registered historic landscapes include quarries or mines (around 45%).

Compiled by: David Robertson

Date: 18 November 2019

ASIDODL2 Stage 4c:

Evaluation of the Relative Importance in the National Context, of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:

Development:

A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.

<i>Value</i>	<i>V</i> <i>High/</i> <i>V</i> <i>good</i>	<i>High/</i> <i>Good</i>	<i>Mod/</i> <i>Med</i>	<i>Low</i>	<i>Poor/</i> <i>None</i>	<i>V</i> <i>High/</i> <i>V</i> <i>good</i>	<i>High/</i> <i>Good</i>	<i>Mod/</i> <i>Med</i>	<i>Low</i>	<i>Poor/</i> <i>None</i>
<i>In relation to:</i>	17 Nant Ffrancon – valley slopes					32 Ogwen valley				

Criterion:

<i>Rarity</i>				√					√	
<i>Representativeness</i>				√					√	
<i>Documentation</i>	Not assessed, as no relevant information in historic character area descriptions									
<i>Group value</i>				√			√			
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>		√						√		
<i>Integrity</i>		√					√			
<i>Potential</i>		√					√			
<i>Amenity</i>		√						√		
<i>Associations</i>		√						√		

Notes:

Assessment based on key elements of historic character area (as listed in Stages 2 and 3; Gwynedd Council nd; Appendix 2), data in *Cof Cymru* (including the register entries for all 58 of Wales' registered historic landscapes), viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings and Google Earth/Street View.

17 Nant Ffrancon – valley slopes

- Irregular enclosures/fields are mentioned in the register entries for about a quarter of registered historic landscapes.
- Mountains are mentioned in the register entries for about a fifth of registered historic landscapes.

32 Ogwen valley

- Valleys are mentioned in the register entries for about a fifth of registered historic landscapes.

Compiled by: David Robertson

Date: 18 November 2019

ASIDODL2 Stage 4c:

Evaluation of the Relative Importance in the National Context, of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:

Development:

A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.

<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	33 Mynydd Llandygai					37 Enclosed fields above Bethesda				

Criterion:

<i>Rarity</i>				√						√
<i>Representativeness</i>				√						√
<i>Documentation</i>	Not assessed, as no relevant information in historic character area descriptions									
<i>Group value</i>				√			√			
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>		√					√			
<i>Integrity</i>		√					√			
<i>Potential</i>		√				√				
<i>Amenity</i>		√					√			
<i>Associations</i>			√							√

Notes:

Assessment based on key elements of historic character area (as listed in Stages 2 and 3; Gwynedd Council nd; Appendix 2), data in *Cof Cymru* (including the register entries for all 58 of Wales' registered historic landscapes), viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings and Google Earth/Street View.

33 Mynydd Llandygai

Towns are mentioned in the register entries for just over 30% of registered historic landscapes.

37 Enclosed fields above Bethesda

- Irregular enclosures/fields are mentioned in the register entries for about a quarter of registered historic landscapes.
- Prehistoric archaeological remains are mentioned in the register entries for about 70% of registered historic landscapes.
- Medieval archaeological remains are mentioned in the register entries for about 35% of registered historic landscapes.
- Scattered farms are mentioned in the register entries for about 7% of registered historic landscapes.

Compiled by: David Robertson

Date: 18 November 2019

ASIDODL2 Stage 4c:

Evaluation of the Relative Importance in the National Context, of the (Part of) Historic Character Area Directly or Indirectly Affected by Development:

Development:

A small lateral extension of an existing active slate workings, including tipping of overburden and quarried waste at existing tips within the area of the existing workings.

<i>Value</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>	<i>V High/ V good</i>	<i>High/ Good</i>	<i>Mod/ Med</i>	<i>Low</i>	<i>Poor/ None</i>
<i>In relation to:</i>	40 Sling					53 Hillslopes below Moel y Ci / Rhiwen				

Criterion:

<i>Rarity</i>				√						√
<i>Representativeness</i>				√						√
<i>Documentation</i>	Not assessed, as no relevant information in historic character area descriptions									
<i>Group value</i>				√						√
<i>Survival</i>		√					√			
<i>Condition</i>		√					√			
<i>Coherence</i>		√					√			
<i>Integrity</i>		√					√			
<i>Potential</i>			√				√			
<i>Amenity</i>				√				√		
<i>Associations</i>			√					√		

Notes:

Assessment based on key elements of historic character area (as listed in Stages 2 and 3; Gwynedd Council nd; Appendix 2), data in *Cof Cymru* (including the register entries for all 58 of Wales' registered historic landscapes), viewpoint drawings and Zone of Theoretical Visibility produced by SLR Consulting drawings and Google Earth/Street View.

40 Sling

Restricted inter-visibility means very little, if any, of this character area will be affected by the development.

53 Hillslopes below Moel y Ci / Rhiwen

- Irregular enclosures/fields are mentioned in the register entries for about a quarter of registered historic landscapes.

Compiled by: David Robertson

Date: 18 November 2019

Based on ASIDOHL2 TABLE 10 in Countryside Council for Wales, Cadw & Welsh Assembly Government 2007 *Guide to Good Practice on using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process*.

Average relative importance scores for stages 4a, b and c (on a scale of 55, with very high scoring 5 and poor 1):

Directly affected

- 14 Penrhyn Quarry: 33
- 36 Unenclosed mountain (north Carneddau): 33
- 41 Moel y Ci/Gwaen Gynfi unenclosed uplands: 33

Indirectly affected

- 11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine: 30
- 12 Bethesda and Llanllechid: 38
- 15 Pen isa'r Nant: 26
- 17 Nant Ffrancon – valley slopes: 35
- 32 Ogwen valley: 35
- 33 Mynydd Llandygai: 35
- 37 Enclosed fields above Bethesda: 35
- 40 Sling: 32
- 53 Hillslopes below Moel y Ci / Rhiwen: 33

Average relative importance scores for stages 4a, b and c (adjusted/on a scale of 100):

Directly affected

- 14 Penrhyn Quarry: 67
- 36 Unenclosed mountain (north Carneddau): 65
- 41 Moel y Ci/Gwaen Gynfi unenclosed uplands: 66

Indirectly affected

- 11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine: 61
- 12 Bethesda and Llanllechid: 75
- 15 Pen isa'r Nant: 53
- 17 Nant Ffrancon – valley slopes: 71
- 32 Ogwen valley: 69
- 33 Mynydd Llandygai: 69
- 37 Enclosed fields above Bethesda: 70
- 40 Sling: 64
- 53 Hillslopes below Moel y Ci / Rhiwen: 65

Grades of overall value at stage 4:

Directly affected

- 14 Penrhyn Quarry: High
- 36 Unenclosed mountain (north Carneddau): High
- 41 Moel y Ci/Gwaen Gynfi unenclosed uplands: High

Indirectly affected

- 11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine: High
- 12 Bethesda and Llanllechid: High

- 15 Pen isa'r Nant: Considerable
- 17 Nant Ffrancon – valley slopes: High
- 32 Ogwen valley: High
- 33 Mynydd Llandygai: High
- 37 Enclosed fields above Bethesda: High
- 40 Sling: High
- 53 Hillslopes below Moel y Ci / Rhiwen: High

ASIDOHL2 Stage 5:

Assessment of the overall significance of the impact of the development, and the effects that altering the Historic Character Area(s) concerned has on the whole of the landscape area on the Register

Historic Character Area (name)	Value of part of Historic Character Area (stage 4)		Impact of development (stages 2 and 3)		Reduction of value of the historic landscape area		Total score for Historic Character Area	Overall significance of impact for Historic Character Area
	Grade	Score	Grade	Score	Grade	Score		
14 Penrhyn Quarry	High	7	Very low	1	Very low	1	9	Slight
36 Unenclosed mountain (North Carneddau)	High	7	Very low	1	Very low	1	9	Slight
41 Moel y Ci/Gwaen Gynfi unenclosed uplands	High	7	Low	2	Low	2	11	Moderate
11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine	High	7	Very low	1	Very low	1	9	Slight
12 Bethesda and Llanllechid	High	8	Very low	1	Very low	1	10	Moderate
15 Pen isa'r Nant	Medium	6	Very low	1	Very low	1	8	Slight
17 Nant Ffrancon - valley slopes	High	7	Very low	1	Very low	1	9	Slight
32 Ogwen Valley	High	7	Very low	1	Very low	1	9	Slight
33 Mynydd Llandygai	High	7	Very low	1	Very low	1	9	Slight
37 Enclosed fields above Bethesda	High	7	Very low	1	Very low	1	9	Slight
40 Sling	High	7	Very low	1	Very low	1	9	Slight
53 Hillslopes below Moel y Ci / Rhiwen	High	7	Very low	1	Very low	1	9	Slight

ASIDOHL2 Concluding Statement

The proposed quarry extension and permitted areas of tipping are located within the Ogwen Valley registered historic landscape. The extension would be within 260m of the Dinorwig registered historic landscape. Both these registered historic landscapes are of national importance and outstanding value.

The proposed quarry extension will have direct and indirect physical impacts on one historic landscape character area. This is 41 Moel y Ci/Gwaen Gynfi unenclosed uplands, which includes unenclosed upland, small holdings/early turbaries, early 19th-century water catchment systems, forestry, and prehistoric and medieval archaeological remains. This impact includes the loss of a very small part of the character area (about 0.42%) and changes in land-use (grazed unenclosed upland to quarry).

The two permitted tips are located within three landscape character areas: 14 Penrhyn Quarry, 36 Unenclosed mountain (North Carneddau) and 41 Moel y Ci/Gwaen Gynfi unenclosed uplands. The tips have a direct impact to small or very small parts of all three landscape character areas – 8.6% of 14 Penrhyn quarry, 0.1% of 36 Unenclosed mountain and 0.43% of 41 Moel y Ci/Gwaen Gynfi unenclosed uplands.

The proposed extension and permitted tips will moderately change views to and from the 41 Moel y Ci/Gwaen Gynfi unenclosed uplands. Combined with the direct and indirect physical impacts, the ASIDOHL2 process has graded the related reduction in value as ‘low’ and the significance of the overall impact of the proposed development on 41 Moel y Ci/Gwaen Gynfi unenclosed uplands as ‘moderate’. This ‘moderate’ grading is influenced by the high value of the historic character area.

The ASIDOHL2 process has assessed the potential for the proposed development to change views from locations within the eleven other historic character areas (14, 36, 11, 12, 15, 17, 32, 33, 37, 40 and 53). In most inter-visible locations the extension and tips will merge into the mass of the existing quarry and tips. As a result, the proposed development will have a slight indirect visual impact on nine high value historic character areas (14, 36, 11, 12, 17, 32, 33, 37 and 53), a very slight indirect visual impact on one high value historic character area (40) and a very slight indirect visual impact on one medium value historic character area (15).

The ASIDOHL2 process has graded the significance of the overall impact of the proposed development on the 12 Bethesda and Llanllechid historic character area as ‘moderate’. This ‘moderate’ grading is strongly influenced by the high value of the historic character area, rather than the scale of indirect impacts of the proposed development and related reduction in value (both of which are graded as ‘very low’).

Appendix 1: Registered Historic Landscape Full Reports

Reference number: HLW (Gw) 10

Name: Ogwen Valley

Date of Designation: 2001

Register Type: Outstanding

Status: Designated

Summary description and reason for designation

The upper part of the Ogwen Valley, or Nant Ffrancon, in north Snowdonia is a deeply glaciated valley of classic Alpine proportions, with its flat floor bounded on both sides by steep slopes that rise to hanging valleys and cirques below ice-worn peaks along the watershed ridges. The valley floor is at about 200m above OD with the surrounding chain of peaks among the highest in Wales, reaching 1044m above OD at Carnedd Dafydd in the east, 999m above OD at Glyder Fawr in the south, and 822m above OD at Carnedd y Filiast in the north west. North of Nant Ffrancon, the valley is much shallower, but the high tributary valleys of Cwm Ffrydlas, Cwm Caseg and Cwm Llafar extend east to the Carneddau ridge between Carnedd Llywelyn and Moel Wnion. On the north west side, outside the main valley, the area includes Moel y Ci, Moel Faban, parts of the coastal strip east of Aber-Ogwen and the north east end of the Arfonian plateau as far as the mouth of the River Cegin on the Menai Strait. The area contains extensive and very well-preserved, relict remains of prehistoric and later land use, and in sharp visual contrast, the immense and diverse remains relating directly and indirectly to the industrial extraction of slate in the last and present centuries. As well as Penrhyn quarry itself, which is one of the few still working in Gwynedd, the contrasting style and scale of the settlements of quarry owner and workers echo the powerful social and economic forces which shaped, and still underlie, this landscape. Overlooking the slate town of Bethesda, the slopes of Moel Faban, Cwm Ffrydlas, Gyrn Wigau and Cwm Caseg contain a palimpsest of relict archaeological remains indicating land use and activity from the prehistoric period to the recent past. There are a number of Bronze Age funerary and ritual monuments and burnt mounds (communal cooking places); several, very extensive and well-preserved, late prehistoric hut settlements, enclosures and field systems; Iron Age hillforts; medieval settlements of long huts and platform houses; 19th century quarry trials and levels, including a leat system and a tramway bed, a hone-stone quarry; and unique, large multi-cellular, drystone-walled sheepfolds. There are further extents of late prehistoric hut settlements and fields above Llanllechid, and vestiges of what might have been equally large extents on the lower slopes beneath Llanllechid and around Tregarth. There is also a large Iron Age hillfort at Pendinas, near the latter village. Further north west, between the Ogwen and Cegin valleys, on a natural terrace partly under what is now the Llandegai Industrial Estate, are the extensive, buried remains of a Neolithic, Bronze Age and later complex of funerary, ritual and settlement sites discovered from the air, including henges and a ceremonial avenue or cursus marked by ditches. The importance of the site is demonstrated by its location at the focus of natural routes along the Ogwen valley to the south east, and running east-west along the coast. The whole area is, however, dominated by the Penrhyn quarry, as was the whole Welsh slate industry, with its excellent quality slate worked by open terracing. The quarry remained the largest, single excavation in the world until the 1960s. Documentary sources hint that slate was being worked in this area as early as the 13th century, but the commercial development of the slate industry owed much to pioneers such as Richard Pennant of Penrhyn, who at the end of the 18th century acquired the numerous small quarries operating in the Bethesda area. A small quay was built in 1790 at the mouth of the River Cegin, on the Menai Strait near Bangor, to export the slate, and this was expanded in 1801 with the construction of Port Penrhyn, and a railway, originally built for horse-drawn trams, to link with the quarries. The trackbed of a slightly later, revised route of the railway survives with the section between Port Penrhyn and Felin-hên in use as a cycle track. The

merging of several small workings into one large productive unit and the provision of an efficient transport system led to a considerable increase in the production of slates to a record output of over 130,000 tons in 1862, when 3,285 men were employed at the quarry. Thereafter, the industry gradually declined, and as in other slate areas, there was a series of protracted and bitter labour disputes culminating in 'Streic Fawr y Penrhyn' (the Penrhyn Lockout) in 1900-1903 which left lasting social scars remembered to this day. The consolidated groups of quarrymen's smallholdings on Mynydd Llandegai to the west of the quarry, each with its parcel of land bounded by slate pillar fences, are one of the most striking testimonies to the planning of the Penrhyn Estate, and contrast with the unplanned nature of most of the villages that developed in the valley, such as Rachub, Llanllechid and Tregarth. Lord Penrhyn also built a model village (with 'no corrupting alehouse') for his workers at Llandegai, outside the main entrance to Penrhyn Castle, which with neat rows of cottages raised around the old church, together with a saw mill on the banks of the River Ogwen, is one of the few examples of a model village in the area. In addition, much of the common land was enclosed at this time to provide grazing land for those with cottages on the Penrhyn Estate. The satellite villages form, after the quarry, perhaps the most important landscape elements of the industry. Bethesda has been viewed as a prototype of Caernarfonshire's quarry Villages, and is possibly the only slate town to have received any detailed study. The original chapel was built near a small group of quarrymen's cottages in 1820, was enlarged in 1830 and then again in 1840. The town also had two brickworks and rapidly expanded to become a classic example of both an irregular and planned development. Penrhyn Castle, seat of the Pennant family, was built by Thomas Hopper between 1827-37 for George Dawkins Pennant on a site which had been occupied since at least the 15th century. Built in Neo-Norman style, it is one of the most potent and enduring reminders of the social and economic forces that have shaped this area, and remained in the family's possession until its acquisition in 1951 by the National Trust. The castle is enparked inside a great wall with castellated gatehouses. The surrounding estate was improved for farming, and a new road through the Ogwen valley was carefully laid out in 1791-92 by Benjamin Wyatt for travellers, in order to get the 'most spectacular view around every bend'. The road on the east side of the valley was built by the Capel Curig Turnpike Trust in 1802 and improved in ensuing years, particularly by the construction in the 1820s of Thomas Telford's new Holyhead Road, the present A5. Nearly all the antiquarian tourist authors of the period provide detailed accounts of the valley and its quarries, including Thomas Pennant, one of the earliest and most famous writers, who

Source

[https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=&id=HLW%20\(Gw\)%2010](https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=&id=HLW%20(Gw)%2010)
(accessed 28 October 2019)

Reference number: HLW (Gw) 6

Name: Dinorwig

Date of Designation: 2001

Register Type: Outstanding

Status: Designated

Summary description and reason for designation

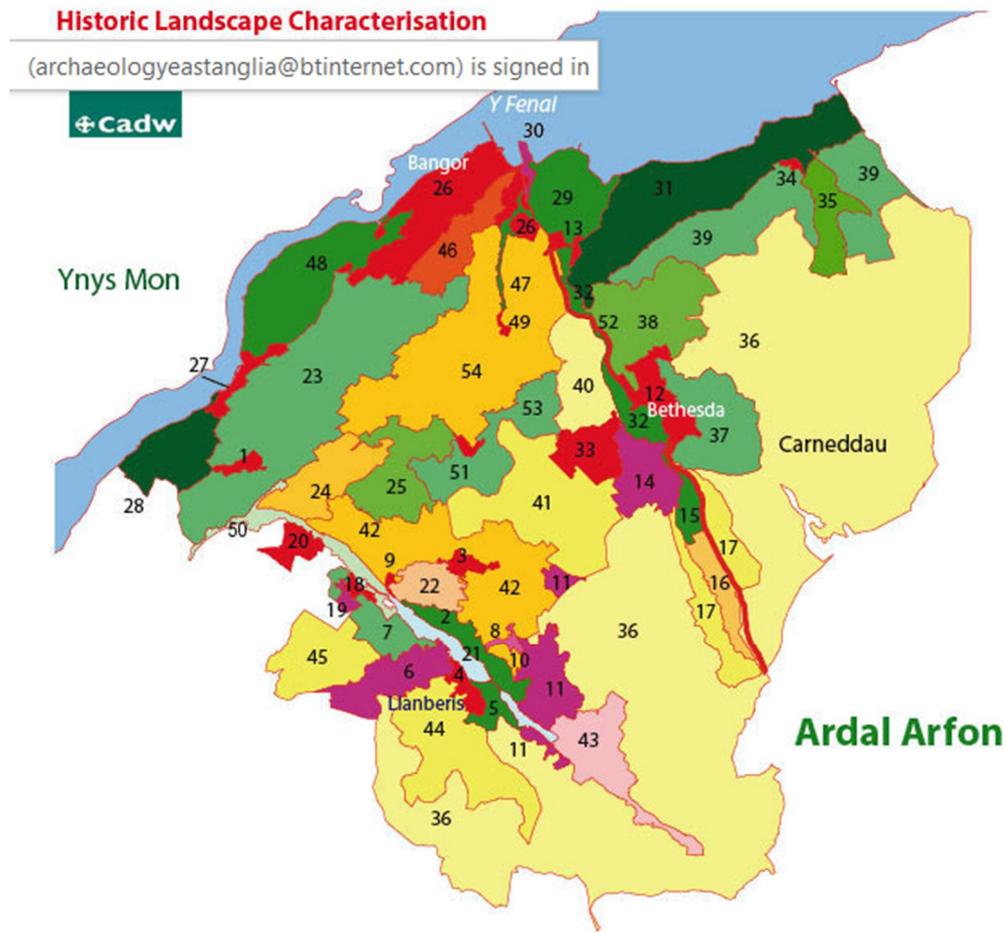
The Dinorwig valley, or Nant Peris, is situated on the north west side of the Snowdonian massif. The valley has been heavily glaciated with its craggy edges rising steeply on both sides. The summit of Snowdon, the highest peak in Wales at 1085m above OD, towers above the valley and defines the southern extent of this area. The valley, with its twin lakes Padarn and Peris, opens north westwards onto the gently undulating Arfonian plateau at about 100m OD. Not unexpectedly, the scenic grandeur of the area was celebrated by most of the antiquarian tourists and artists who visited the area in the late 18th and the 19th centuries. The area has retained considerable evidence for late prehistoric land use and settlement, and for medieval land holdings, but superimposed over these earlier patterns, and dominating the present landscape, are the extensive remains of 19th and 20th centuries slate quarries, their associated settlements and transport infrastructure. These developments were made possible by, and were linked to, the Vaynol Estate, one of the most significant and powerful post-medieval landholdings in North West Wales. The evidence for late prehistoric landscape organisation is not as well-preserved as in other areas because of later agricultural improvements. Only the more massive, robust settlement sites have tended to survive. However, it is often possible to trace the former extents of destroyed settlements and field systems where surviving fragments have been incorporated into later features. The multivallate Iron Age hillfort of Dinas Dinorwig is perhaps the best example, sitting on an isolated hill with dominant views of the the Arfonian plateau in all directions, but surrounded by a fragmentary complex of contemporary hut settlements and enclosures with traces of associated field systems and field banks, many of which are recorded as having been obliterated by land clearance and improvements in the 19th century. More complete remains do occasionally survive on the poorer, unimproved margins, such as on the slopes of Moel Rhiwen to the south east of Dinas Dinorwig. Dolbadarn Castle, built in the 13th century, probably by Llywelyn ab Iorwerth, stands on a low ridge above the isthmus separating Lakes Padarn and Peris. Documentary evidence of the 14th century refer to Prince's 'havotries' or summer dwellings in Dolbadarn, which almost certainly correspond with surviving archaeological sites and placenames around Cwm Dwythwch on the lower slopes of Snowdon. In the late 18th and early 19th centuries, Dolbadarn Castle and its setting became a popular subject for artists wishing to reflect the contemporary aesthetic notions of the Beautiful, the Sublime or the Picturesque. Turner's famous work, which was exhibited at the Royal Academy in 1802, captures the notion of the Sublime perfectly, with the castle depicted as a gloomy, isolated tower set within a stark, windswept, mountain landscape, although most contemporary studies of the site were executed in less dramatic, Beautiful or Picturesque modes, typified by the scene opposite. The scenic popularity of the area continued throughout the 19th century, and in 1896, the 7.6km long Snowdon Mountain Railway, which is regarded as one of Britain's finest historic engineering achievements, was constructed from Llanberis to carry passengers to the summit of Snowdon. During the same period, the area is linked with the growth, development and eventual domination of the Vaynol Estate, a process which has been charted in some detail. The estate no longer exists, but Vaynol Hall and its great walled park survive in the north west of the area on the banks of the Menai Strait. By the late 16th century, the estate was the principal landowner and ruthlessly consolidated its interest by the acquisition and extinction of any remaining medieval bond hamlets within the area. From the mid-18th century, following a period when they were in poor condition, tenancies were remodelled as they fell vacant, and the estate was improved and expanded by the enclosure of common land. From the 1850s onwards, capital was spent on improvements and plantations, and the great wall around Vaynol Park dates from this time. As the economic potential of slate quarrying became evident, the industrial resources of the estate were also developed. In 1809, the Vaynol Estate followed the lead set by the Penrhyn Estate in the Ogwen valley (pp. 105–108) and developed the Dinorwig quarries of Nant Peris. Here, the main outlet for the slate was Port Dinorwig on the Menai Strait, which had had an artificial harbour since 1793. A road was built to the coast in 1790 for the easier export of slate, followed by an unsuccessful horse tramway which had to be later replaced by a new line, and finally, in 1848, by a new railway on a different route along the shores of Lake Padarn to Port Dinorwig. This ceased

operating in 1962, just before the final closure of the Dinorwig quarries in 1969. The quarries and their attendant settlements have left an indelible mark on this landscape. The main complex of workings on either side of the Peris valley is dominated by the Dinorwig quarries on the north side, with their massive waste tips and stepped working floors. There is a wealth of industrial archaeological remains, some of which, including a quarry hospital, have been preserved, or moved for safe-keeping, at the Vivian quarry and at the Dinorwig quarry workshop complex. The patchwork of quarrymen's tyddynod or smallholdings can also be seen on former common land on the surrounding slopes, while the settlements of Llanberis, Dinorwig, Deiniolen, Cwm-y-glo Llanrug, Bethel and Port Dinorwig owe their development and present character to the industry. Social and economic conditions in Bethel in the early 20th century were graphically described by the Welsh litterateur W. J. Gruffydd in his autobiography, *Hen Atgofion*. During the late 19th and early 20th centuries, the slate industry gradually declined which, partly as a consequence, eventually led to the Vaynol Estate's demise. It was a long process, and embittered disputes between quarrymen and owner, and landlord and tenant, left indelible social scars as well the material changes in the landscape. During the 1960s, there was widespread agricultural reorganisation in what turned out to be a final attempt by the estate to create viable full-time units, but the estate was finally dissolved in 1967, when 8600ha of land in and around Snowdon came onto the market. The quarries closed shortly afterwards in 1969. In the late 1970s and early 1980s, part of the Dinorwig complex became the site of the vast Dinorwig hydro-electric pumped storage power scheme, the largest in Europe and the third largest in the world. The upper reservoir was created in Marchlyn Mawr which feeds the lower reservoir in Lake Peris, through pipelines and a generating station located in a colossal chamber excavated underground, so that the physical impact on the landscape was minimised.

Source

[https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=&id=HLW%20\(Gw\)%206](https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=&id=HLW%20(Gw)%206) (accessed 29 October 2019)

Appendix 2: Historic Landscape Characterisation in the Ogwen Valley and Dinorwig registered historic landscapes



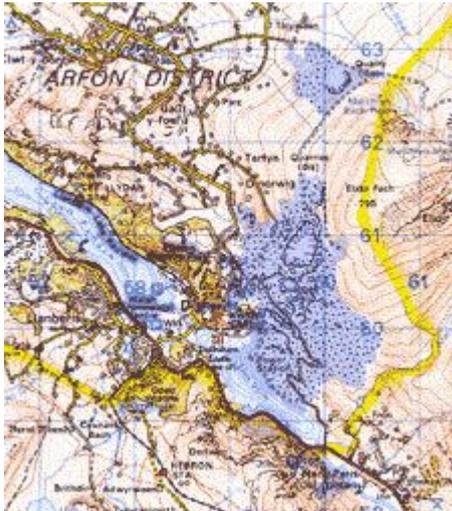
Source

Gwynedd Archaeological Trust no date <http://www.heneb.co.uk/hlc/arfon.html> (accessed 28 October 2019).

Arfon – 8 Allt Ddu

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – 8 Allt Ddu*, <http://www.heneb.co.uk/hlc/arfon/arfon8.html> (accessed 14 November 2019).

Arfon - 11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine



Historic background

The main part of the Dinorwic slate quarry complex, at one time the second largest in the world after Penrhyn Quarry. Earlier workings were to the north of this area (see 08) but there is evidence for some working on the present site of the main quarry from 1787. In the course of the nineteenth century these workings were united to form the different departments of Dinorwic quarry, and contour railways and inclined planes laid to connect the rock face with the tips, the slatemakers' shelters and the mills. The quarry closed in 1969, and part of the lower workings around Hafod Owen have been substantially altered to create the pumped storage scheme.

The adjacent Marchlyn quarry was opened in the 1930s on a greenfield site and was developed after the second war using modern methods. It closed down in the 1960s.

The copper mine may be bronze age in origin, and was active by the mid 18th century . Operations ceased in the 1870s.

Gallt y Llan quarry was operative from c.1811 to c. 1832 but was never developed on the scale of Dinorwic.

Key historic landscape characteristics

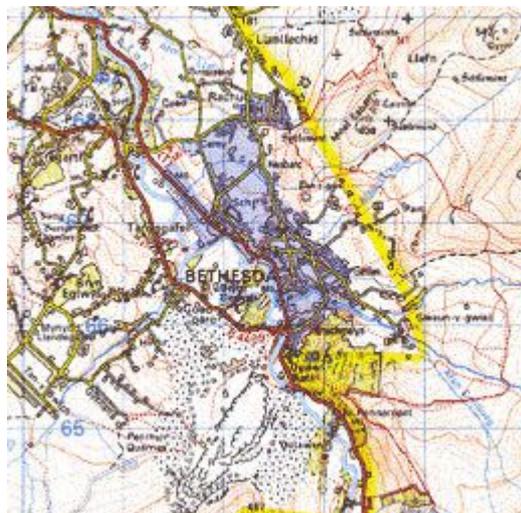
Slate quarry and copper mine landscape

Dinorwic quarry is a visually spectacular site covering a considerable area. Worked as a galleried open quarry, the galleries themselves survive largely intact as do the substantial dry-stone incline embankments built to connect the different levels. In a number of locations the shells of the slate mills erected from 1921 onwards survive. Though the complex of buildings at steam mills level ('ponc ffeiar injan') have been demolished, the upper levels of the quarry retain most their machinery, including railways, inclines, ropeways, saw tables and compressors.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – 11 Dinorwic, Marchlyn, Gallt y Llan slate quarries and Llanberis copper mine*, <http://www.heneb.co.uk/hlc/arfon/arfon11.html> (accessed 29 October 2019).

Arfon - 12 Bethesda and Llanllechid



Historic background

A slate quarry community established from 1820 onwards along the newly-constructed Telford road on a pocket of non-Penrhyn land, around the Independent chapel which gave its name to the town.

By the 1850s development was beginning to spill over onto Penrhyn land. As at Deiniolen/Clwt y Bont, community infrastructure is on the margins of the earlier town. An application was made for a building grant for Glanogwen (Church) School in 1851, and the following year Col. Douglas Pennant demised Pen y Bryn farm to a local grocer for building, who leased the land to a building society which in turn sold it on. The housing development on Pen y Bryn is more spacious development than the earlier ones, with wider streets and more substantial houses. Gerlan, built after the Bethesda Improvement Act of 1854, is far more regular and well laid-out, though John Street, which dates from the same period, is a cramped network of tiny lanes.

The satellite village of Caellwynrydd, appears to be a speculative builder's development of c. 1838-9. The tithe map of 1841 shows a ribbon development along the main road, entirely on Cefnfaes land, and a few scattered dwellings elsewhere, including the attractive row of crog-lofftydd at Braich Melyn.

The development of the community is reflected in the appointment of Improvement Commissioners in 1854, and the establishment of an Urban District Council in 1894. Bethesda's three surviving chapels, Bethesda itself (Independent - exterior only), Bethania (Baptist) and Jerusalem (Calvinistic Methodist), recently restored with grant-aid from Cadw, are built on a substantial scale.

There is comparatively little evidence of house-building after 1900 other than a suburban row along Bangor road to the north of the village.

Key historic landscape characteristics

Industrial settlement (slate quarry)

Bethesda and its outliers reflect the changes on working-class housing from the 1830s onwards. There are no known examples of buildings from the very earliest period (1820-1838), but the distinctive settlement at Caellwynrydd, with its narrow spinal road up the hillside and radiating contour lanes, preserves many of the features of the late 1830s. John Street, though constructed as late as the 1860s, nevertheless exemplifies the unplanned and apparently chaotic way in which workers' accommodation was put up in a hurry in the early phases of industrialisation. Later buildings are substantial, often ornamented with cast-iron work.

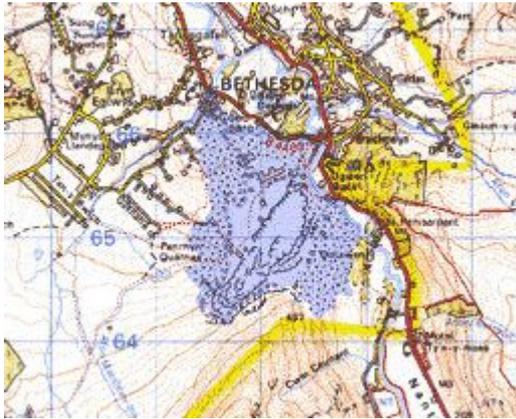
Remarkably for a community in which slate was the dominant vernacular idiom, Bethania, the substantial Baptist chapel and the houses next to it are built of brick.

Bethesda's places of worship are prominent landscape features, and include Glanogwen church as well as the chapels.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – 12 Bethesda and Llanllechid*, <http://www.heneb.co.uk/hlc/arfon/arfon12.html> (accessed 28 October 2019).

Arfon – 14 Penrhyn Quarry



Historic background

A major slate quarry, still in active production under Alfred McAlpine Slate products, once the largest slate quarry in the world. Its origins are almost certainly Medieval, but it reaped the benefit of direct management and substantial investment from the 1760s onwards. It was served by a 2' gauge railway to the sea from 1801, realigned for locomotive operation between 1874 and 1879, and was equipped with a slab mill from c. 1803.

Key historic landscape characteristics

Slate quarry landscape

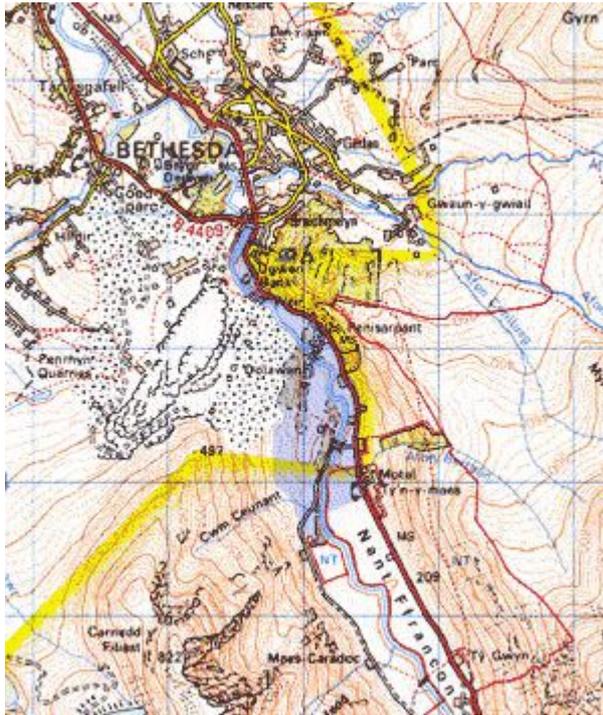
A galleried slate quarry of great size, still in active production. Despite the scale of present quarrying operations, the quarry preserves the industrial landscape of the nineteenth century. Incline planes, galleries and ancillary structures survive as landscape features, and the quarry preserves a number of examples of quarry machinery from the 19th and 20th centuries. Operations are currently concentrated on the upper part of the quarry, and are likely to continue moving towards the south-west, but tipping continues to take place on the site of the nineteenth century workings.

Some attempt is being made to encourage tree-growth on the tips. The Felin Fawr workshops complex which formerly served the quarry at Coed y Parc survives largely intact.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – 14 Penrhyn Quarry*, <http://www.heneb.co.uk/hlc/arfon/arfon14.html> (accessed 28 October 2019).

Arfon - 15 Pen isa'r Nant



Historic background

A calculatedly 'picturesque' part of the former Penrhyn estate, which formed part of Lord Penrhyn's road from the quarries to Capel Curig, built in the 1790s. The area includes Ogwen Bank, the Penrhyn family's bijou retreat, and farms which appear to have been laid out in the late eighteenth and early nineteenth century.

Key historic landscape characteristics

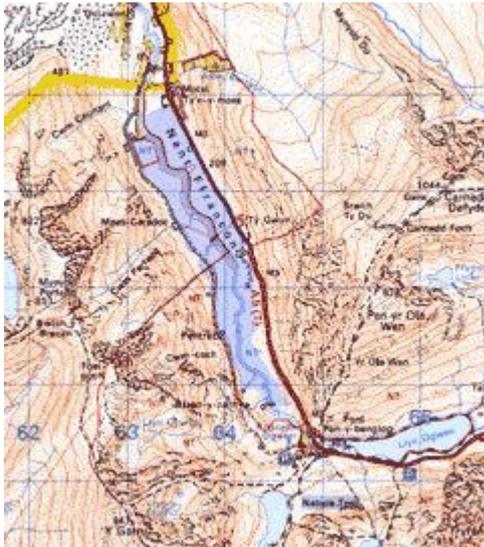
Picturesque landscape

The architecture of the area is distinctively polite. Ogwen Bank is now in re-use as a caravan park; other buildings include the cottage ornée Dol Awen, and the dairy at Plas Pen isa'r Nant. The river bridges at Ceunant and Ogwen Bank are respectively rustic and polite in conception.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – 15 Pen isa'r Nant*, <http://www.heneb.co.uk/hlc/arfon/arfon15.html> (accessed 29 October 2019).

Arfon - 16 Nant Ffrancon - valley floor



Historic background

This area is principally pastureland, formerly part of the Penrhyn estate and now owned and managed by the National Trust, as laid out by the estate in the post-1769 period, when a much less regular pattern of enclosure is evident on the estate survey than previously. Both the Telford road (early 19th century) and Lord Penrhyn's own (earlier, late 18th century) road pass through the area on either side of the valley.

Key historic landscape characteristics

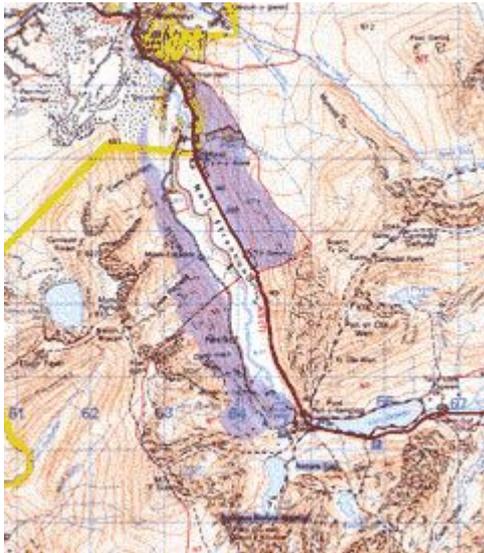
Improved pasture, road communications

Improved pasture at the foot of the (glaciated) valley floor, through which both the Telford road and Lord Penrhyn's own road pass. The farmhouses and labourers' cottages are of an estate style, making use of local material

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – 16 Nant Ffrancon*, <http://www.heneb.co.uk/hlc/arfon/arfon16.html> (accessed 29 October 2019).

Arfon - 17 Nant Ffrancon – valley slopes



Historic background

This character area actually comprises two separate portions, one on each side of the valley, which were sheepwalks associated with the farms on the floor of Nant Ffrancon. Lying between the Telford and Lord Penrhyn roads (at the bottom) and the unenclosed mountains above, they were formerly part of the Penrhyn estate and are now owned by the National Trust.

Key historic landscape characteristics

Irregular enclosures

Steep hillside slopes, characterised by irregular enclosures, with some evidence of mineral working in number of locations.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – 17 Nant Ffrancon – valley slopes*, <http://www.heneb.co.uk/hlc/arfon/arfon17.html> (accessed 29 October 2019).

Arfon - Area 32 Ogwen valley



Historic background

This small area comprises a narrow wooded valley, formerly part of the Penrhyn estate; this stretch of the river formerly powered two estate corn-mills, and is crossed by a number of nineteenth-century bridges, both road and rail. Coed Cochwillan and Melin Cochwillan form part of the economy of the late Medieval Cochwillan estate.

Key historic landscape characteristics

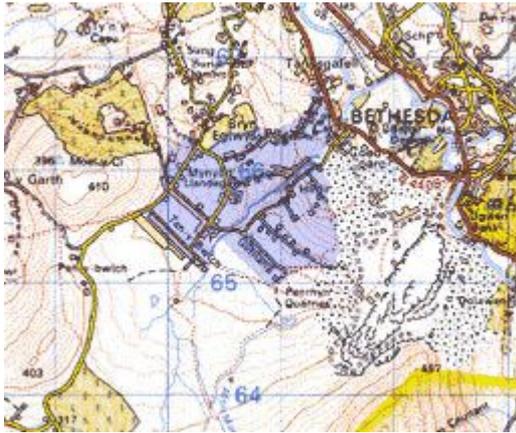
Woodland, Telford road, paths

An area of mature woodland in a narrow defile, crossed by the Telford road and by a nineteenth century branch line, which opens out into a broad river valley. The two mills (Cochwillan and Coetmor) are prominent features. A number of pathways run through the area.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – Area 32 Ogwen Valley*, <http://www.heneb.co.uk/hlc/arfon/arfon32.html> (accessed 29 October 2019).

Arfon - Area 33 Mynydd Llandygai



Historic background

This area was part of the ffridd in the late eighteenth century, and was subsequently enclosed by the Penrhyn estate. During the Napoleonic wars the quarrymen were encouraged to grow potatoes here, and the rows of dwellings were established in stages between the 1830s and 1870s.

Key historic landscape characteristics

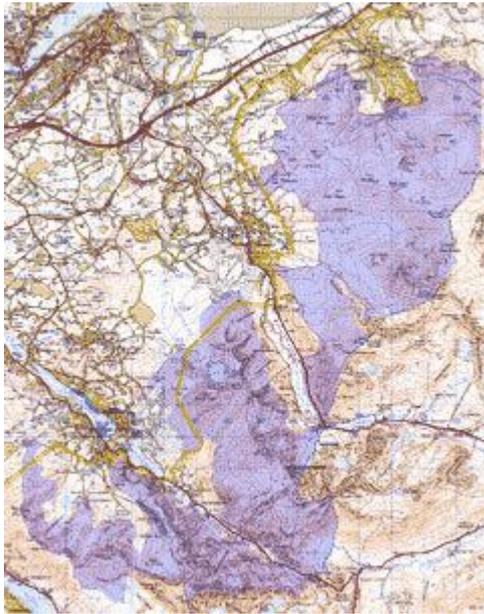
Industrial settlement (slate quarry), slate fencing, crog-lofftydd

A distinctive nineteenth century workers' settlement, consisting of rows of crog-lofftydd, vernacular in inspiration but in which polite influence is apparent, and long allotments separated by slate fences.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – Area 33 Mynydd Llandygai*, <http://www.heneb.co.uk/hlc/arfon/arfon33.html> (accessed 29 October 2019).

Arfon - Area 36 Unenclosed mountain (north Carneddau)



Historic background

A vast area of mountainside including several of the highest peaks in north Wales forming its southern boundary, some of which have prehistoric summit cairns. It remains unenclosed currently, but in the river valleys (e.g. Afon Caseg, Cwm yr Afon Goch) there is considerable evidence for prehistoric settlement and agriculture in the form of hut groups and associated series of paddocks or fields. These are some of the finest relict archaeological sites and landscapes in north Wales. This area is, in fact, a continuation of area 2019 described in characterisation report 318 (project G1527).

There are also (medieval) deserted rural settlements in the lower parts of the area, mainly just beyond the ffridd walls, many of which are traditionally associated with the seasonal exploitation of the upland summer pastures. In similar locations (often re-using earlier sites) there are complex sheepfolds associated with post-medieval use of the upland areas as sheep pasture. Some mining and quarrying trials are dotted around the area.

Key historic landscape characteristics

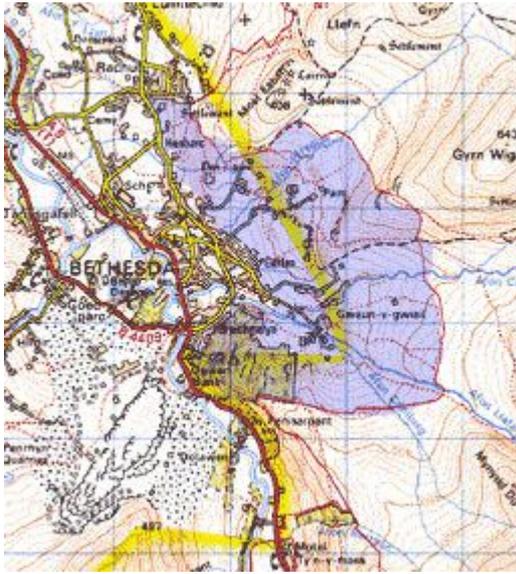
Relict archaeology (settlements and fields), sheepfolds

An area of relict stone-built remains of prehistoric, medieval and post medieval periods. No, or very few, modern intrusions.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – Area 36 Unenclosed mountain (north Carneddau)*, <http://www.heneb.co.uk/hlc/arfon/arfon36.html> (accessed 29 October 2019).

Arfon - Area 37 Enclosed fields above Bethesda



Historic background

This is a small-scale, complex and intricate area showing evidence for settlement and landscape organisation over several successive periods. It is possible to pick out at least three phases of field patterns, with some 'current' boundaries preserving earlier layouts, alongside relict boundaries and lynchets. Relict prehistoric and medieval settlements are also present, while the area has a pattern of small, scattered farms on the margins of the enclosed land, often at the end of winding, narrow trackways. Some are undoubtedly 19th century encroachments. A complex of small footpaths criss-crosses the area, and there are small trial levels.

Key historic landscape characteristics

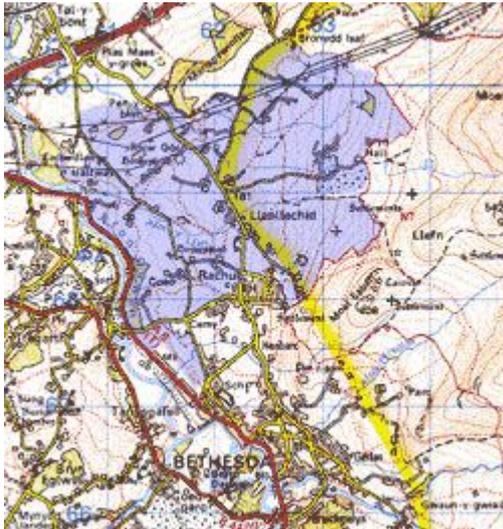
Palimpsest of field boundaries, relict archaeology, scattered farms, winding paths and tracks

An intricate area made up of small details relating to many periods, within a framework of small, irregular fields, many of which date from the 18th century. The scattered settlement pattern reflects earlier occupation of the area, and there is considerable potential for researching and demonstrating landscape evolution in a restricted area.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – Area 37 Enclosed fields above Bethesda*, <http://www.heneb.co.uk/hlc/arfon/arfon37.html> (accessed 29 October 2019).

Arfon - Area 38 Fieldscape around Llanllechid



Historic background

This area is similar in many ways to area 37, in that it contains some extensive, well-preserved relict archaeological remains comprising prehistoric settlements still visibly set within their fieldscape context: in places these remains are of more than one period. However, the present field pattern here is more open, consisting of larger fields, some of which are in regular patterns showing post-medieval re-organisation. Llanllechid itself is a small partially-nucleated settlement dating from the post 1830s, but otherwise the settlement pattern is of large, dispersed farms. The slate quarry at Bryn Hafod-y-Wern is a prominent landscape feature: possibly with origins in the medieval period, it really only took off after 1830 and is noted for its use of water-power (although ironically it shut down after Lord Penhryn deprived it of its water supply).

Key historic landscape characteristics

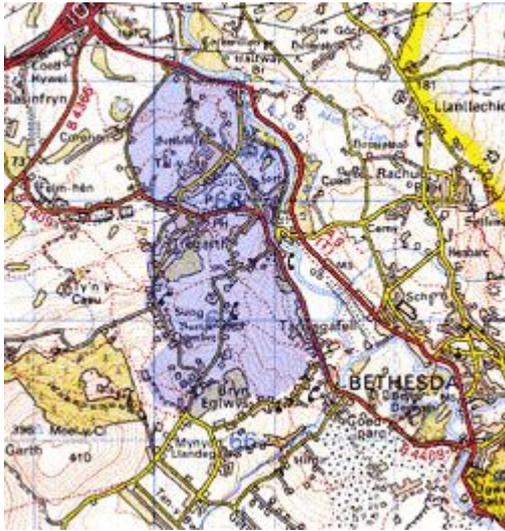
Relict archaeology, slate quarry, dispersed farms

The area is differentiated from area 39 largely because it retains a more complex, and older, set of fields, with no overall, consistent pattern, but also because it contains a number of major sites of relict archaeological interest. The settlement pattern is one of large, scattered farms, with small (late) nucleations.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – Area 38 Fieldscape around Llanllechid*, <http://www.heneb.co.uk/hlc/arfon/arfon38.html> (accessed 29 October 2019).

Arfon - Area 40 Sling



Historic background

An area formerly part of the Penrhyn estate, and largely made up of ffriddoedd in the mid-eighteenth century. Part remains unenclosed, but much of it was given over to housing for quarrymen and quarry officials in the nineteenth century.

Key historic landscape characteristics

Industrial settlement

An area which retains some of the open fields of the pre-Modern sheepwalk, as well as some possibly early slate-quarrying sites (Chwarel Goch) but which is largely given over to nineteenth century housing, partly vernacular, partly 'estate vernacular'. These preserve many distinctive estate features, such as the use of ornamentation in porches etc, suggesting that they were for quarry stewards. The course of the Penrhyn Railway of 1801 passes through the area.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – Area 40 Sling*, <http://www.heneb.co.uk/hlc/arfon/arfon40.html> (accessed 29 October 2019).

Arfon - Area 41 Moel y Ci/Gwaen Gynfi unenclosed uplands



Historic background

An area traditionally used as a sheepwalk, situated between the quarryman-cottager settlements of 33 and 42, which remained unenclosed during the population increases of the nineteenth century.

Key historic landscape characteristics

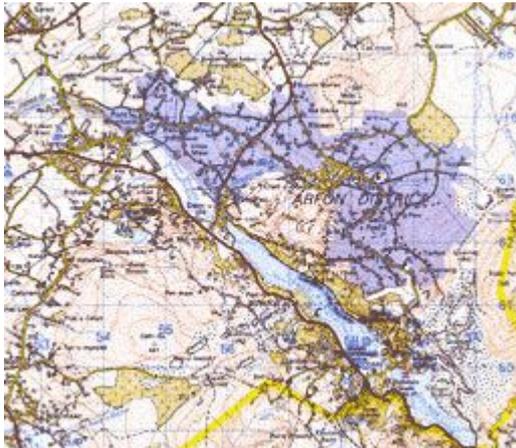
Unenclosed upland

An area of largely unenclosed upland, in which there are a few smallholdings and early turbaries, as well as the early nineteenth century water-catchment systems for Penrhyn Quarry. There is some forestry.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – Area 41 Moel y Ci/Gwaen Gynfi unenclosed uplands*, <http://www.heneb.co.uk/hlc/arfon/arfon41.html> (accessed 29 October 2019).

Arfon - Area 42 Gwaen Gynfi enclosed area



Historic background

An area which remained unenclosed, apart from some squatter encroachment, until 1806, when it was granted to the Vaynol estate and other local landowners, and which from 1834 onwards was used to establish Dinorwic quarrymen and their families on small-holdings in an attempt to encourage them in habits of frugality and sobriety.

Key historic landscape characteristics

Industrial settlement (slate quarry)

The area is distinguished by small parciau (enclosures) each supporting a cottage, and some larger sheepfolds, though the pattern of settlement is much less regular than in the similar landlord-settled community at Mynydd Llandygái, suggesting that the enclosures themselves were carried out by the quarrymen under the agent's eye, rather being directly controlled by Vaynol. sources. A number of the settlements, such as Garnedd, represent unsanctioned squatter encroachment from the eighteenth century. The dwellings for the most part show typical estate influence, with some polite features, and are sufficiently large to suggest that they may be later nineteenth century rebuilds of the original dwellings of the 1830s and '40s. Some older buildings survive, distinguished by their roofs of large slate.

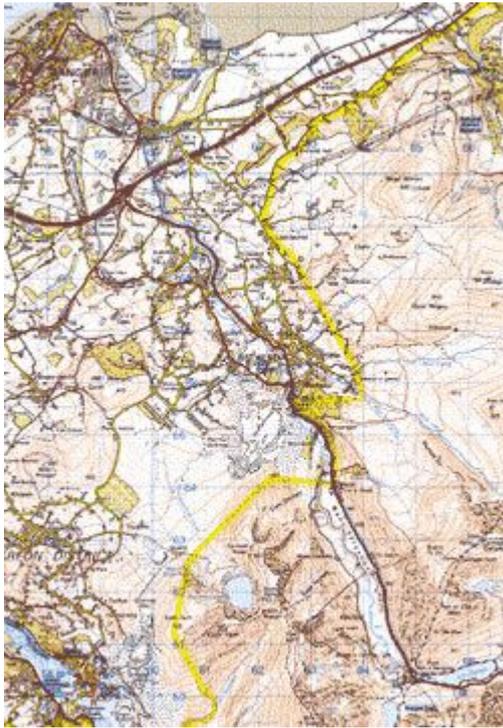
Most of the buildings remain inhabited, though a considerable number, especially near the quarry, are now deserted.

The public turbary stipulated by the enclosure act is situated here, and the area is traversed by the Assheton Smith slate road of 1811, as well as by other industrial roads connected with the slate quarry and part of the course of the Dinorwic Railway of 1825.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – Area 42 Gwaen Gynfi enclosed areas*, <http://www.heneb.co.uk/hlc/arfon/arfon42.html> (accessed 29 October 2019).

Arfon - Area 52 Telford's Road



Historic background

The main road artery between London and Holyhead, designed to afford easy communication between the English and Irish capitals, constructed in stages between 1815 and 1830, and which includes the Menai suspension bridge, completed in 1826.

Key historic landscape characteristics

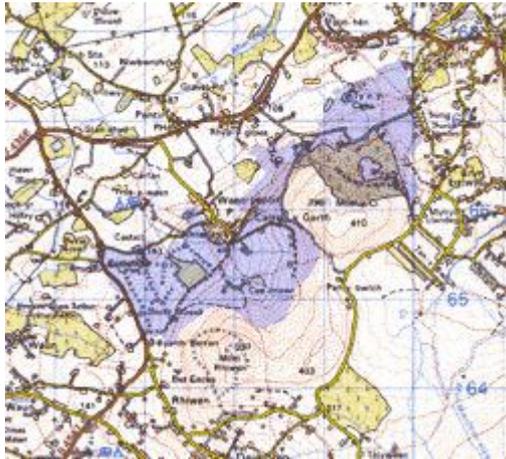
Early nineteenth century transport link

Long recognised as an outstanding engineering masterpiece of the nineteenth century, Telford's road and its associated features (the Menai bridge, quaysides used in the bridge's construction, toll-houses, depots, etc) remain in daily use, and form an historic landscape in their own right.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – Area 52 Telford's Road*, <http://www.heneb.co.uk/hlc/arfon/arfon52.html> (accessed 29 October 2019).

Arfon - Area 53 Hillslopes below Moel y Ci / Rhiwen



Historic background

This area contains a fine distribution of relict archaeological sites, including hut circles and deserted rural settlements, many of which have been recently scheduled. Many of the circular patterns of field boundaries characteristic of the area (for example around Cae Mawr (SH580651) are almost certainly prehistoric in origin. Overlying these are areas of late eighteenth or early nineteenth century encroachment on the Gwaen Gynfi, latterly forming part of the Vaynol and Penrhyn estates. There are remains of a twentieth century wartime military camp at SH571648 interspersed with earlier relict remains.

Key historic landscape characteristics

Relict archaeology, field patterns

Visually, an area dominated by a pattern of small irregular fields mixed in with recent forestry plantations and a number of smallholdings. The importance and wealth of the relict archaeology has only relatively recently been recognised, but requires greater study.

Sources

Gwynedd Archaeological Trust no date, *Historic Landscape Characterisation – Arfon – Area 53 Hillslopes below Moel y Ci/Rhiwen*, <http://www.heneb.co.uk/hlc/arfon/arfon53.html> (accessed 29 October 2019).

Winding and narrow paths, tracks and roads		3	10
Church		1	3.3
Chapels		2	6.7
19th-century water catchment systems		1	3.3
Scattered farms		3	10
Unenclosed turbaries		1	3.3
Small holdings		1	3.3
Irregular fields		1	3.3
Fields of multiple phases			0
Post medieval sheepfolds		1	3.3
Medieval deserted settlements and archaeology		1	3.3
Prehistoric settlement and agriculture		4	13.3
Forestry		1	3.3
Wooded valley		0	0
Enclosed valley slopes		0	0
Mountain/unenclosed upland		3	10
Industrial/mining/ quarry town or village		7	23.3
Mining and quarrying trials		1	3.3
Quarry workshops		0	0
19th/20th-century quarry machinery		0	0
Slate quarry		3	10
HLCA (name)	HLCA (number)		
Number of HLCAs with key features mentioned in the historic character area descriptions (Gwynedd Archaeological Trust no date): n = 30)			
Percentage of HLCAs with key features			