

Appendix E

Archaeology

Ty Mawr West Slate Quarry: **Llanllyfni, Gwynedd**



ASIDOHL Assessment

GAT Project No. 2169

Report No. 960

June, 2011

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Prepared for

D & E Jones

June 2011

By

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Ty Mawr West Slate Quarry

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Ty Mawr West: **ASIDOHL**

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ASIDOHL 2 ASSESSMENT

Summary

Gwynedd Archaeological Trust has carried out an Assessment of the Significance of the Impact of Development On Historic Landscape Areas (ASIDOHL) in advance of the proposed extension of the removal of old mineral deposits (slate tips) at Ty Mawr West slate quarry, Llanllyfni (NGR SH 4975452351). The quarry is a working site (under a planning consent dated 2004), in which some of the slate tips are being reprocessed. The present planning application seeks in part to modify the existing planning consent within the original mineral planning permit area, but also seeks to extend the working area to an adjacent area of collapsed ground within the property. The area is located within the Nantlle Valley Landscape of Outstanding Historic Significance as set out in the ICOMOS/Cadw/Countryside Council for Wales Register of Landscapes of Outstanding Historic Interest in Wales (Cadw/ICOMOS 1998; Nantlle Valley HLW (Gw) 9, No. 27). The direct physical impact of the proposed mineral extraction upon one HLCA was assessed, as was the indirect physical and non-physical impacts upon two other HLCAs.

The overall significance of impact of the proposed development was found to have a ‘slight’ impact upon the Cloddfa’r Coed, Nantlle slate quarries, and the Moel Tryfan – lower slopes HLCAs.

SECTION A

A.1 Introduction (Fig.1)

Gwynedd Archaeological Trust has been asked by Dr Gwynfor Pierce Jones on behalf of D & E Jones (owners) to undertake an Assessment of the Significance of the Impact of Development On Historic Landscape Areas (ASIDOHL) in advance of the proposed extension of the removal of old mineral deposits (slate tips) at Ty Mawr West slate quarry, Llanllyfni (NGR SH 4963552319) (Fig. 1 and Fig. 2). The applicants wish to extend their present workings by extracting slate blocks from the collapsed and fragmented ground that lies to the south of the Old East Quarry, being that ground between it and the East Green Pit (or 'back quarry'). This report forms part of a new Mineral Planning application by the owners.

A.2 Statutory and Non-Statutory Designations (Summary) (Fig.1)

An archaeological desk-based assessment has been carried out by Dr. G.P. Jones (*Ty Mawr West Slate Quarry, Archaeological Survey: December 2008*) which noted that the proposed development lies:

(i) within the Nantlle Valley Landscape of Outstanding Historic Significance, as set out in the ICOMOS/Cadw/Countryside Council for Wales Register of Landscapes of Outstanding Historic Interest in Wales (Cadw/ICOMOS 1998; Nantlle Valley HLW (Gw) 9, No. 27). In particular, Ty Mawr West slate quarry lies within the discreet Historic Landscape Character Area (HLCA) of *Nantlle slate quarries* (HLCA 09 PRN 15708).

(iii) within the 1km buffer zone of the Snowdonia National Park (SNP)

The nearest listed building to the proposed extraction area is the grade II Causeway (SH 4957552921; LB 22902) located on the southwest edge of the disused Dorothea slate quarry

and situated 550.0m to the north-northwest. A number of other listed buildings are located within 1.0km of the proposed scheme, these are the the grade II listed Capel Mawr (SH 4921053194; LB 23708), the grade II* Engine House, Boilerhouse, Bunker and remains of chimney to south (SH 4972753124; LB 22901), the grade II South-western aerial ropeway revetment, incline and associated buildings (SH 4982653107; LB 23687); the grade II North-eastern aerial ropeway revetment, incline and associated buildings (SH 5011753236; LB 23688) and the grade II Strainer arches and retaining walls (SH 5017753287; LB 23728). None of these will be directly affected, and the indirect effect of the proposed works will be minimal.

A number of Scheduled Ancient Monuments (SAMs) lie within 1.0km of the proposed works. These are:

- (i) Ty Mawr East Slate Quarry Winding Engine House (CN300) located 200.0m to the northeast.
- (ii) Dorothea Quarry, Pyramids, Inclines, Mill & Winding Houses (CN199) located 620.0m to the north.
- (iii) Dorothea Quarry Beam Engine (CN165) located 700.0m to the north.
- (iv) Cloddfa'r Lon Slate Quarry (CN302) located 1000.0m to the northeast.

The entirety of the Ty Mawr West slate quarry lies within a *Landscape of Outstanding Historic Interest*, namely the Nantlle Valley Landscape of Outstanding Historic Significance HLW identified on the *Register of Landscapes of Outstanding Historic Interest in Wales*, Cadw: Welsh Historic Monuments, 1998 (*Register*). The Register is a material consideration in the planning process as set out in *Planning Policy Wales*, March 2002 (*PPW*), paragraph 6.5.23, which states:

‘Information in the Register should also be taken into account by local planning authorities in preparing UDPs and emerging Local Development Plans, and in considering the implication of developments that are of such a scale that they would have more than local impact on an area on the Register’.

Detailed guidance on the use of the Register is provided in the *Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process*, revised (2nd) edition, Cadw, 2007 (“Guide to Good Practice”), which includes a Technical Annex setting out the ASIDOHL2 process (Assessment of the Significance of Impact of Development on Historic Landscapes) used in this assessment.

The ASIDOHL2 process is based on assessing development impacts in relation to discreet Historic Landscape Character Areas (HLCAs), into which the Historic Landscape has been geographically sub-divided in the *Caernarfon - Nantlle Historic Landscape Characterisation Report*, Unpublished GAT Report No. 402. The descriptions of the HLCAs featured in this assessment are reproduced in Appendix II, while the full report is available upon request from:

GAT@heneb.co.uk

A.3 Summary of the impacts of the proposed development

The contents and significance of the Nantlle Valley Historic Landscape is summarised in the *Register* as:

A glaciated valley situated on the west side of the Snowdonia massif, having contrasting evidence of relict prehistoric and later land use, superimposed by the 19th and 20th centuries remains of the large-scale industrial exploitation of slate. The area includes: Iron Age hillforts, settlements and extensive field systems; 18th century and later copper mines; well-preserved and visually dramatic remains of slate quarries, pits, waste tips, associated structures, transport systems and settlements; historic legendary artistic and literary associations.

The proposed development would have a direct (physical) impact upon the following HLCAs:

Nantlle Valley HLA

HLCA 09 (PRN 15708) Nantlle slate quarries

The proposed development would have indirect (mainly non-physical) impact upon the following HLCAs:

Nantlle Valley HLA

HLCA 08 (PRN 15707) Cloddfa'r Coed

HLCA 09 (PRN 15708) Nantlle slate quarries

HLCA 25 (PRN 15724) Moel Tryfan – lower slopes

This report provides a full assessment of the significance of the impacts of the proposed development on the Historic Landscape in relation to the above HLCAs, in compliance with the ASIDOHL2 process.

A.4 ASIDOHL STAGE 1: CONTEXTUAL INFORMATION

A.4.1 Historical background (reproduced from Jones.G.P. *Ty Mawr West Slate Quarry: Archaeological Survey*. 2008)

The history of the Ty Mawr West Slate Quarry is poorly understood. No primary documentation from the quarry's various operators has been uncovered during an archival search of the manuscript collections of the major Welsh depositories or by an internet search of UK archives. Secondary sources, such as local history essays and HM Inspectorate of Quarries reports, suggest that this is a complex site which has been subject to several historical sub-divisions into separate commercial undertakings, many of which operated concurrently, with other periods of re-amalgamation into a single entity.

The land was owned by the Pant Du Estate, and leased to private entrepreneurs and Joint Stock Companies. The farm was part of the land holdings of the Garnons family (of Caernarfon and Flintshire) up to the 1840s, and was subsequently bequeathed to the Gwynne Hughes family of Tregyb, Dyfed (latterly held by the late Lady Phillips of Picton Castle, Haverfordwest, Pembrokeshire) before its sale to the Dorothea Slate Quarry Co Ltd in 1932 as part of a dispersal of all of her Ladyship's land in the Nantlle district.

It appears that the present 'East Quarry Pit' might be the original excavation on the old Ty Mawr Farm land, and that its opening might date from the early 1800s. Subsequently, other quarry pits were opened on other parts of the land contiguous to the first pit (but there are no details of the chronology) and the eastern portion of the farm was hived off (possibly in the 1840s) as a separate quarrying leasehold 'sett' known as the Ty Mawr East Slate Quarry, this having no further commercial connection with the remaining West site.

The Ty Mawr West site appears to have been occupied by a succession of entrepreneurs, sometimes in the form of Joint Stock Companies, none of whom seem to have been particularly successful. The most significant of these lessees was John Robinson (and successor) of the Talysarn Slate Quarries, who held the lease from c1877 until an unknown date pre-1932. This operator sub-let portions of their sites to other parties, and there was at least one, if not two, separate Ty Mawr Green Slate Quarries operating on the upper ground during the early decades of the twentieth century. This has caused confusion given the lack of original maps and quarry documents, in that it is uncertain which 'green quarry' is sometimes referred to in secondary sources. Consequently, it is now possible that the information presented in the 2002 report regarding the working of the Ty Mawr West Green Quarry by one Frederick Davies in the early twentieth century might actually have been confused with concurrent operations at the adjacent Ty Mawr East Green Quarry. Further research is required to untangle the overlapping histories of these two sub-leased quarrying sites in that particular era.

The Welsh Green Slate Quarry Co (Caernarfon) leased the site from 1907 until 1931, although it probably ceased operating c.1928. The land was sold by Lady Phillips to the Dorothea Slate quarry Company Ltd in 1932 as part of a larger disposal of her Ladyship's Nantlle Valley properties. Intermittent small-scale quarrying activities continued on this site throughout the 1950s and 1960s, and the mill building (now demolished) was used as a timber-sawing mill up to c.1973. In 1984 the then owner of the Dorothea Quarry lands sold off portions south of the river Llyfni, and both Ty Mawr West and East (i.e., the old Ty Mawr farm) was bought by the tenant farmer, Robert W. Jones of Nantlle. The present slate tip recycling business was commenced by Dafydd and Ellis Jones, of Nantlle (now trading as the Ty Mawr West Slate Ltd) in 2004.

A.4.2 Summary description of development (provided by Dr. Gwynfor Pierce Jones on behalf of D & E Jones (owners))

The applicants wish to extend their present workings (comprising of the removal of material from old waste tips) by extracting slate blocks from the collapsed and fragmented ground that lies to the south of the Old East Quarry, being that ground between it and the East Green Pit (or 'back quarry'). The Geotechnical Report produced by *Key Geosolutions Ltd* shows the proposed methodology of removing this material in a series of 'benches' (or galleries), in a similar fashion to the phased removal employed in the slate industry in previous eras. This report takes into account ground stability, and as a consequence, the scheme of work ensures that no contiguous ground will be affected by subsidence or similar physical calamities.

The previous planning application (i.e. the present permit) ensured that a certain portion of ground within the then application was to be retained as an Archaeological Conservation Area. This Area is not physically impinged upon by the present proposed scheme. The overall effect of the proposed works would be to change a small area of collapsed (geologically 'slumped' or subsided) hillside into a slate quarry, by subsuming it into the existing workings that lie to the north, south and west of it, and *inter alia*, absorbing it into the mass of various slate workings that extend for several thousand yards to the west, and in a landscape dominated by the massive Central Nantlle slate quarry historical landscape to its northern vista.

It is in the professional opinion of the present acting consulting project agent that there is no significant archaeological remains of an *industrial character* present on the area of ground to be affected by the present proposal. This is based upon the findings of the Archaeological Survey provided with the previous planning application (and copied for re-use in the present study) covers the majority of the Ty Mawr West site, and was accepted by the Mineral Planning Authority as being sufficiently rigorous for its purpose.

A.4.3 Context for ASIDOHL assessment

At the request of Dr. Gwynfor Pierce Jones on behalf of D & E Jones (owners), the Gwynedd Archaeological Trust have been contracted to undertake an ASIDOHL2 assessment of the significance of the impact of the proposed development on the Historic Landscape.

A.4.4 Planning history of the proposed development site

This report is in relation to a new planning application (yet to be submitted), intended to seek mineral extraction permission in the areas of collapsed and fragmented ground that lie to the south of the Old East Quarry (centred on SH 4975452351). This will be in addition to the current mineral extraction planning permission granted to the owners in 2004.

A.4.5 Summary of the planning policy context

As outlined in Section A.1 above, national planning policy in relation to historic landscapes requires information on the Register to be treated as a material consideration in the planning process. This is set out in PPW paragraph 6.5.23, with further, more detailed, information available in the Register Guide to Good Practice also noted in Section A.1.

The Gwynedd Unitary Development Plan 2001-2016 (adopted 2009), Policy B12 states that 'Proposals that are within or on sites visible from a park and garden identified and described in part 1 of the Register of Historic Landscapes, Parks and Gardens of Special Interest in Wales will be refused if they cause significant harm to their character, appearance or setting.'

A.4.6 Assessment constraints

The following constraints apply to the ASIDOHL2 assessment presented below.

Site visits to the proposed development site and to selected vantage points within the HLCAs upon which it was judged there would be discernible and measurable impacts, was undertaken on 01/06/2011, in bright and clear conditions.

The limits of the Historic Landscape are taken to be those identified in GAT Report 402, which is shown by the solid red line in Fig. 1. This is in line with the latest guidance on determining landscape edges provided in the Register *Guide to Good Practice*, sections 7.1 – 7.7 (p. 13).

A.4.7 Assessment methodology

The assessment follows the guidance for the ASIDOHL2 process set out in the Register Guide to Good Practice, and was undertaken by Richard Cooke BA MA, of The Gwynedd Archaeological Trust, with advice on the ASIDOHL2 process provided by the *Guide to Good Practice On Using the Register Of Landscapes Of Historic Interest in Wales in the Planning and Development Process* revised (2nd) edition, Cadw.

A.5 ASIDOHL STAGE 2: ASSESSMENT OF DIRECT, PHYSICAL IMPACTS OF DEVELOPMENT

A.5.1 Introduction

The second stage of the ASIDOHL2 process describes and as far as possible quantifies the direct physical impacts of the proposed development on the HLCAs affected by the development. This is described and quantified in three ways, which can be summarised as follows:

- a) In absolute terms, i.e. the proportion of the surface area of the HLCA affected
- b) In relative terms, i.e. the proportion of each of the 'key historic landscape characteristics' (the baseline being those characteristics identified in the HLCA Report) that will be permanently lost or removed by the development
- c) In landscape terms, the contribution that the 'key historic landscape characteristics' identified in (b) makes to the value of the HLCA as a whole.

The physical impacts are each assigned a score and the overall scores for the impacts on the individual HLCA are used to produce a quantified expression of the overall magnitude of direct impact on a 28 point scale (see table A.1). These are presented as a table for each HLCA along with qualifying statements and background information and summaries of the key characteristics of the HLCAs affected.

The full HLCA descriptions in *GAT Report 894* are included in Appendix II and should be consulted alongside the assessment below.

Table A.1 Overall magnitude of direct physical impacts

Score	Grading
24-28	Very Severe
19-23	Severe
14-18	Considerable
9-13	Moderate
4-8	Slight
0-3	Very Slight

Nantlle valley HLA

A.5.2 Historic Landscape Character Area 09 (PRN 15708) Nantlle slate quarries

(For a full description, see Section B.1.1. See fig. 3. See plate 1)

Key characteristics: An outstanding landscape of relict industrial archaeology, exemplifying the industry's technical development from the mid nineteenth-century to the twentieth. Some of the surviving machines are built on such an impressive scale as to form landscape elements in their own right, such as the Cornish pump-engine at Dorothea Quarry and the Blondin rope-systems at Pen yr Orsedd. Reworking of tips and some very limited primary extraction threatens the integrity of these landscapes, and the recent attempt to establish Dorothea as a commercial diving centre has resulted in the destruction of historic features without any recording. The massive slate bastions for the chain inclines at a number of quarries are at risk from progressive dilapidation and possible collapse.

Impacts: The impact in terms of area is very slight. There are no relative physical elements affected by the proposed development.

Table A.2 Assessment of Direct, Physical impacts on Historic Landscape Character Area 09 (PRN 15708) Nantlle slate quarries

Absolute Impact (loss of area) 0.001 km ² – 0.04%				
Magnitude and score Very Slight – 1				
Relative and landscape impacts (loss of known elements or characteristics) and scores				
Element / % loss	Status	Magnitude	Landscape value	Landscape value effect
OVERALL DIRECT IMPACT	1- Very Slight			

A.6 ASIDOHL STAGE 3: ASSESSMENT OF INDIRECT IMPACTS OF DEVELOPMENT

A.6.1 Introduction

The third stage of the ASIDOHL process describes and as far as possible quantifies the **indirect physical and non-physical impacts** of the development on the HLCA affected. A clearly defined area will be directly or physically affected (assessed in Stage 2), but a much greater area could be indirectly affected owing to fragmentation or changes to the setting of features within the landscape. Changes to views of, or views from a landscape element or key characteristic are also important potential impacts to consider.

This stage is divided into two categories of impacts; the first, Stage 3 (a) assesses the indirect physical impacts; while the second, Stage 3 (b) assesses the indirect (non-physical) visual impacts.

A.6.2 Stage 3 (a) Indirect, physical impacts

The principal types of indirect physical impacts set out in the Guide to Good Practice include, but are not confined to:

- (a) An increased risk of exposure, erosion, disturbance, decay, dereliction or any other detrimental physical change to elements, during or consequent to development.
- (b) Related to (a), the likelihood of increased management needs to maintain elements as, for example, through altered habitats, water levels, increased erosion, new access provision etc., during or consequent to development.
- (c) The severance, fragmentation, dislocation or alteration of the functional connections between related elements, for example, a field system becomes 'severed' from its parent farmstead by intervening development.
- (d) The frustration or cessation of historic land use practices, for example, it becomes more difficult or impossible to manage an area in a traditional manner as a result of development.
- (e) The frustration of access leading to decreased opportunities for education, understanding or enjoyment of the amenity of elements, during or consequent to development

A.6.3 Stage 3 (b) Indirect (non-physical) impacts

These can occur to elements as a result of one or a combination including, but are not confined to, the following:

- (a) Visual impacts on elements from which a development can be seen (considered up to its maximum height). The impact might be on 'views to' or 'views from' these elements, and it should be assessed with reference to key historic viewpoints and essential settings. These should be considered in relation to a site's original character and function, as well as to vantage points and visual experience of a visitor today.
- (b) Impact on the visual connections between related elements, by occlusion, obstruction etc., for example, an essential line of sight between historically linked defensive sites will become blocked or impaired by an intervening development.

(c) Conversely, the creation of inappropriate visual connections between elements not intended to be inter-visible originally, by the removal of intervening structures, barriers, shelters, screening or ground.

(d) the visual impact of the development itself in relation to the existing character of the HLCA considering:

its form – the scale, number, density, massing distribution etc. of its constituent features;

its appearance – the size, shape, colour fabric etc., of its constituent features.

Stage 3 (b) is aimed at assessing to what extent the development constitutes a visual intrusion or encroachment, and to what extent in turn that affects the HLCA's character.

The indirect impacts in Stages (a) and (b) are each assigned a score, which are then added together and calibrated to the 28-point scale used in Stage 2 (see table A.1), in order to produce a quantified expression of the overall magnitude of indirect impacts on the individual HLCAs. These are presented as a table for each HLCA along with qualifying statements and background information and summaries of the key characteristics of the HLCAs affected.

Nantlle valley HLA

A.6.4 Historic Landscape Character Area 08 (PRN 15707) Cloddfa'r Coed

(For a full description, see Section B.1.1. See fig. 4. See plate 2)

Key characteristics: Reclaimed industrial landscape. Completely landscaped in 1978-9, removing everything of historical interest (at least on the surface).

Impacts: There are no indirect, physical impacts on this HLCA, but there is an indirect, visual impact when viewing southeast across the Cloddfa'r Coed HLCA to the Floor of the Nantlle valley (HLCA 49), and onwards to the Nantlle slate quarries (HLCA 09). The distant views south towards the Nantlle valley lower slopes (HLCA 37) and the Nantlle valley upper slopes (HLCA 42) are also affected.

Table A.3 Assessment of Indirect, visual impacts on Historic Landscape Character Area 08 (PRN 15707) Cloddfa'r Coed

Impacts	Category and Score	Magnitude and Score
View from the Cloddfa'r Coed HLCA southeast to the Floor of the Nantlle valley HLCA.	B - 3	Very Slight - 1
View from the Cloddfa'r Coed HLCA southeast to the Nantlle slate quarries HLCA.	B - 3	Very Slight - 1
View from the Cloddfa'r Coed HLCA south to the distant views of the Nantlle valley lower slopes HLCA.	B - 3	Very Slight - 1
View from the Cloddfa'r Coed HLCA south to the distant views of the Nantlle valley upper slopes HLCA.	B - 3	Very Slight - 1
Development form	3.0	Very Slight - 1
Development appearance	3.0	Very Slight - 1
Overall Magnitude of Indirect Impacts	Score: 4.0	Grading: Slight

A.6.5 Historic Landscape Character Area 09 (PRN 15708) Nantlle slate quarries

(For a full description, see Section B.1.2. See fig. 3. See plate 1 and 3.)

Key characteristics: An outstanding landscape of relict industrial archaeology, exemplifying the industry's technical development from the mid nineteenth-century to the twentieth. Some of the surviving machines are built on such an impressive scale as to form landscape elements in their own right, such as the Cornish pump-engine at Dorothea Quarry and the blondin rope-systems at Pen yr Orsedd. Reworking of tips and some very limited primary extraction threatens the integrity of these landscapes, and the recent attempt to establish Dorothea as a commercial diving centre has resulted in the destruction of historic features without any recording. The massive slate bastions for the chain inclines at a number of quarries are at risk from progressive dilapidation and possible collapse.

Impacts: There are no indirect, physical impacts on this HLCA, but there is an indirect, visual impact when viewing south across this HLCA. Furthermore, there is an indirect visual impact when viewing south from the SAM of Dorothea Quarry, Pyramids, Inclines, Mill & Winding Houses, etc (CN 199) to the proposed extraction area.

Table A.4 Assessment of Indirect, visual impacts on Historic Landscape Character 09 (PRN 15708) Nantlle slate quarries

Impacts	Category and Score	Magnitude and Score
View across the Nantlle slate quarries HLCA	B – 3	Very Slight - 1
View from the Dorothea Quarry SAM to the Nantlle slate quarries HLCA.	A - 4	Very Slight - 1
Development form	3.5	Very Slight – 1
Development appearance	3.5	Very Slight - 1
Overall Magnitude of Indirect Impacts	Score: 4.5	Grading: Slight

A.6.6 Historic Landscape Character Area 25 (PRN 15724) Moel Tryfan – lower slopes

(For a full description, see Section B.1.3. see fig 5. see plate 4.)

Key historic landscape characteristics: The west-facing lower slopes of Moel Tryfan, below the mountain wall which formerly demarcated the commons here. This landscape is made up largely of pre-modern field systems, whose irregular pattern contrasts markedly with the geometric organisation of the post- 1798 enclosures on the commons, though in a number of places there is evidence for much smaller fields laid out in the nineteenth century on surviving patches of common land on these lower slopes. Buildings are a mixture of estate-built farmhouses and vernacular rural dwellings, with some short two-storey rows. Construction material is local field stone though there is some use of yellow brick as quoins, becoming less prevalent further away from the site of the former Groeslon station.

Impacts: There are no indirect, physical impacts on this HLCA, but there is an indirect, visual impact when viewing south to the Nantlle slate quarries (HLCA 09).

Table A.5 Assessment of Indirect, physical impacts on Historic Landscape Character Area 25 (PRN 15724) Moel Tryfan – lower slopes

Impacts	Category and Score	Magnitude and Score
View from the Moel Tryfan HLCA to the Nantlle slate quarries HLCA.	B - 3	Very Slight – 1
Development form	3	Very Slight - 1
Development appearance	3	Very Slight - 1
Overall Magnitude of Indirect Impacts	Score: 4	Grading: Slight

Table A.6 ASIDOHL Stage 3: Summary of Overall Magnitude of Indirect Impacts on Historic Character Areas

The following table is a summary of the overall magnitude of indirect impact scores and grading. The magnitude is based on the 28 point scale system used in stage 2 and stage 3 (see table A.1)

Historic Landscape Character Area	Overall Magnitude (Score)
Cloddfa'r Coed HLCA 08	Slight – 4.0
Nantlle slate quarries HLCA 09	Slight – 4.5
Moel Tryfan HLCA 25	Slight – 4.0
Average Overall Magnitude	Slight – 4.2

A.7 ASIDOHL STAGE 4: EVALUATION OF RELATIVE IMPORTANCE

A.7.1 Introduction

The fourth stage of the ASIDOHL process and report evaluates the relative importance of the HLCAs (or part(s) thereof) directly or indirectly affected by development in relation to:

- (a) if relevant, the whole of the HLCA(s) or;
 - (b) the whole of the Historic Landscape Area (HLA) on the Register,
- followed by in each case;
- (c) an evaluation of the relative importance of the HLCA(s) concerned in the national context.

‘Which evaluation steps have to be done and how much input is required will depend on the scale of the development in relation to the nature and extent of the affected Historic Character Area(s) and the historic landscape area on the Register. For example, if a development directly affects an entire Historic Character Area, then only evaluation steps (b) and (c) need to be done. The complexity of the Historic Character Area(s) in terms of the variety of characteristics and numbers of elements affected will also influence the amount of input required.

In cases where both steps (a) and (b) have to be done, evaluating relative importance is necessary because it may well be that the relative importance of an element within the Historic Character Area differs from its relative importance within the overall historic landscape area on the Register. For example, a particular element could be abundant and fairly representative of the Historic Character Area as a whole, but might be quite rare in relation to the whole of the historic landscape area on the Register. Clearly, if an entire Historic Character Area is directly affected with the complete loss of all its constituent elements, then step (a) would not apply.

It is likely that evaluation scores could be influenced by a number of factors. The relative size and number of Historic Character Areas within the historic landscape area on the Register, and the number of Historic Character Areas affected in relation to the total number of Historic Character Areas within the historic landscape area on the Register, could all have some bearing on the values determined.

With regard to evaluation step (c), ‘national context’ should be taken to refer to the historic landscape areas on the Register, not the whole of Wales. Although all historic landscapes on the Register are of national importance, being either of outstanding or of special historic interest, some component Historic Character Areas may be of even greater significance, because of the range or the quality of elements they contain, the presence of designated elements within them, their relationship with other Historic Character Areas, their status as a key component in the historic landscape area on the Register, or because of a combination of these factors.’ (“Guide to Good Practice” p23)

The criteria used to evaluate relative importance are the Secretary of State's Criteria for Scheduling Ancient Monuments (Welsh Office Circular 60/96, *Planning and the Historic Environment*, p.15, Annex 3), although depending on the individual circumstances and the characteristics of the HLCAs concerned, not all criteria will be universally applicable.

The selected criteria are scored on a scale of 1 to 5 (Very Low or Poor to Very High or Very Good) and in many cases, the scores will be the same for stages (a) and (b) where both are required. Scores for stage (c) however, will generally but not always, be graded lower than

stages (a) and (b), because of the greater numbers and the wider ranges of element qualities to be found in the national context.

Scores are summarised as an overall percentage (out of a maximum possible score of all Very High grades) at the end of stages (a) and (b) and also (c). Stage 4 is then completed with a determination of, and a table showing, the average, overall value of all the HLCA(s) (or part(s) thereof) affected.

A.7.2 Relative Importance in relation to (A) The Whole of the HLCA; (B) The Whole of the HLA

Historic Landscape Character Area 08 (PRN 15707) Cloddfa'r Coed

- Rarity
 - a) Low
 - b) Very Low
- Representativeness
 - a) Low
 - b) None
- Documentation
 - a) Very Low
 - b) Moderate
- Group Value
 - a) Low
 - b) Moderate
- Survival
 - a) Very Low
 - b) Very Low
- Condition
 - a) Very Low
 - b) Very Low
- Coherence
 - a) Very Low
 - b) Very Low
- Integrity
 - a) Very Low
 - b) Very Low
- Potential
 - a) Very Low
 - b) Moderate
- Amenity
 - a) Very Low
 - b) Very Low

- Associations
- a) Very Low
- b) High

Table A.7 Evaluation of the relative importance of the part of HLCA 08 (PRN 15707) Cloddfa'r Coed Directly and/or Indirectly affected by Development.

VALUE:	V high/good	high/good	Mod/mod	low	Poor/non	V high/good	high/good	Mod/mod	low	Poor/non
in relation to: CRITERION	(a) Whole of historic landscape character area					(b) Whole of historic landscape area on the Register				
Rarity				X						X
Representativeness				X						X
Documentation					X			X		
Group Value				X				X		
Survival					X					X
Condition					X					X
Coherence					X					X
Integrity					X					X
Potential					X			X		
Amenity					X					X
Associations					X		X			

Score for Stage (a) 14/55 = 25.5%

Score for Stage (b) 20/55 = 36.4%

Historic Landscape Character Area 09 (PRN 15708) Nantlle slate quarries

- Rarity
 - a) High
 - b) Very High
- Representativeness
 - a) Very High
 - b) Moderate
- Documentation
 - a) Moderate
 - b) High
- Group Value
 - a) Very High
 - b) Very High
- Survival
 - a) Moderate
 - b) High
- Condition
 - a) High
 - b) High
- Coherence
 - a) High
 - b) High
- Integrity
 - a) Moderate
 - b) High
- Potential
 - a) Moderate
 - b) Moderate
- Amenity
 - a) Moderate
 - b) Moderate
- Associations
 - a) Moderate
 - b) High

**Table A.8 Evaluation of the relative importance of the part of HLCA 09 (PRN 15708)
Nantlle slate quarries and/or Indirectly affected by Development**

VALUE	V high/g ood	high/go od	Mod/m ed	low	Poor/n one	V high/go od	high/go od	Mod/m ed	low	Poor /non e
in relation to: CRITERION	(a) Whole of historic landscape character area					(b) Whole of historic landscape area on the Register				
Rarity		X				X				
Representativeness	X							X		
Documentation			X				X			
Group Value	X					X				
Survival			X				X			
Condition		X					X			
Coherence		X					X			
Integrity			X				X			
Potential			X					X		
Amenity			X					X		
Associations			X				X			

Score for Stage (a) 40/55 = 72.7%

Score for Stage (b) 43/55 = 78.2%

Historic Landscape Character Area 25 (PRN 15724) Moel Tryfan – lower slopes

• Rarity

a) Very Low

b) Low

• Representativeness

a) Low

b) Low

• Documentation

a) Very Low

b) Low

• Group Value

a) Low

b) Medium

- Survival

a) Good

b) Good

- Condition

a) Good

b) Good

- Coherence

a) Low

b) Moderate

- Integrity

a) Moderate

b) Moderate

- Potential

a) Very Low

b) Low

- Amenity

a) Low

b) Moderate

- Associations

a) Very Low

b) Very Low

**Table A.9 Evaluation of the relative importance of the part of HLCA 25 (PRN 15724)
Moel Tryfan – lower slopes**

VALUE	V high/g ood	high/go od	Mod/m ed	low	Poor/n one	V high/go od	high/go od	Mod/m ed	low	Poor /non e
in relation to: CRITERION	(a) Whole of historic landscape character area					(b) Whole of historic landscape area on the Register				
Rarity					X				X	
Representativeness				X					X	
Documentation					X				X	
Group Value				X				X		
Survival		X					X			
Condition		X					X			
Coherence				X				X		
Integrity			X					X		
Potential					X				X	
Amenity				X				X		
Associations					X					X

Score for Stage (a) 23/55 = 41.8%

Score for Stage (b) 29/55 = 52.7%

A.7.3 Relative Importance in the National Context

Historic Landscape Character Area 08 (PRN 15707) Cloddfa'r Coed

- Rarity
Very Low

- Representativeness
Very Low

- Documentation
Low

- Group Value
Moderate

- Survival
Very Low
- Condition
Very Low
- Coherence
Very Low
- Integrity
Very Low
- Potential
Low
- Amenity
Very Low
- Associations
Moderate

Historic Landscape Character Area 09 (PRN 15708) Nantlle slate quarries

- Rarity
High
- Representativeness
Low
- Documentation
High
- Group Value
High
- Survival
High
- Condition
High
- Coherence
High
- Integrity
Moderate
- Potential
High
- Amenity
Moderate

- Associations
Moderate

Historic Landscape Character Area 25 (PRN 15724) Moel Tryfan – lower slopes

- Rarity
Very Low

- Representativeness
Low

- Documentation
Very Low

- Group Value
Very Low

- Survival
Moderate

- Condition
Moderate

- Coherence
Moderate

- Integrity
Low

- Potential
Low

- Amenity
Low

- Associations
Very Low

Table A.10 Evaluation of the relative importance in the national context of HLCA's 08 & 09 Directly and/or Indirectly affected by Development

VALUE	V high/g ood	high/go od	Mod/m ed	low	Poor/n one	V high/go od	high/go od	Mod/m ed	low	Poor /non e
in relation to: CRITERION	<u>HLCA 08 (PRN 15707) Cloddfa'r Coed</u>					<u>HLCA 09 (PRN 15708) Nantlle slate quarries</u>				
Rarity					X		X			
Representativeness					X				X	
Documentation				X			X			
Group Value			X				X			
Survival					X		X			
Condition					X		X			
Coherence					X		X			
Integrity					X			X		
Potential				X			X			
Amenity					X			X		
Associations			X					X		
SCORE				17/55	Moderate				35/55	High

Table A.11 Evaluation of the relative importance in the national context of HLCA 25 Directly and/or Indirectly affected by Development

VALUE	V high/g ood	high/go od	Mod/m ed	low	Poor/n one
in relation to: CRITERION	HLCA 25 (PRN 15724) Moel Tryfan – lower slopes				
Rarity					X
Representativeness				X	
Documentation					X
Group Value					X
Survival			X		
Condition			X		
Coherence			X		
Integrity				X	
Potential				X	
Amenity				X	
Associations					X
SCORE				21/55	Moder ate

Table A.12 ASIDOHL Stage 4: Grade of overall value of relative importance of the HLCAs (or parts thereof) affected by development

Historic Landscape Character Area	Grading (average of (a)+(b)+(c))
HLCA 08 (PRN 15707) Cloddfa'r Coed	31 – Moderate (range 20-39)
HLCA 09 (PRN 15708) Nantlle slate quarries	72 – High (range 60-79)
HLCA 25 (PRN 15724) Moel Tryfan – lower slopes	44 - Considerable (range 40-59)
GRADE OF OVERALL VALUE	50 – Considerable (range 40-59)

A.8 ASIDOHL STAGE 5: ASSESSMENT OF OVERALL SIGNIFICANCE OF IMPACT OF DEVELOPMENT

A.8.1 Introduction

The final stage of the ASIDOHL process combines the results of Stages 2 – 4 in order to determine the overall significance of the impact of development on the HLA. This is determined by setting out and scoring the value of the HLCAs affected in relation to the effect caused by development, and the consequent change in the value of the HLA on the Register. This is presented in table A.31 which is based on the framework, grades and scores set out in Table 13 of the Guide to Good Practice. The overall significance of impact for each HLCA is determined by adding together the scores in columns (a), (b), and (c) and grading them using the overall significance of impact table set out in Table 14 of the Guide to Good Practice, and reproduced here in table A.30.

Table A.13 Overall Significance of Impact

Score	Grade
26-30	Very Severe
21-25	Severe
16-20	Fairly Severe
10-15	Moderate
4-9	Slight
0-3	Very Slight

Table A.14 ASIDOHL Stage 5: Summary of the overall significance of impact of the proposed mineral extraction, on the Nantlle Valley landscape of outstanding historic interest - HLW (Gw) 9 (Based on Guide to Good Practice, Table 13, p.29)

HISTORIC LANDSCAPE CHARACTER AREA	(a) VALUE OF HLCA based on Stage 4 (Table A.17)	(b) IMPACT OF DEVELOPMENT ON HLCA based on Stages 2-3	(c) IMPACT ON HISTORIC LANDSCAPE	OVERALL SIGNIFICANCE OF IMPACT (a)+(b)+ c)
HLCA 08 Cloddfa'r Coed	Medium 4	Low visual intrusion 1	Very Low 1	Slight 6
HLCA 09 Nantlle slate quarries	High 7	Low direct and visual intrusion 1	Very Low 1	Slight 9
HLCA 25 Moel Tryfan – lower slopes	Medium 5	Low visual intrusion 1	Very Low 1	Slight 7

A.8.2 Concluding Statement and Mitigation Statement

The proposed development would impact to a greater or lesser extent on three of the forty-nine HLCAs that constitute the Nantlle Valley landscape of outstanding historic interest. The physical footprint of the proposed mineral extraction area is very low indeed, covering an area of just 1043m². Furthermore, the proposed area of extraction is located at the foot of a steep wooded scarp which obscures the area completely when viewed from the south. Likewise, the remaining in-situ tumbled slate cliffs to the east and west hides the proposed extraction area from view. Moreover, the location of the site on a plateau of ground halfway up the slopes of the lower foothills of the Nantlle valley ensures that the area is only visible from distant elevated ground to the north. The overall significance of impact (direct and indirect) of the proposed extraction area upon the *Cloddfa'r Coed*, *Nantlle slate quarries*, and the *Moel Tryfan – lower slopes* HLCAs would all be *slight*. This is because the direct physical and indirect visual impact of the proposed works would be negligible, and/or affect such a small proportion of the relevant HLCAs so that the impact upon the historic landscape would be considered very low indeed.

There are no sites or features of archaeological importance within the proposed extraction area and the proposed works would utilise existing haul routes, ensuring that no indirect physical impacts to the HLCA would occur. The proposed extraction area would be visible from the SAM of Dorothea Quarry, Pyramids, Inclines, Mill & Winding Houses, etc (CN 199), however the proposed area to be removed is negligible in size and no new materials or haul routes will be introduced, ensuring that the indirect visual impact of the works when viewed from the SAM would be considered *very slight*.

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APPENDIX I

Historic Landscape Characterisation Report – Summaries of the HLCAs included in the ASIDOHL assessment.

B.1.1 HLCA 08 Cloddfa'r Coed (PRN 15707)

Historic background

The site of one of the earliest Nantlle slate quarries, operational by the middle of the eighteenth century, and for a while the most profitable and productive in the area. Closed following rock-falls in the 1820s, and revived in the later nineteenth century.

Key historic landscape characteristics

Reclaimed industrial land

Completely landscaped in 1978-9, removing everything of historical interest (at least on the surface).

B.1.2 HLCA 09 Nantlle slate quarries (PRN 15708)

Historic background

An area of extensive slate quarrying, active from at least the medieval period to the late twentieth century. Proprietary constraints meant that the slate had to be worked in many separate quarries rather than in one gigantic site as at Penrhyn and Dinorwic, and geology and topography meant that the dominant method of extraction was from open pits on the side or the floor of the Nantlle valley.

Key historic landscape characteristics

Slate quarries, mills, pyramids, engine houses, tips

An outstanding landscape of relict industrial archaeology, exemplifying the industry's technical development from the mid nineteenth-century to the twentieth. Some of the surviving machines are built on such an impressive scale as to form landscape elements in their own right, such as the Cornish pump-engine at Dorothea Quarry and the blondin rope-systems at Pen yr Orsedd. Reworking of tips and some very limited primary extraction threatens the integrity of these landscapes, and the recent attempt to establish Dorothea as a commercial diving centre has resulted in the destruction of historic features without any recording. The massive slate bastions for the chain inclines at a number of quarries are at risk from progressive dilapidation and possible collapse.

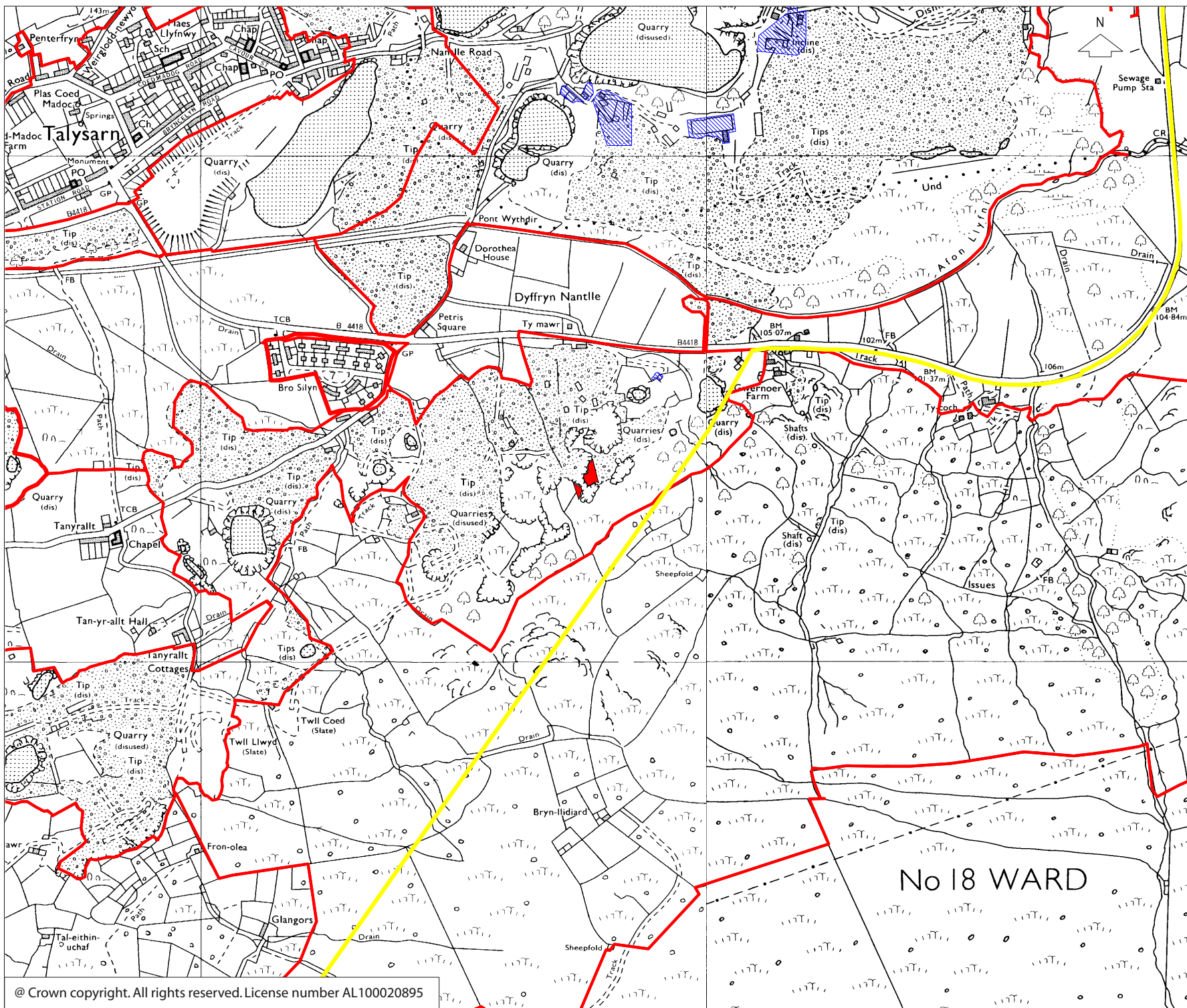
Historic background

The field patterns show origins in the late prehistoric period, and there is substantial evidence for settlement and farming of that period. Interestingly, relatively few 'long huts' survive in the area and there is little evidence for medieval activity, and much of the settlement and many of the field walls which characterise the current landscape date from the nineteenth century.

Key historic landscape characteristics

Irregular and curvilinear enclosures, relict archaeological sites, scattered settlement

The west-facing lower slopes of Moel Tryfan, below the mountain wall which formerly demarcated the commons here. This landscape is made up largely of pre-modern field systems, whose irregular pattern contrasts markedly with the geometric organisation of the post-1798 enclosures on the commons, though in a number of places there is evidence for much smaller fields laid out in the nineteenth century on surviving patches of common land on these lower slopes. Buildings are a mixture of estate-built farmhouses and vernacular rural dwellings, with some short 2-storey rows. Construction material is local field stone though there is some use of yellow brick as quoins, becoming less prevalent further away from the site of the former Groeslon station.



Proposed extraction site

Snowdonia National Park boundary

HLCA boundaries

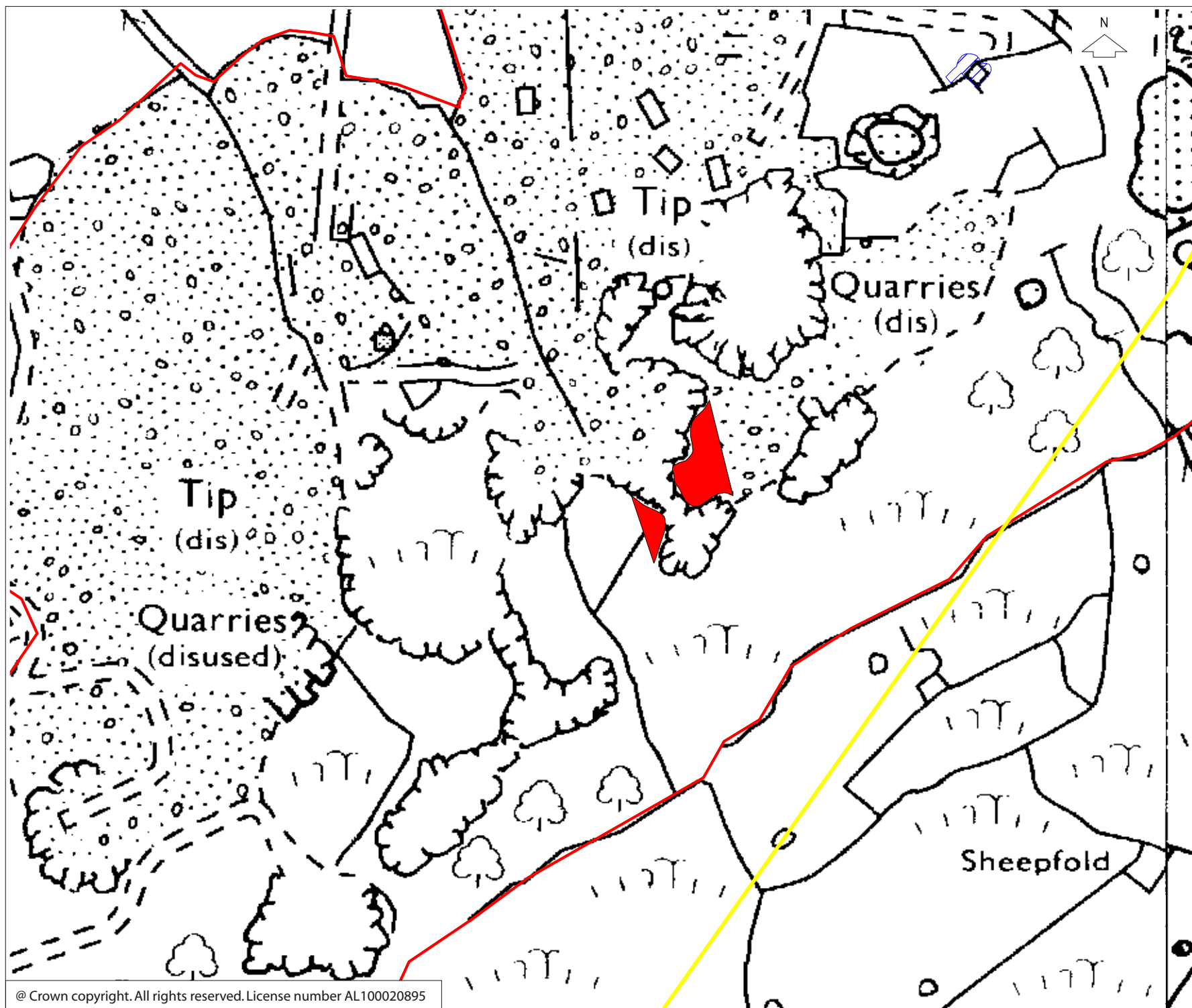
Scheduled Ancient Monuments

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Figure1. Location map
1:10,000 at A4



- Proposed extraction site
- Snowdonia National Park boundary
- HLCA boundaries
- ▨ Scheduled Ancient Monuments

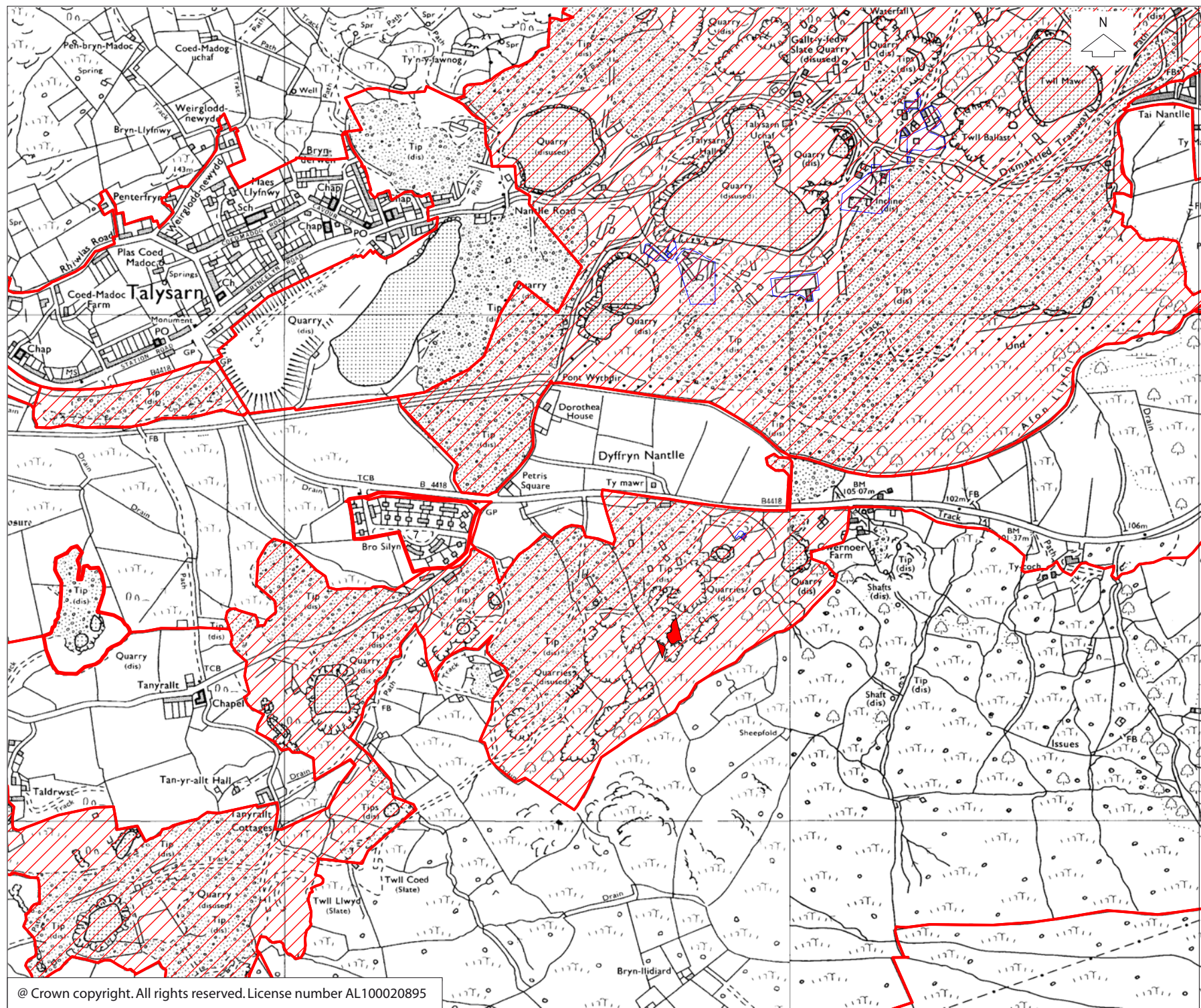
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**Figure 2. Location map
1:2,500 at A4**



- Proposed extraction site
- HLCA boundaries
- Scheduled Ancient Monuments

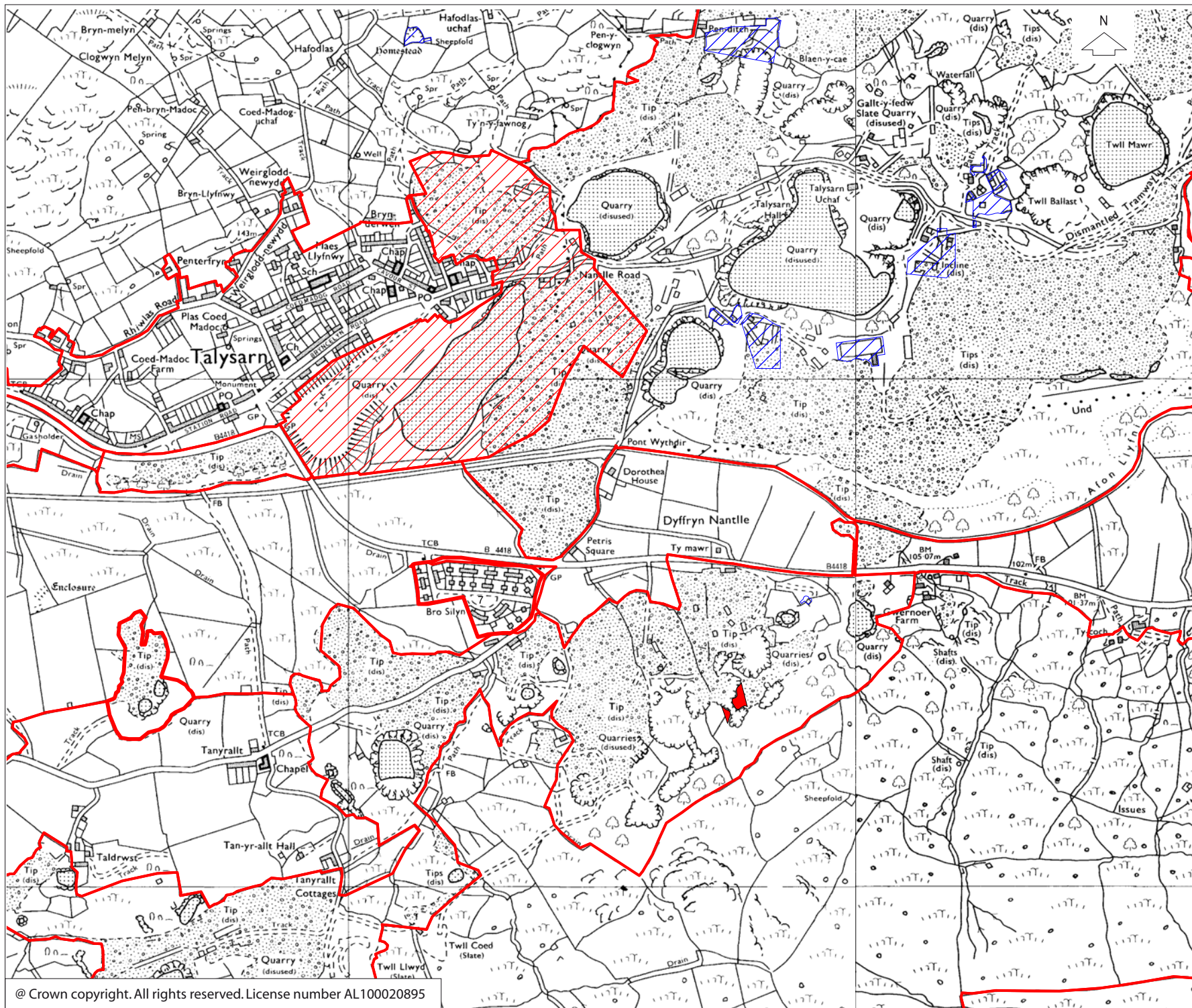
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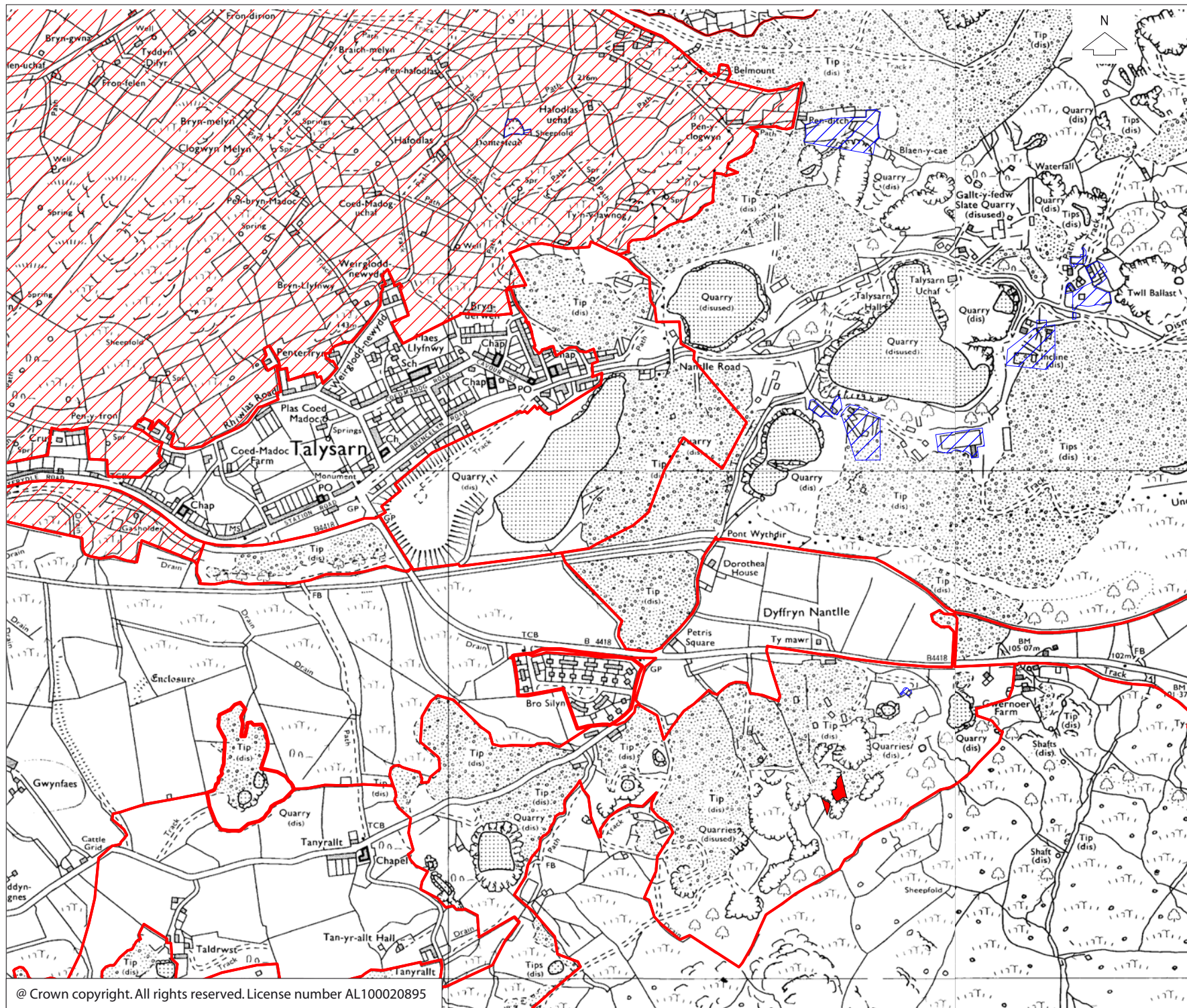
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Figure 3. Nantlle Slate Quarries HLCA. 1:10,000 at A4



- Proposed extraction site
- HLCA boundaries
- Scheduled Ancient Monuments

**Figure 4. Cloddfa'r Coed
HLCA. 1:10,000 at A4**



Proposed extraction site

HLCA boundaries

Scheduled Ancient Monuments

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Figure 5. Moel Tryfan-lower slopes HLCA.
1:10,000 at A4



**Plate 1: Proposed extraction area from the Ty Mawr West Slate Quarry. View from the north.
Proposed extraction area in red. (Nikon D3100 - f.5 - 35mm)**



**Plate 2. View from Cloddfa'r Coed HLCA to the Nantlle Slate Quarries HLCA. View from the north.
Proposed extraction area in red. (Nikon D3100 - f.8 - 34mm)**



**Plate 3: View from the SAM of Dorothea Quarry to the proposed extraction area. View from the northeast.
Proposed extraction area in red. (Nikon D3100 - f.9 - 35mm)**



**Plate 4. View from Moel Tryfan-lower slopes HLCA to the Nantlle Slate Quarries HLCA. View from the north.
Proposed extraction area in red. (Nikon D3100 - f.8 - 34mm)**



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