# ASSESSMENT OF NON-FERROUS METAL MINES 2002-3

MANAGEMENT RECOMMENDATIONS

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#### ARCHAEOLEG CAMBRIA ARCHAEOLOGY

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# ASSESSMENT OF NON-FERROUS METAL MINES 2002-3

MANAGEMENT RECOMMENDATIONS

Gan / By

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#### 1. SCHEDULING RECOMMENDATIONS

Of the 29 metal mines visited during, 6 had previously been partly designated as Scheduled Ancient Monuments - namely Bronfloyd (Cd 152), Poole's Llywernog (Cd 158), Frongoch (Cd 146), Darren Fawr (Cd 144), Castell (Cd 153) and Cwmsymlog (Cd 149). The following list indicates those mines for which it is felt consideration should now be given for creating or extending areas of Scheduled Ancient Monument status, on the basis of the field visits carried out. Refer to Site Reports section (5 above) for site maps.

Bronfloyd (Cd 152)	PRN 5424	Whole site
Cwmsymlog (Cd 149)	PRN 5425	Extend to incorporate the ruins of the old wheel driver's house of Ty'r Rhod
Cwmrheidol	PRN 5472	Whole site
Daren Fawr (Cd 144)	PRN 8337	Extend to include the uppermost portion of the 19 <sup>th</sup> century spoil tips
Hafan	PRN 9166	Whole site
Bog	PRN 9169	Part of site including; wheelpit PRN 44489; flat rod system PRN 44490; winding house PRN 44491
Castell (Cd 153)	PRN 9171	Extend to include wheelpit and associated features to the east of the main mine area
Temple	PRN 9342	Whole site
Wemyss	PRN 23230	Part of site including ore processing area; wheelpit
Logaulas	PRN 24586	Open cut and adjacent landscape
Gwaith Goch	PRN 25891	Part of site including; ore bin (PRN 44492); mine building; crusher house & wheelpit; Leat
Ystumtuen	PRN 25900	Whole site
Graig Goch	PRN 25917	Part of site including ore processing area
Glogfawr	PRN 25932	Cobbled dressing floors, processing area, buddle pits, crushing mill, tips, reservoir, shafts

#### 2. MANAGEMENT RECOMMENDATIONS

#### **BRONFLOYD PRN 5424**

Although the main area of mining activity is already protected by SAM status, it is felt that consideration might also be given to extending the SAM area to include the spoil tips at the northern edge of the mine and also to the small strip of land to the east on the banks of the Nant Silo, where building remains and the now blocked Bushell's level are located. Ownership was not established, but the owner's details should already be known to Cadw as the site is mostly protected as a SAM already.

#### **CWMSYMLOG PRN 5425**

As noted above, a significant area of the central portion of the mine complex already has SAM status. It is recommended that this area be slightly extended to incorporate the ruins of the old wheel driver's house of Ty'r Rhod (see accompanying map). This is felt appropriate due to the fact that the house is an integral element in the group of scheduled features that survive alongside, namely Skinners Shaft and its associated features. Ownership was not established, although the eastern part of the complex is in Forest Enterprise ownership.

#### **CWMRHEIDOL PRN 5472**

It is recommended that the shaded area on the accompanying map be considered for scheduling on the basis of the range and condition of the structures and mining features that survive, as well as their high landscape value. The owner lives nearby and was contacted. There is proactive management practiced by an environmental group, which has included some planting of deciduous trees on the spoil tips.

#### DAREN FAWR PRN 8337

Almost the entire area of mining activity from west of Darren Farm to the northeastern extremity of the open-work is a SAM (Cd 144). It is proposed that this area be extended to the northeast as shown on the accompanying map, to include the uppermost portion of the 19<sup>th</sup> century spoil tips that form such an impressive landscape feature above Penybontrhydybeddau. There is multiple ownership of this extensive complex. The owner's details should already be known to Cadw as the site is partly protected as a SAM already. The ownership of the area recommended for SAM status was not established.

#### FRONGOCH PRN 9151

Part of the northwestern section of the mine site, adjoining the road and containing two of the engine houses along with the crusher house, is a Scheduled Ancient Monument (Cd 146). It is not thought appropriate to make any new scheduling recommendations due to the complex nature of the mine site's present use. It also has to be noted that scheduling has not prevented the decay of the most important structures at Frongoch and it may be the case that there are other management strategies that should be pursued to protect the site. The owner lives on site and the owner's details should already be known to Cadw as the site is partly protected as a SAM already.

Clearly a sustainable management plan is required to retain what survives, whether in terms of standing structures or sub-surface archaeology, and this must include attention to stabilisation work on those structures that remain. Unless a pro-active approach is taken, even the scheduled area will continue to decay until little surface evidence remains. It should be noted that the owner of the sawmill and the main part of Frongoch mine and the adjacent Wemyss mine is sympathetic to the need for the protection and enhancement of the site as a whole. The future of Frongoch/Wemyss is a matter of great concern, as the combined archaeological resource of these mines must still be rated to be amongst the most important range of features in the Ceredigion ore-field. They are the focus

of a wider landscape that was substantially influenced by mining and the mining community. The wealth of built heritage associated with the settlements of that community and the visual impact of mining remains on the landscape offer a major heritage management and interpretation opportunity for the district.

#### HAFAN PRN 9166

It is recommended that the shaded area on the accompanying map be considered for scheduling. The area includes all evidence of mining activity as well as the dramatic inclined quarry tramway that cuts through the site. The Deserted Rural Settlement site falls within this area. The ownership was not established and access was made via a public footpath.

#### **BOG PRN 9169**

The southern part of the complex, including the Winding Engine House (PRN 44491), flat rod course (PRN 44490) and associated wheelpit (PRN 44489) should be considered for scheduling and are shaded on the accompanying map. This recommendation might be extended to include the core of the mine site, including the spoil tips, dressing floor area and associated tailings, by virtue of their relatively undisturbed state and archaeological potential. The core of the site is on Forest Enterprise owned land, but the ownership of the features outside the FE boundary was not established.

#### **CASTELL PRN 9171**

A portion of the site, including the crusher house, has SAM status (Cd 153). It is recommended that the wheelpit and associate features in the eastern block described above be also considered for SAM status, in view of the good state of preservation of the wheelpit. The core of the site is apparently in Crown ownership, but the features to the east are owned by a local farm.

#### **ABBEY CONSOLS PRN 9310**

Although there is no scheduling recommendation proposed for the mine site, it is worth noting that the proximity of Abbey Consols to other important heritage sites, and its own prominent landscape profile, suggest this to be a mine site that is exceptionally well suited to interpretation. It is owned by a nearby farm.

#### **TEMPLE PRN 9342**

It is recommended that the area shown on the accompanying map be considered for scheduling. Temple mine is a well-preserved complex in a dramatic and attractive setting and is worthy of protection and interpretation. Its ownership is uncertain, but it appears to be managed by the CCW and access is possible by public footpath.

#### **LLANFYRNACH PRN 9703**

Llanfyrnach mine is undoubtedly a major heritage site with high archaeological potential' which is in need of further assessment and some degree of protection or management in the long term, although there are few threats to the complex at present. It is understood that previous attempts to schedule the Cornish engine house and chimney were not successful and it is possible that the current owner, who lives nearby, would not welcome such action. It is clear that the boiler house and chimney are worthy of scheduling, but it is not felt appropriate to put forward new scheduling recommendations at this stage for any other part of the mine, without having had proper sight of the features within the mine area.

#### POWELL'S LLYWERNOG PRN 19839

Unfortunately, it appears that there has been an historic reluctance on the part of the private owners of the site, who reside here, to allow an archaeological assessment to be undertaken therefore no

specific management recommendations can be put forward at this stage. However, the potentially high value of the surviving buildings at Powell's mine makes it desirable for common ground to be found with the site owners to increase the likelihood of continued survival of mining related features here in future.

#### WEMYSS PRN 23230

The Wernyss complex is considered to be of great importance for its historical interest, its high landscape value and the varied and relatively well-preserved assemblage of mining features and structures. The core of the mine site is recommended for scheduling (see accompanying map). It falls into the same ownership as the adjacent Frongoch mine.

#### **ALLTYCRIB PRN 25833**

Despite the historic importance of this mine, there are no Scheduled Ancient Monuments here (SAM) at present. A number of scheduling recommendations can be made (see site map), although it must be emphasised that it is possible that consultation with Forest Enterprise, the owners of much of the site, could lead to a sympathetic forest design plan that could ensure the long term protection of features. Indeed, it is felt that the current management regime of features within the forest of Alltycrib has already helped protected many of the mining features but there remains a potential long term threat to these features from forestry operations, which include the regeneration of deciduous woodland.

There are three distinct areas within the forest where it is felt that scheduling would be an appropriate method of ensuring that future degradation of mining remains, particularly sub-surface archaeological features, is avoided (see site map). The concrete 20<sup>th</sup> century dressing mill at the southern edge of the forest should also be considered for SAM status.

The Welsh Mines Society has drawn attention to the degradation of features on farmland to the west of the forest. This includes the area of reputedly "ancient" workings known as the "Roman Level." It is recommended that consideration is given to this level and surrounding surface features for SAM status, but contact was not made with the landowner of this feature (nor is the landowner's identity known) and the features were only viewed from a distance to confirm that surface features are still present.

#### **LOGAULAS PRN 24586**

The opencut in the western part of the mine, and the area of open shafts to the east of this working are recommended for SAM status as significant historic landscape features that represent the long history of mining at the site (see accompanying map). It is thought that the mine area is in multiple ownership. No owners were located when the site was visited in 2002. Much of the area is unfenced and open to the road.

Note that the site has also been recommended by the CCW as a Regionally Important Geological Site (RIGS) (Environment Agency, 2002b, 106). The Welsh Mines Society advises that some of these are shallow workings and that care should be taken along the course of the lodes.

#### RHIWRHIGOS (RHEIDOL UNITED) PRN 25888

There are no scheduling proposals for the Rhiwrhigos mine at present, although the potential of early mining features surviving here make this an important mine which is in need of fuller archaeological assessment. Owner unknown. Site accessed by public footpath.

#### **GWAITH GOCH (RHEIDOL UNITED) PRN 25891**

The most impressive surviving structure is however a pair of well-preserved ore bins (PRN 44492) at the edge of the reclaimed area. These are recommended for scheduling, and consideration may be given to extending the scheduling to include the other surviving buildings to the southeast of this point and also a length of well preserved leat course, which runs away to the south-east and outside the mine boundary as defined by Robert-Protheroe Jones (see site map). Owner unknown, site accessed by pubic footpath.

#### **CAEGYNON PRN 25897**

There are no scheduling recommendations currently proposed for the Caegynon mine, but the consolidation and retention of the surviving features and structures here is an issue of concern as they include structures and buildings now incorporated into dwellings and a garden area. Owner resides on site.

### YSTUMTUEN PRN 25900

The rare preservation of the surface features of a pre-19th century mine site makes the Ystumtuen mine a particularly valuable site. It is therefore recommended that the site be considered for scheduling (see site map). Owner not located. Site visible from roadside.

#### **GRAIG GOCH PRN 25917**

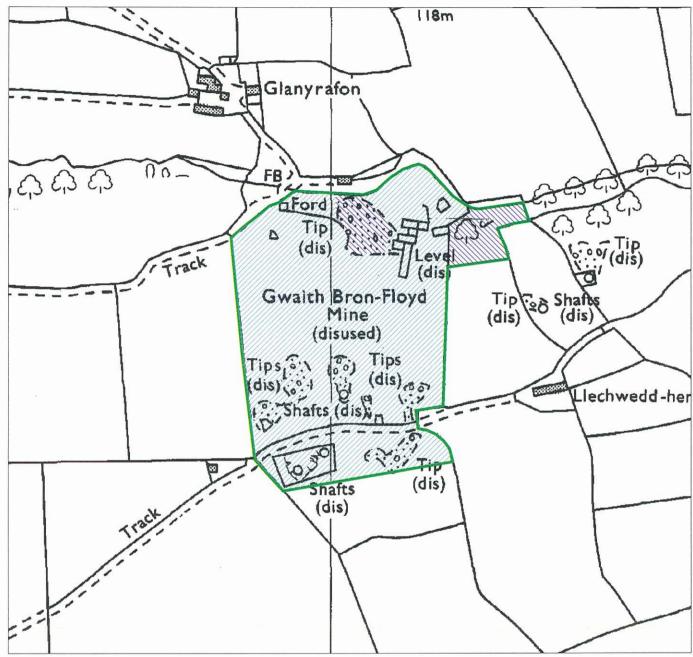
Despite the recent disturbance of part of the complex, Gwaith Goch still displays features related to each stage of mining and ore preparation and in that sense it remains a coherent site. The core of the mine site (identified on the site map) may have well preserved sub-surface archaeological remains and may be considered for scheduling. Given its high landscape value also, it is a site that offers some visitor and interpretative potential. This is enhanced by the proximity of the ruins of the Pont Ceunant generator house, associated with the Frongoch/Wemyss complex.

#### **GLOGFAWR PRN 25932**

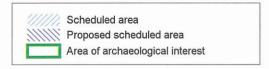
There are currently no scheduled features at Glogfawr. The mine complex has retained a wide range of features of archaeological significance, related to all aspects of mining and therefore most of the western part of the mine area is recommended for scheduling. Further to the northeast, the Davey shaft and its winding engine base and spoil tip, and the inclined Penybwlch shaft, should also be considered for SAM status. The significance of this mine as a major landmark adds to the requirement that it is carefully protected for future generations. The visit was made without succeeding to locate the landowner, but information subsequently received suggests that the owner is interested in the preservation and interpretation of the mine complex. Note that the adjacent Glogfach mine is in the same ownership and is also reported to have high archaeological potential, despite the degradation of surface features. (Environment Agency, 2002b, 80).

Map 1: Bronfloyd Mine PRN 5424 / SAM CD 152

Scale 1:4000

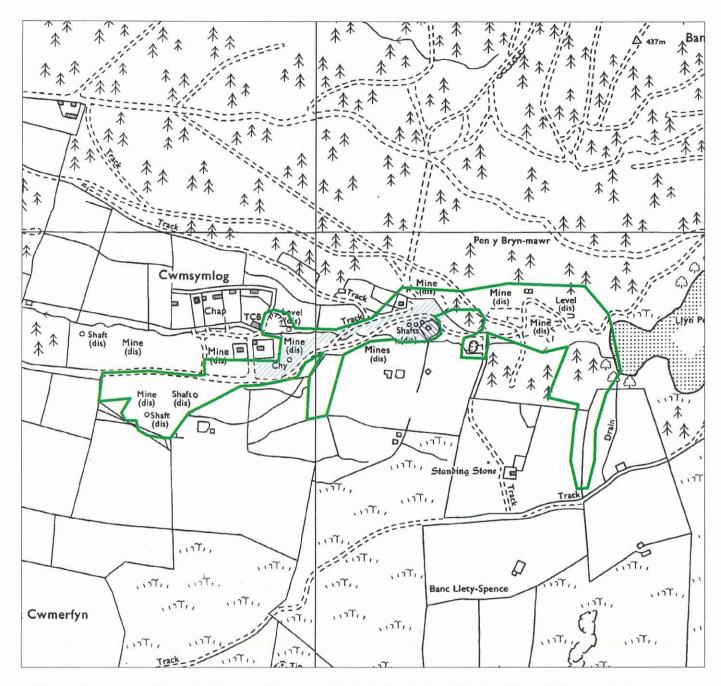


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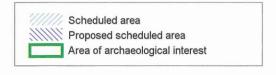


## Map 2: Cwmsymlog Mine PRN 5425 / SAM CD 159

Scale 1:8000

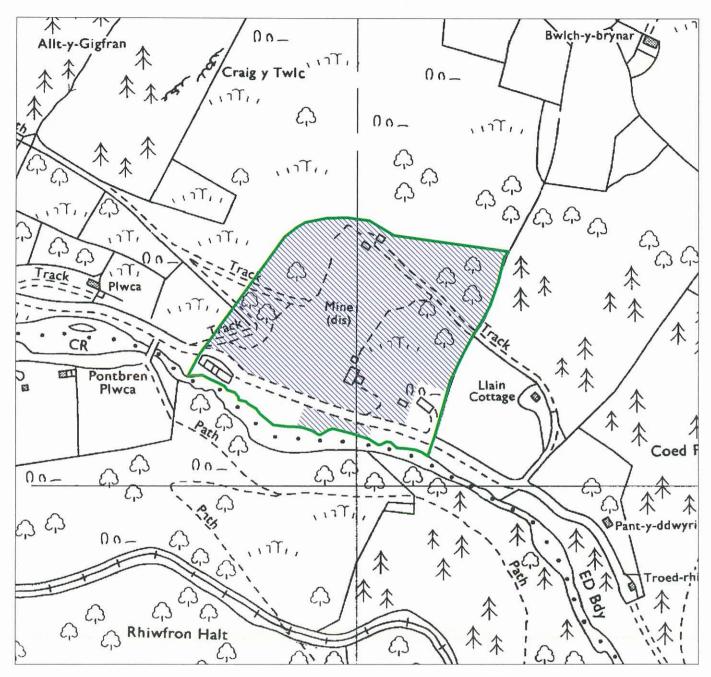


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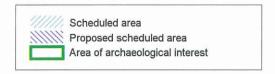


Map 3: Cwm Rheidiol Mine PRN 5472

Scale 1:5000

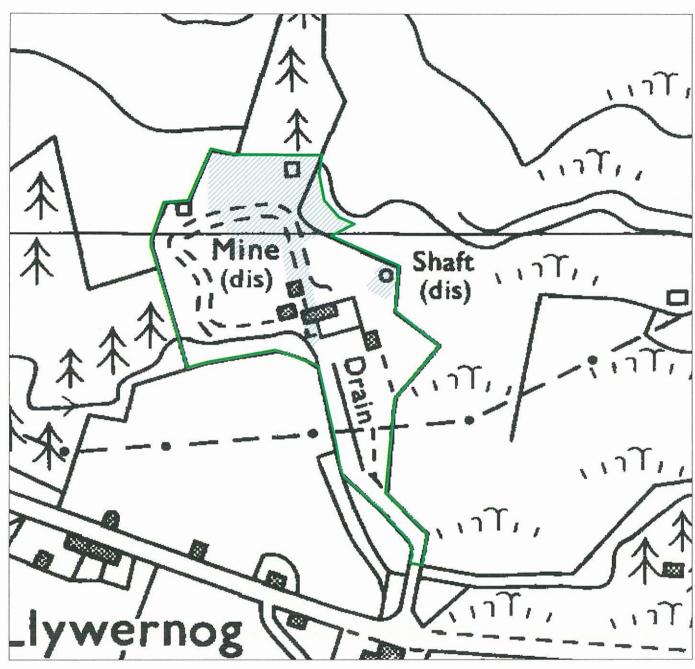


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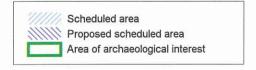


Map 4: Poole's Llywernog Mine PRN 5604 / SAM CD 158

Scale 1:2500

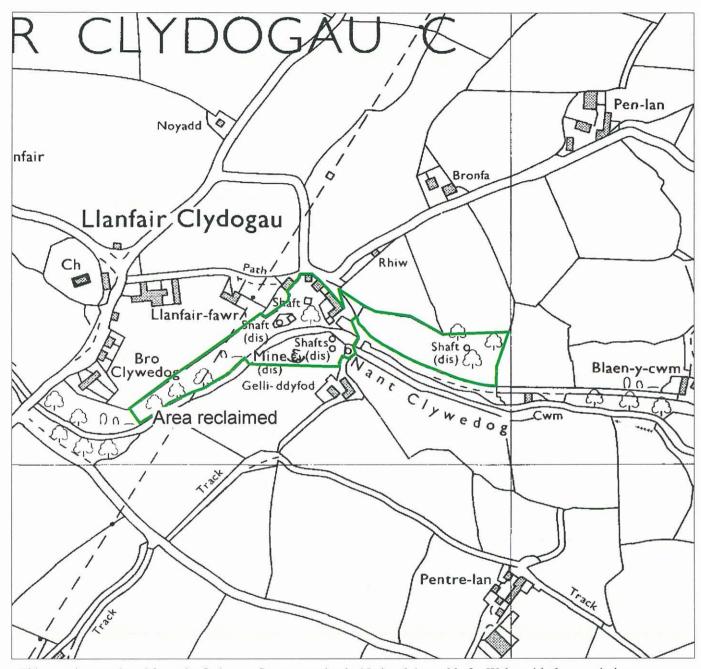


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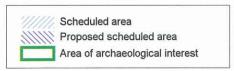


Map 5: Llanfair Clydogau Mine PRN 8231

Scale 1:5000

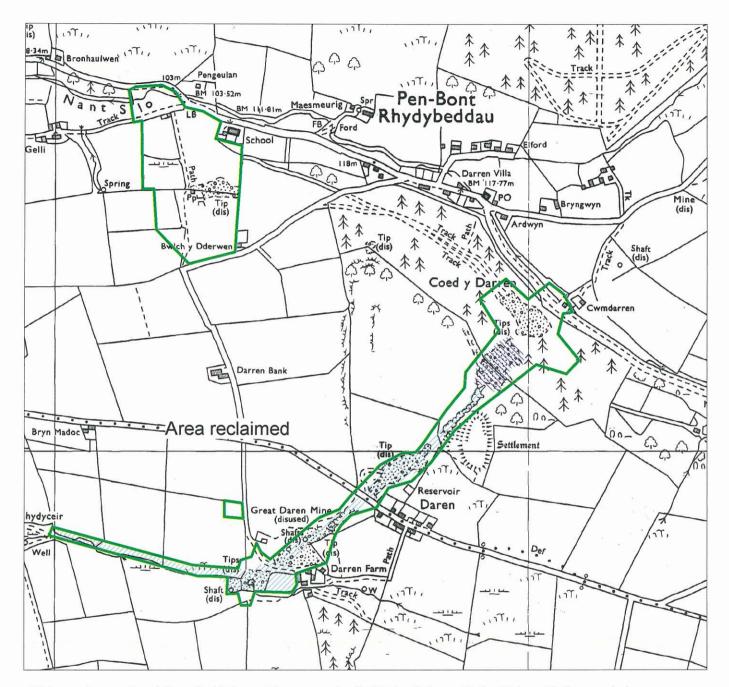


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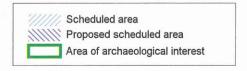


Map 6: Daren Mine PRN 8337 / SAM CD 144

Scale 1:8000

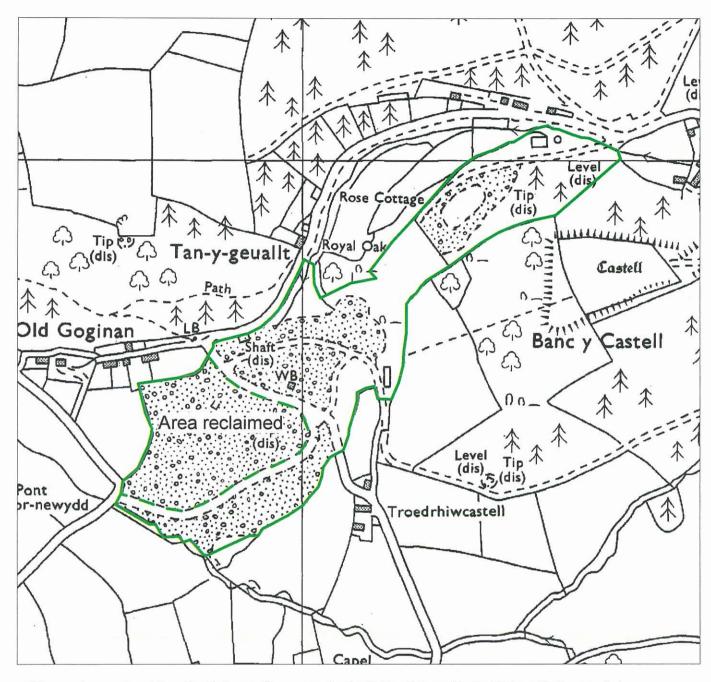


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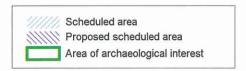


Map 7: Goginan Mine PRN 8838

Scale 1:5000

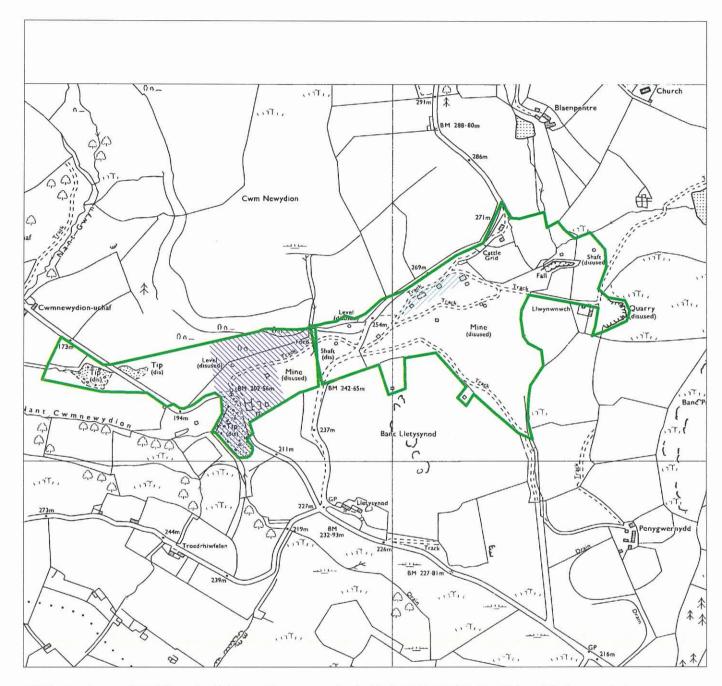


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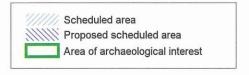


Map 8: Frongoch Mine PRN 9151 / SAM CD 146

Scale 1:10000

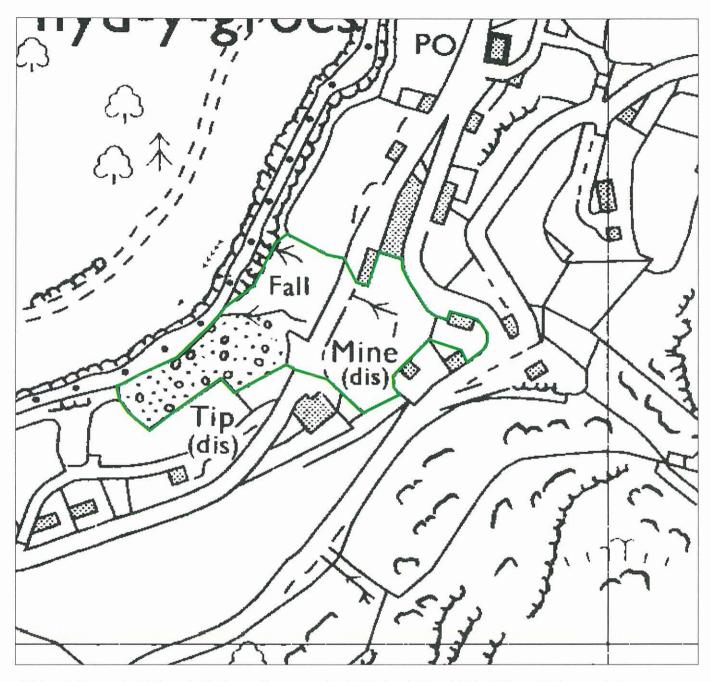


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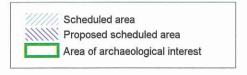


Map 9: Level Fawr Mine PRN 9153

Scale 1:2500

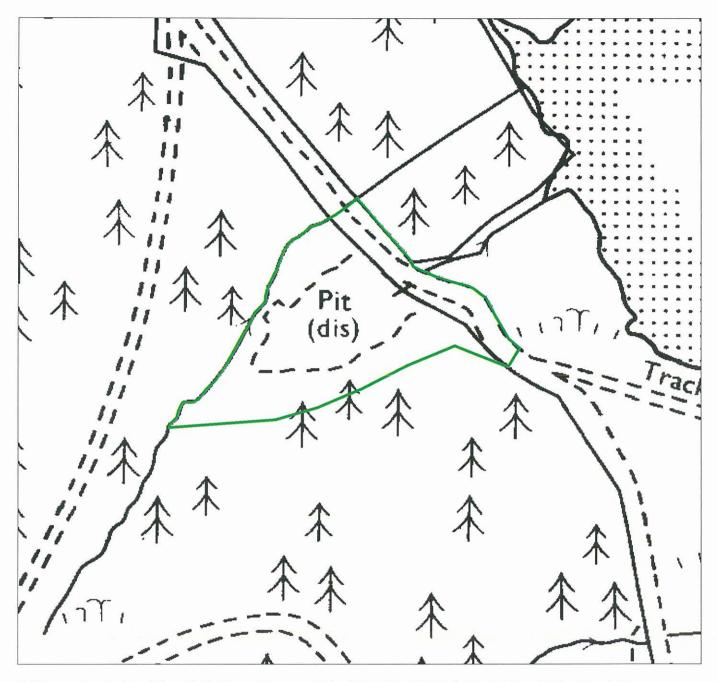


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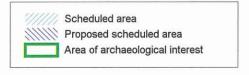


Map 10: Henfwlch Mine PRN 9164

Scale 1:2500

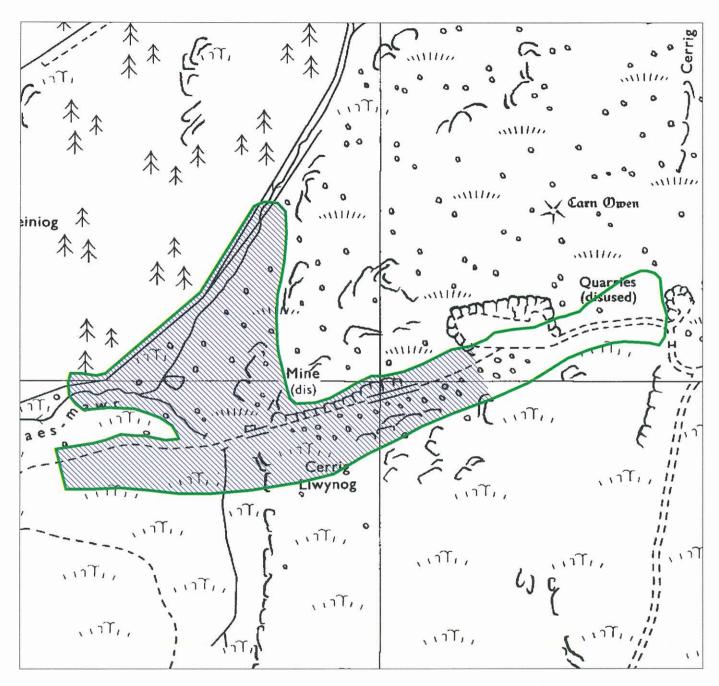


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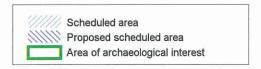


Map 11: Hafan Mine PRN 9166

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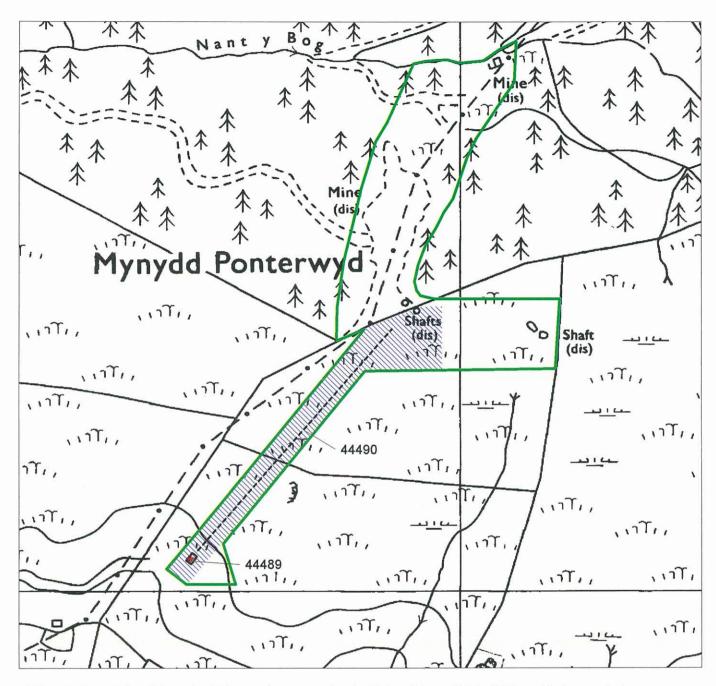


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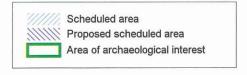


Map 12: Bog Mine PRN 9169

Scale 1:5000

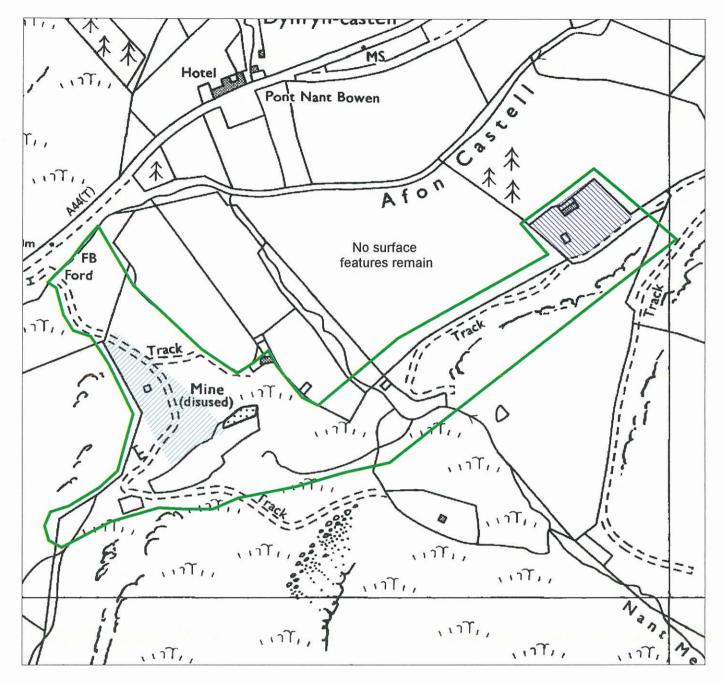


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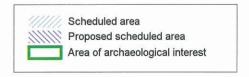


Map 13: Castell Mine PRN 9171 / SAM CD 153

Scale 1:5000

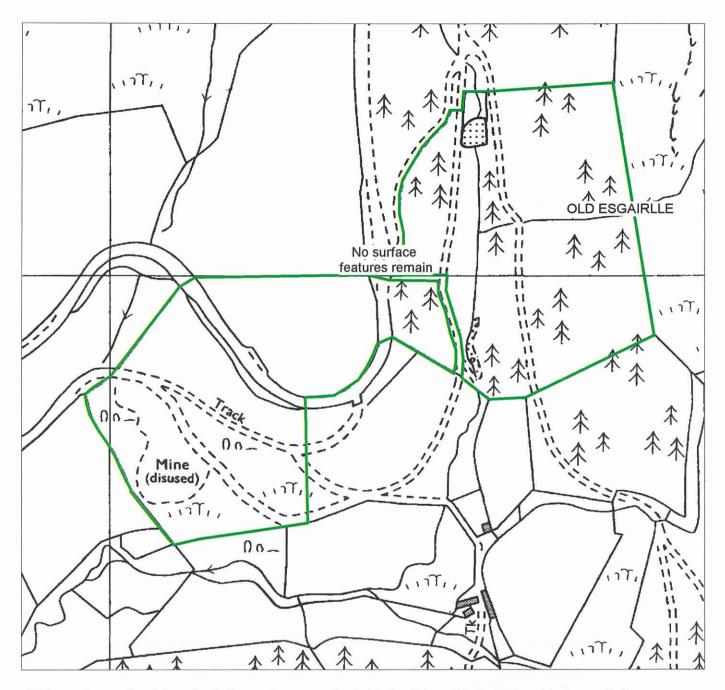


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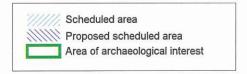


Map 14: Esgairlle Mine PRN 9173

Scale 1:5000

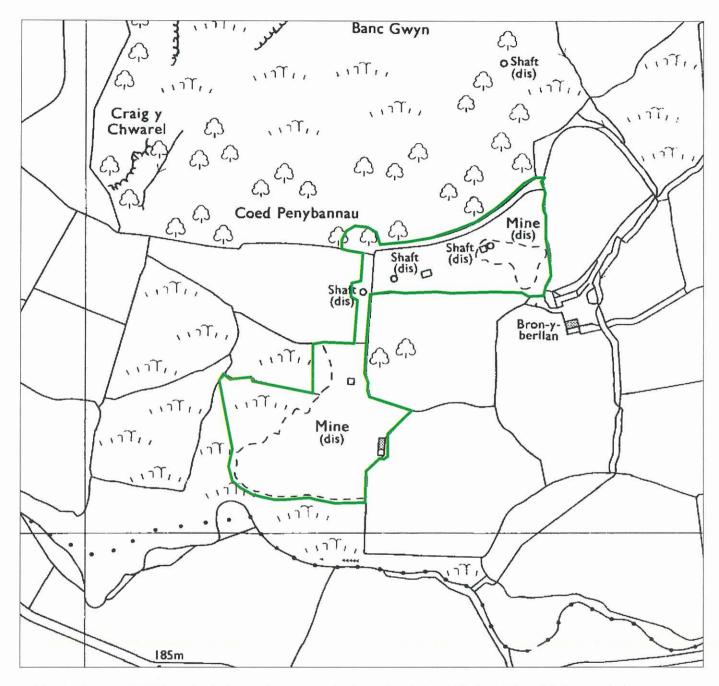


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Map 15: Abbey Consols Mine PRN 9310

Scale 1:5000

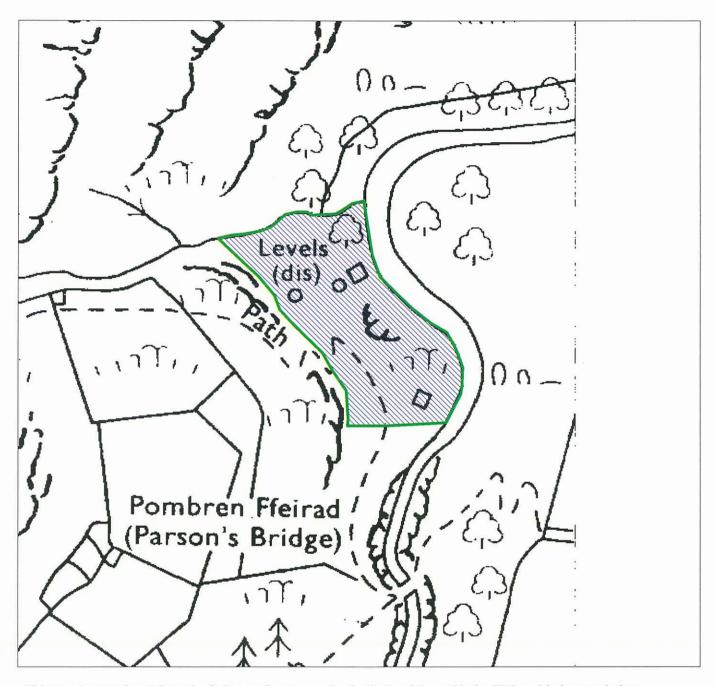


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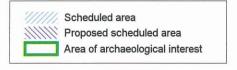


Map 16: Temple Mine PRN 9342

Scale 1:2500

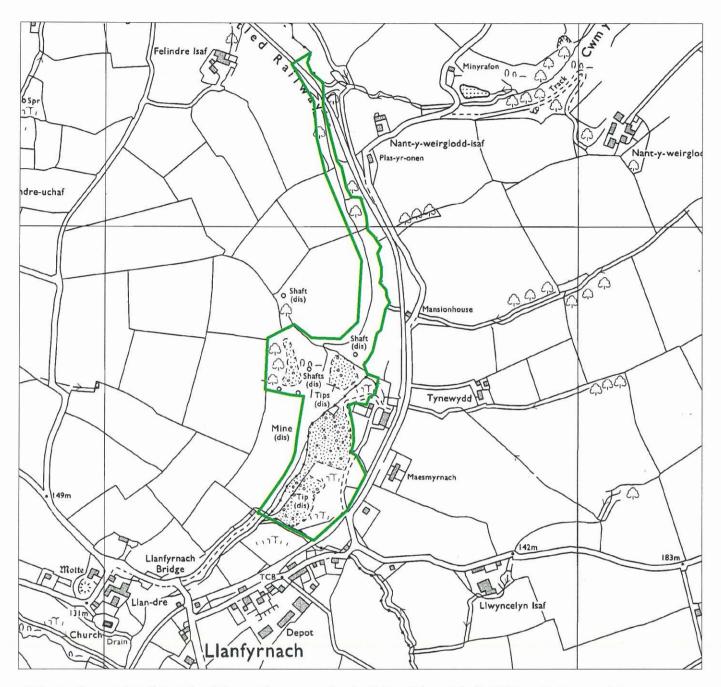


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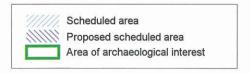


Map 17: Llanfyrnach Mine PRN 9703

Scale 1:8000

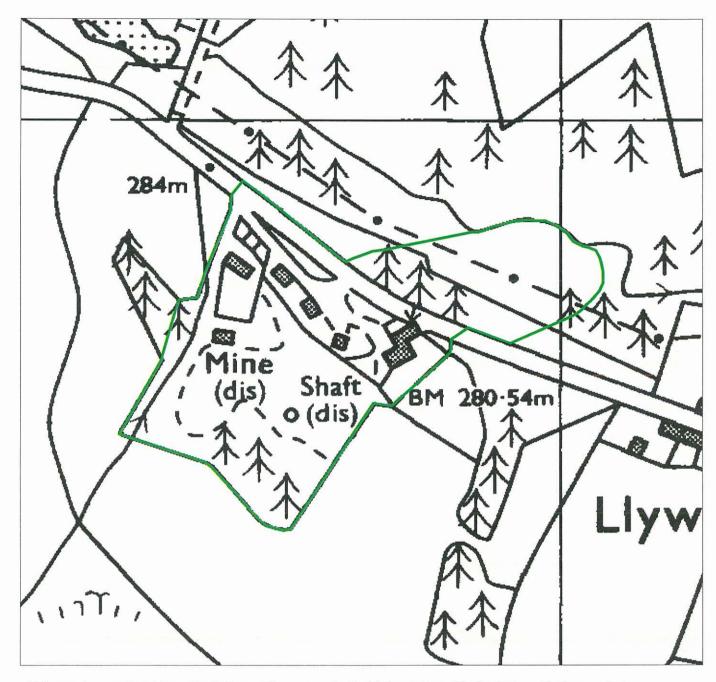


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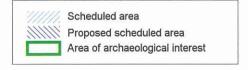


Map 18: Powell's Llywernog Mine PRN 19839

Scale 1:2500

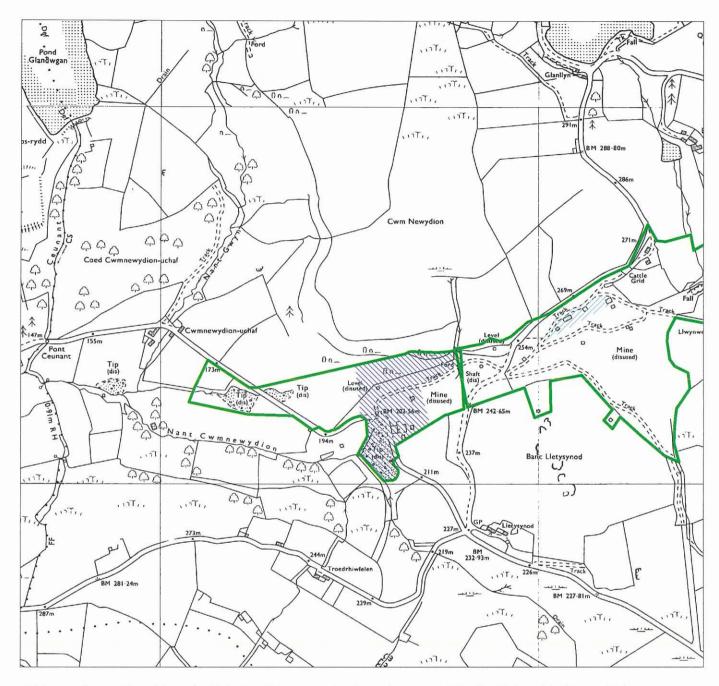


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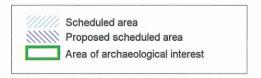


Map 19: Wemyss Mine PRN 23230

Scale 1:10000

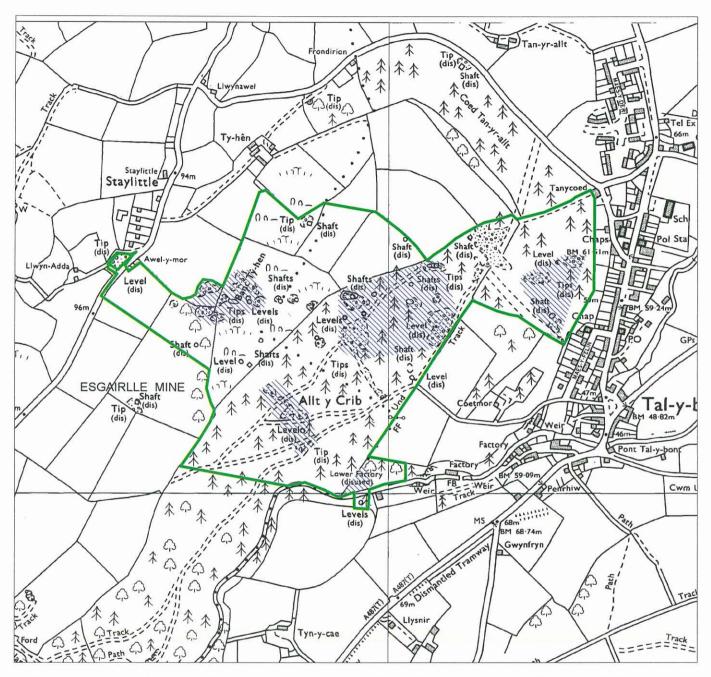


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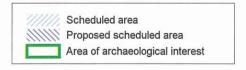


Map 20: Alltycrib Mine PRN 25833

Scale 1:8000

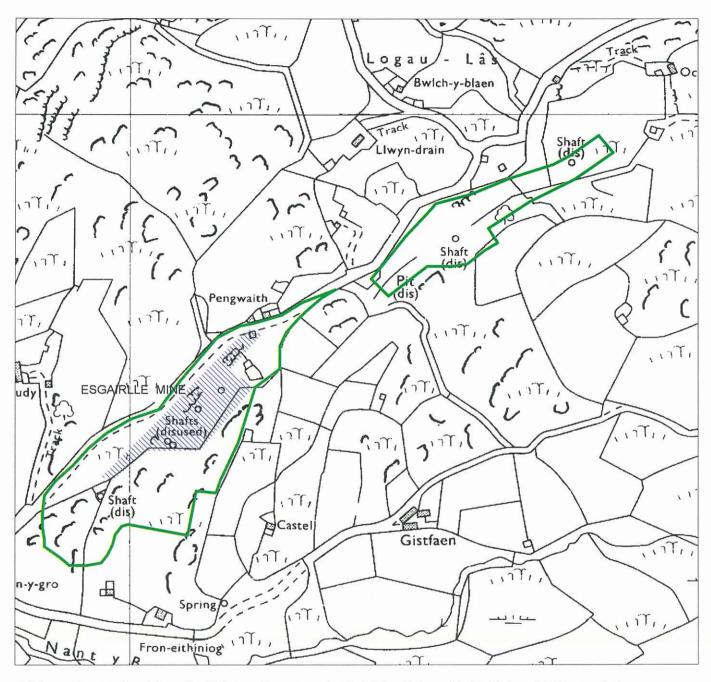


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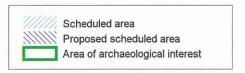


Map 21: Logaulas Mine PRN 24586

Scale 1:5000

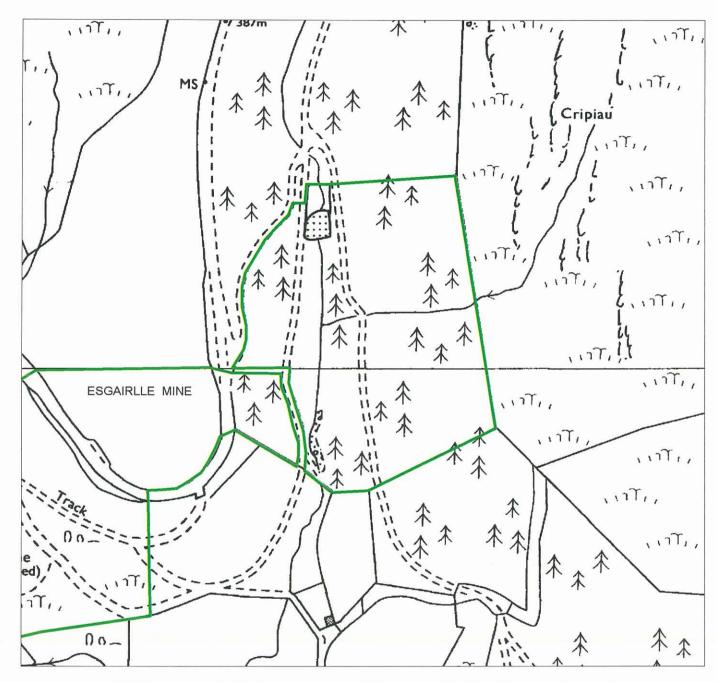


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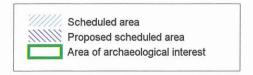


Map 22: Old Esgairlle Mine PRN 25868

Scale 1:5000

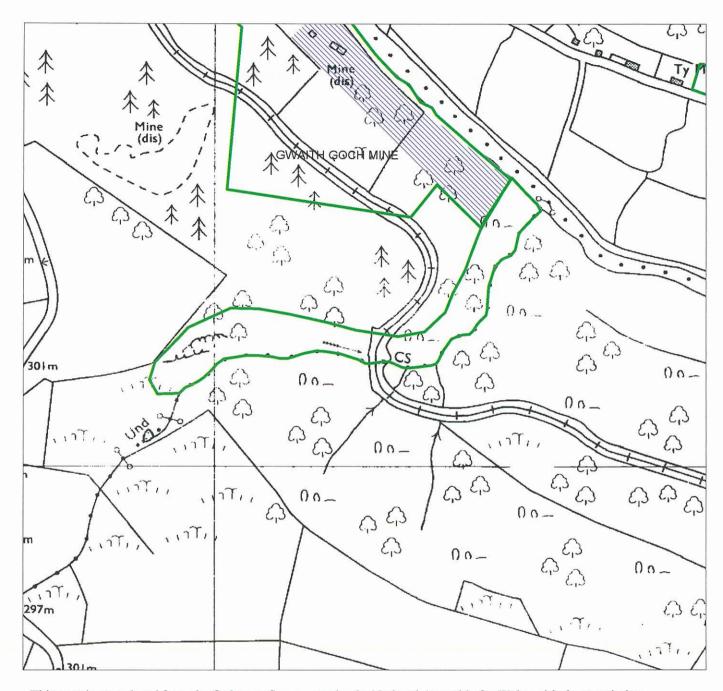


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Map 23: Rheidol United (Rhiwrhigos) Mine PRN 25888

Scale 1:5000

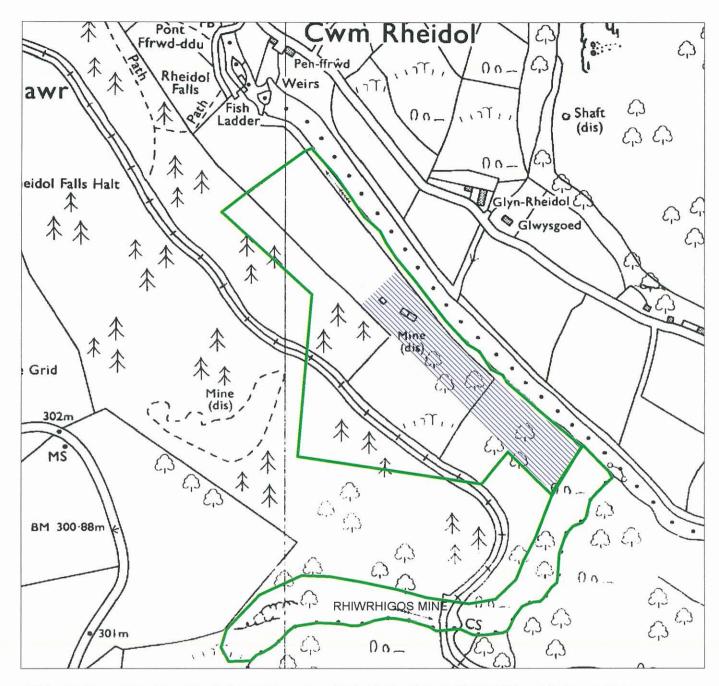


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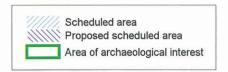


Map 24: Rheidol United (Gwaith Goch) Mine PRN 25891

Scale 1:5000

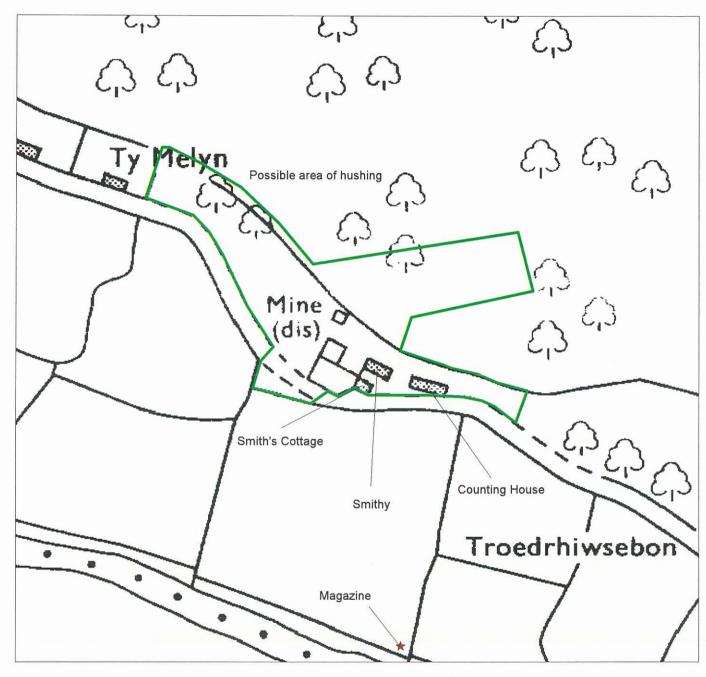


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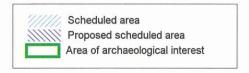


Map 25: Caegynon Mine PRN 25897

Scale 1:2500

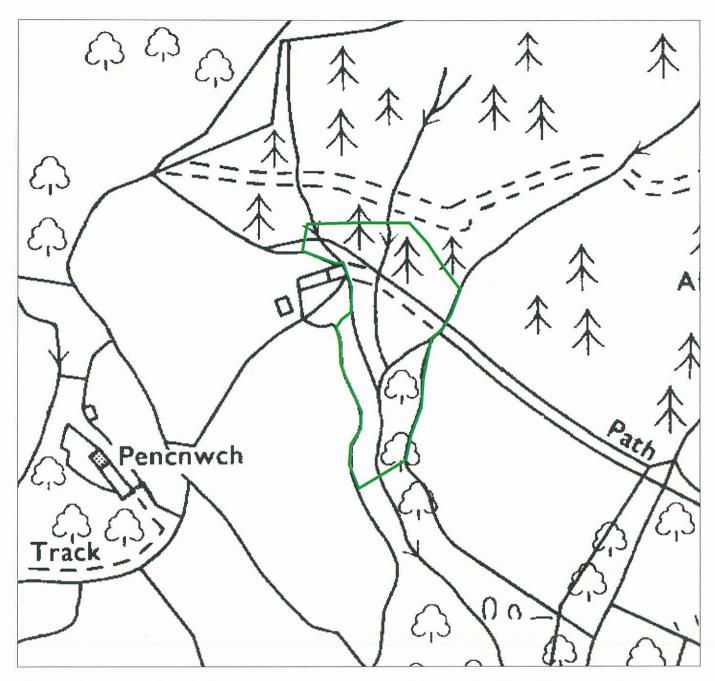


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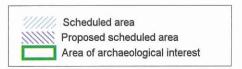


Map 26: Tynyfron Mine PRN 25898

Scale 1:2500

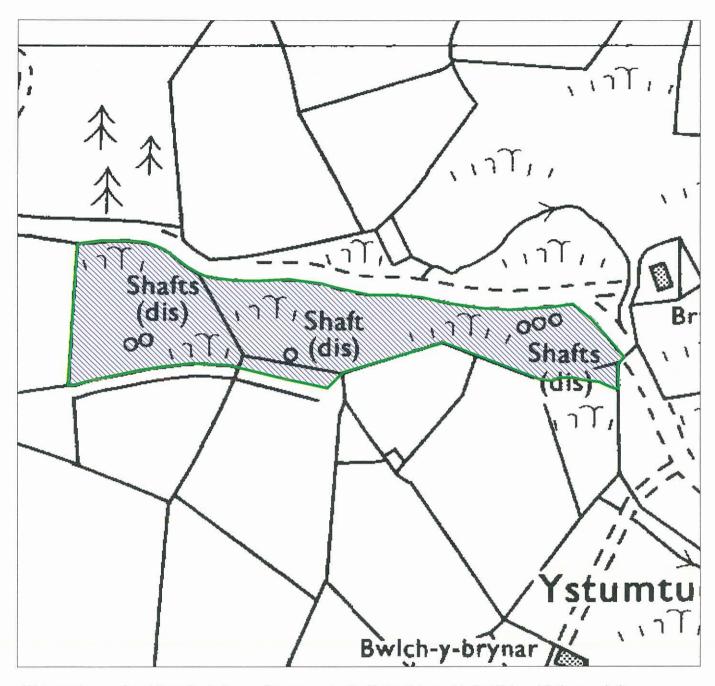


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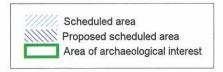


Map 27: Ystumtuen Mine PRN 25900

Scale 1:2500

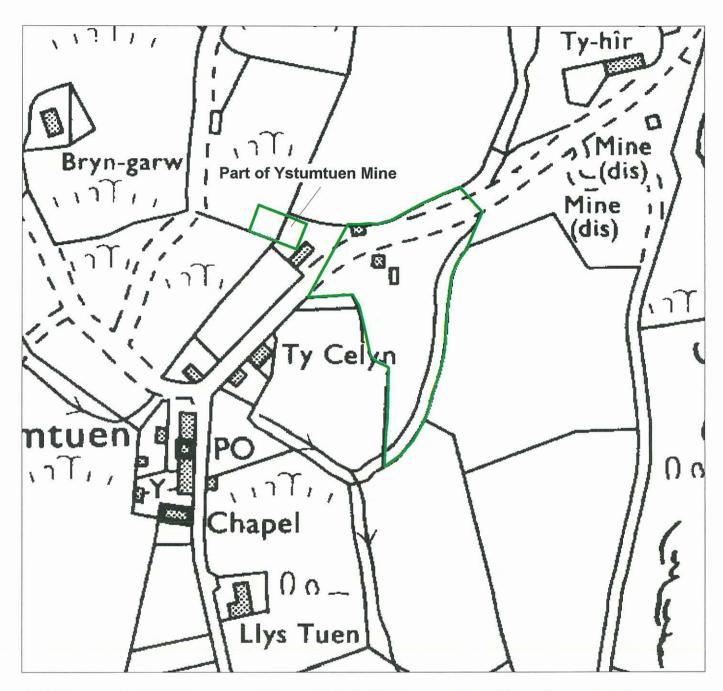


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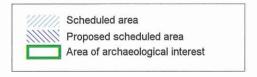


Map 28: Penrhiw Mine PRN 25901

Scale 1:2500

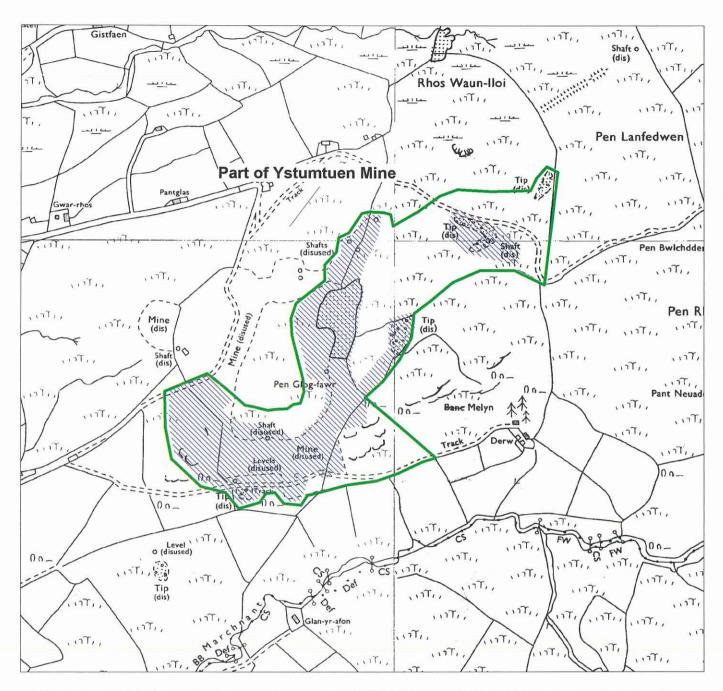


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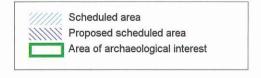


Map 29: Glogfawr Mine PRN 25932

Scale 1:8000

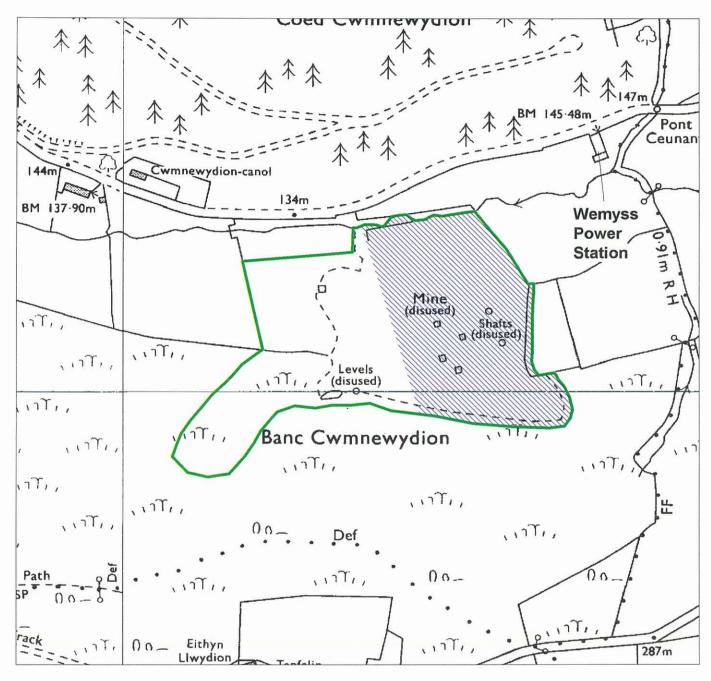


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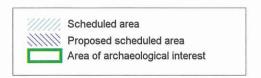


Map 30: Graig Goch Mine PRN 25917

Scale: 1:2500



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# 3. RECOMMENDATIONS ARISING FROM THE REVIEW OF ROBERT PROTHEROE-JONES' ARCHIVE

Two specific recommendations for further action can be made from the brief review of the Protheroe-Jones archive included in Cambria's 2002-3 Metal Mines Project report.

- i) It is evident that full cataloguing of the aerial and ground photographic archive produced by the project is required and the integration of the photographic archive into the regional SMR
- ii) Further field visits are required to secure better protection and management of sites. Of the 125 mine complexes visited by Protheroe-Jones, only 29 were visited and were the subject of management recommendations by Cambria's 2002-3 Metal Mines Project (Sambrook, 2003). Many of the remaining 96 mine complexes have important archaeological remains and attention should be given to those that are not already protected by scheduling agreements or other management plans. The preservation of the surviving field evidence of Ceredigion's metal mines must be considered an issue of considerable importance due to the role of mining in the development of the region's historic landscape and its place in the economic and social history of the county.

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Vol. 36, 1996

# METAL MINES MANAGEMENT REPORT

### RHIF YR ADRODDIAD / REPORT NUMBER 2003/46

#### Ebrill 2003 April 2003

Paratowyd yr adroddiad hwn gan / This report has been prepared by Paul Sambrook
Swydd / Position: Heritage Projects Manager
Llofnod / Signature
Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith This report has been checked and approved by
Louise Austin
ar ran Archaeoleg Cambria, Ymddiriedolaeth Archaeolegol Dyfed Cyf. on behalf of Cambria Archaeology, Dyfed Archaeological Trust Ltd.
Swydd / Position: Principal Archaeological Officer
Llofnod / Signature
Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any comments you may have on the content or presentation of this report