
LLECHWEDD QUARRY BLAENAU FFESTINIOG



Archaeological Scoping Report 2010

GAT Project No. 2160

Report No. 904

18th November 2010

Llechwedd Quarry, Blaenau Ffestiniog

ARCHAEOLOGICAL SCOPING REPORT

Page

| | |
|---|---|
| 1 | Introduction |
| 1 | Assessment Brief |
| 1 | Methods and Techniques |
| 6 | Archaeological Findings and Recommendations |
| 8 | Summary and Recommendations |

Figure 1: Map of Features

LLECHWEDD SLATE QUARRY

ARCHAEOLOGICAL SCOPING REPORT

1. INTRODUCTION

Cynefin Consultants have commissioned Gwynedd Archaeological Trust (Contracts Section) to carry out an archaeological scoping report on behalf of their clients Greaves Welsh Slate Company Ltd. as part of an environmental impact assessment. The assessment will help determine the suitability of four designated areas for future quarry tipping (see figure 1).

2. ASSESSMENT BRIEF

This report is intended to give a brief introduction into the potential for archaeological receptors within the four designated tipping areas, the potential effect of intended works upon said receptors, and the recommended mitigation procedures. This report should not be regarded as a comprehensive archaeological assessment, but rather as a scoping report which is intended to inform future decision-making in regards to further archaeological works if the proposed development is to proceed.

3. METHODS AND TECHNIQUES

3.1 Desk-top study

The Gwynedd Archaeological Trust's Historic Environment Record (HER) was consulted, as was the relevant volume of the Royal Commission on Ancient and Historic Monuments (Wales) Inventory. Map regression using the earliest available Ordnance Survey map editions was used to establish the potential for buried archaeological remains.

3.2 Field Search

A field visit was undertaken by Trust staff. Features identified were marked on the current 1/10,000 Ordnance Survey map and any relevant historical Ordnance Survey map edition.

3.3 Regulatory / Policy Framework

The European Union Council Directive 85/337/EEC, amended by Directive 97/11/EC, requires the preparation of an Environmental Impact Assessment (EIA) for certain types of projects likely to have significant effects on the environment. This helps to ensure that the predicted effects and the scope for reducing them are properly understood by the relevant authorities, statutory consultees and general public.

The framework for the protection of archaeology in Wales within the planning process is provided by Welsh Office Circular 60/96 'Planning and the Historic Environment: Archaeology' in conjunction with Planning Policy Wales and Welsh Office Circular 61/96 'Planning and the Historic Environment: Historic Buildings and Conservation Areas',

Currently the Unitary Development Plan (UDP 2001-2016) remains the adopted strategic development plan, implemented in July 2009. The UDP embodies policies relating to transport and the countryside within Gwynedd and the Snowdonia National Park, including nature conservation, tourism, recreation and agriculture.

The UDP (Policy B7) states that the developer will be required to commission either an archaeological assessment and/or field evaluation in order to determine the archaeological impact of a proposed

development. Appropriate mitigation should also be recommended. This scoping report fulfils the first part of those requirements.

3.4 Report

The features on the site were assessed and allocated to the categories listed below. These are intended to give an idea of the importance of the site, and specific recommendations for further evaluation or mitigatory measures. The criteria used for allocating sites to categories are based on those used by the Secretary of State when considering ancient monuments for scheduling. These are set out in Welsh Office Circular 60/96 Planning and Environment: Archaeology.

3.5 Definition of Site Importance/Rarity

‘This process should take account of all aspects of the distribution of a particular class of monument, both in a national and a regional context’ (Secretary of State, Annex 3, 1996, p15)

The following categories were used to define the importance of the archaeological resource:

Category A - Sites of national importance.

Scheduled Ancient Monuments, Listed Buildings and sites worthy of scheduling or listing *i.e.* those which would meet the criteria for scheduling (ancient monuments) or listing (buildings) or both.

Sites which are scheduled or listed have legal protection, and it is recommended that all Category A sites remain preserved and protected *in situ*.

Category B - Sites of regional or county importance.

Sites which would not fulfil the criteria for scheduling or listing, but which are nevertheless of particular importance within the region.

Preservation *in situ* is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an acceptable alternative.

Category C - Sites of district or local importance.

Sites which are not of sufficient importance to justify a recommendation for preservation if threatened.

Category C sites nevertheless merit adequate recording in advance of damage or destruction.

Category D - Minor and damaged sites.

Sites which are of minor importance or so badly damaged that too little remains to justify their inclusion in a higher category.

For Category D sites, rapid recording, either in advance or, or during, destruction should be sufficient.

Category E - Sites needing further investigation.

Sites whose importance is as yet undetermined and which will require further work before they can be allocated to categories A-D are temporarily placed in this category, with specific recommendations for further evaluation. By the end of the assessment there should be no sites remaining in this category.

3.6 Definition of Site Condition/survival

‘The survival of a monument’s archaeological potential both above and below ground is a particularly important consideration and should be assessed in relation to its present condition and surviving features’ (Secretary of State. Annex 3.1996.p15)

For the purposes of this assessment, all archaeological features will be assigned a site condition/survival category as outlined below.

Category 1: Excellent condition- roof slates and timbers are wholly or mostly present if applicable. Walls/structure is mostly complete. Signs of cultural heritage remain such as machinery, decoration, fittings etc. Structure/feature has deviated very little from new.

Category 2: Good condition- some roof slates and beams may remain if applicable. Walls/structure is for the most part complete with only minimal collapse or listing. Some degraded signs of cultural heritage may remain.

Category 3: Poor condition- no roof slates or beams remain, walls are listing heavily and are in danger of, or have already, collapsed (if applicable). Structure/feature has degraded significantly.

Category 4: Very poor condition- structure has almost entirely subsided or collapsed. Structure/feature is nearing complete destruction via a total deterioration of structural integrity, burial or damage via external factors, or total subsidence.

Category 5: Unknown condition- further investigation is required to ascertain condition status.

3.7 Definition of Site Vulnerability/Fragility

‘There are existing standing structures of particular form and complexity whose value can again be severely reduced by neglect or careless treatment and which are similarly well suited by scheduled monument protection, even if these structures are already listed historic buildings’ (Secretary of State. Annex 3.1996.p15).

For the purposes of this assessment, all sites will be assigned a category to delineate their current level of vulnerability or fragility from external agents, as recorded during the fieldwork process.

| | |
|--------|--|
| LOW | In relatively stable condition with no immediate threat. |
| MEDIUM | Vulnerable from weathering, erosion or management change. |
| HIGH | Very vulnerable from weathering, erosion or management change. |

3.8 Definition of Group Value

‘The value of a single monument may be greatly enhanced by its association with related contemporary monuments or with monuments of different periods. In some cases, it is preferable to protect the complete group of monuments’ (Secretary of State. Annex3.1996.p15).

The Gwynedd Slate Quarries Project (Report 154) coupled with grant-aid by Cadw, identified eight categories into which features on slate quarry sites were allocated. These are:

1. Extraction/tipping
2. Processing
3. Power
4. Transport
5. Structural features
6. Administration
7. Ancillary

8. Domestic
9. Unrelated

(Source: GAT.report 252.1997.)

3.9 Definition of Evaluation and Mitigation techniques

Where a feature of archaeological significance is affected, mitigation measures will be included in accordance with current policies as recommended in Circular 60/96 for rescue archaeology.

3.9.1 Definition of field evaluation techniques

Field evaluation is necessary to fully understand and assess most class E sites and to allow the evaluation of areas of land where there are no visible features but for which there is potential for sites to exist. Two principal techniques can be used for carrying out the evaluation: geophysical survey and trial trenching. Topographic survey may also be employed where sites are thought to survive as earthworks.

Geophysical survey most often involves the use of a magnetometer, which allows detection of some underground features, depending on their composition and the nature of the subsoil. Other forms of geophysical survey, including resistivity survey and ground penetrating radar might also be of use.

Trial trenching allows a representative sample of the development area to be investigated at depth. Trenches of appropriate size can also be excavated to evaluate category E sites. Trenching is typically carried out with trenches of between 20 to 30m length and 2m width. The topsoil is removed by machine and the resulting surface is cleaned by hand, recording features. Depending on the stratigraphy encountered the machine may be used to remove stratigraphy to deeper levels.

3.9.2 Definition of Mitigatory Recommendations

Below are the measures that may be recommended to mitigate the impact of the development on the archaeology. The recording levels defines the level of recording recommended for each structure, given the importance, status and nature of the structure. These recommendations would be appropriate if a programme of survey were to be undertaken in advance of management change. The levels are defined in *Understanding Historic Buildings: A guide to good recording practice* (English Heritage 2006). Four levels of recording are defined.

None

No impact so no requirement for mitigatory measures.

Level 1 Record

Level 1 is essentially a **basic visual record**, supplemented by the minimum of information needed to identify the building's location, age and type. This is the simplest record, not normally an end in itself but contributing to a wider aim. Typically it will be undertaken when the objective is to gather basic information about a large number of buildings – for statistical sampling, for area assessments or historic landscape characterisation, for a pilot project, to identify buildings for planning purposes, or whenever resources are limited and much ground has to be covered in a short time. It may also serve to identify buildings requiring more detailed attention at a later date.

Level 1 surveys will generally be of exteriors only, although they may include superficial interior inspection for significant features. Only if circumstances and objectives allow will any drawings be produced, and these are likely to take the form of sketches.

Level 2 record

This is a **descriptive record**, made in circumstances similar to those of Level 1 but when more information is needed. It may be made of a building which is judged not to require any fuller record, or it may serve to gather data for a wider project. Both the exterior and the interior will be viewed, described and photographed. The record will present conclusions regarding the building's development and use, but will not discuss in detail the evidence on which these conclusions are based. A plan and sometimes other drawings may be made but the drawn record will normally not be comprehensive and may be tailored to the scope of a wider project.

Level 3 record

Level 3 is an **analytical record**, and will comprise an introductory description followed by a systematic account of the building's origins, development and use. The record will include an account of the evidence on which the analysis has been based, allowing the validity of the record to be re-examined in detail. It will also include all drawn and photographic records that may be required to illustrate the building's appearance and structure and to support an historical analysis.

The information contained in the record will for the most part have been obtained through an examination of the building itself. If documentary sources are used they are likely to be those which are most readily accessible, such as historic Ordnance Survey maps, trade directories and other published sources. The record will not normally discuss the building's broader stylistic or historical context and importance at any length. It may, however, form part of a wider survey – thematic or regional, for example – of a group of buildings, in which additional source material contributes to an overall historical and architectural synthesis. A Level 3 record may also be appropriate when the fabric of a building is under threat but time or resources are insufficient for detailed documentary research, or where the scope for such research is limited.

Level 4 record

Level 4 provides a **comprehensive analytical record** and is appropriate for buildings of special importance. Whereas Level 3 analysis and interpretation will clarify the building's history in so far as it may be deduced from the structure itself, the record at Level 4 will draw on the full range of available resources and discuss the building's significance in terms of architectural, social, regional or economic history. The range of drawings may also be greater than at other levels.

Strip, Map and Sample

The technique of Strip, Map and Sample involves the examination of machine-stripped surfaces to identify archaeological remains. The stripping is undertaken under the supervision of an archaeologist. Stripping and removal of the overburden is undertaken in such a manner as to ensure damage does not take place to surfaces that have already been stripped, nor to archaeological surfaces that have not yet been revealed.

Stripping is undertaken in as careful a manner as possible, to allow for good identification of archaeological features. A small team of archaeologists will be responsible for subsequently further cleaning defined areas where necessary. Complex sites which cannot be avoided will need to be fully excavated.

Watching brief

This is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

Avoidance

Features, which may be affected directly by the scheme, or during the construction, should be avoided. Occasionally a minor change to the proposed plan is recommended, but more usually it refers to the need for care to be taken during construction to avoid accidental damage to a feature. This is often best achieved by clearly marking features prior to the start of work.

Reinstatement

The feature should be re-instated with archaeological advice and supervision.

N.B. Recommendations within the gazetteer (4.2 below) would only take effect if the site referred to is to be disturbed.

4. ARCHAEOLOGICAL FINDINGS AND RECOMMENDATIONS

4.1 Location

Llechwedd quarry is situated on the northern slopes of Blaenau Ffestiniog, in the community (formerly civil parish) of Ffestiniog at grid ref: SH 705455 within the county of Gwynedd. The quarry was opened in 1849 by J.W. Greaves after the discovery of five slate beds running diagonally downwards between beds of chert. The quarry is still commercially worked today, and forms an integral part of the slate quarry industry at Blaenau Ffestiniog. This scoping report has focused on four main areas outlined by *Cynefin Consultants*, these being areas C, E, F and Q.

4.2 Statutory and Non-Statutory Designations

No Scheduled Ancient Monuments lie within 500.0m of any of the four main proposed development areas.

No listed buildings are located within any of the four main proposed development areas; however the following buildings lie within close proximity:

Area C

Hydro-electric Power-station grade II (listed building no. 16897)

Area Q

Slate Dressing Mill grade II* (listed building no. 16888)

Booster Station grade II (listed building no. 16890)

Smithy and Workshop Range grade II (listed building no. 16889)

Former Engine House grade II (listed building no. 16891)

Powered Incline Drumhouse including chimney grade II* (listed building no. 16892)

Former Weighbridge Hut grade II (listed building no. 16895)

Remote Incline Drumhouse grade II (listed building no. 16896)

All four proposed development areas lie outside of both the Snowdonia National Park boundary, and the Snowdonia National Park 1km buffer zone boundary.

All four proposed development areas lie within an Outstanding Landscape Area (area no.21 Blaenau Ffestiniog).

4.3 Gazetteer of Archaeological Sites

Area F

Area F is located to the southwest of the current quarry, and is focused around a large slate tip some 217m long by 118m wide, surround by quarry access tracks.

| | | | |
|---|---------------|------------------------------------|----------------------------|
| 01 Tramway | SH 6999546575 | PRN: 31631 | Transport |
| Category of Importance (A-E): D | | | |
| Site condition (1-5): 5 | | Site vulnerability (L, M, H): Low | |
| Management recommendation: Level 1 | | | |
| The second edition 1901 OS map depicts a tramway running north to south across the western limit of area F, where it branches into two separate lines. The western line continues south out of the study area, while the eastern line terminates in the south-western part of area F. The line appears to split in to two before terminating, and it can be surmised that these led to two areas being worked at the time. A small area of shading of the map may depict a structure associated with the tramway or workings. The area today is buried by a large slate spoil tip, and there are no visible remains of the tramway. | | | |
| <i>Area E</i> | | | |
| Area E is located to the east of area F, and somewhat more centralised within the quarry. It is focused upon a large hill covered in long grass and heath with occasional protruding patches of bedrock, measuring some 425m long by 216m wide. Its western side is flanked by a deep valley, with a quarry access track on its eastern side. | | | |
| 02 Field boundary | SH 7041446574 | PRN: 31632 | Unrelated |
| Category of Importance (A-E): C | | | |
| Site condition (1-5): 2 | | Site vulnerability (L, M, H): High | |
| Management recommendation: Level 3 | | | |
| A field boundary is depicted on the second, third, and fourth edition 6" OS maps as running east to west across the northern part of area E. The boundary exists today as an earthen bank some 2m in width, 0.5m in height, and approximately 70m in length. The boundary is currently redundant and runs parallel with a quarry access track to the north. | | | |
| 03 Footpath | SH 7037946561 | PRN: 31633 | Transport |
| Category of Importance (A-E): C | | | |
| Site condition (1-5): 5 | | Site vulnerability (L, M, H): High | |
| Management recommendation: Level 2 | | | |
| A footpath is depicted on the second, third, and fourth edition 6" OS maps as running from south to north across the eastern half of area E. The footpath is depicted as forking, the western fork running northwest to a depicted reservoir no longer in existence, while the eastern fork continued roughly north to join a tramway some 184.0m north of the area. | | | |
| 04 Disused weighbridge | SH 7022646595 | PRN: 31634 | Processing |
| Category of Importance (A-E): D | | | |
| Site condition (1-5): 2 | | Site vulnerability (L, M, H): High | |
| Management recommendation: Level 2 | | | |
| A modern weighbridge some 2m high and 4m square stands to the northwest of area E. The weighbridge is surrounded by a perimeter wire fence, and has fallen into disuse. | | | |
| 05 Cable tensioning point with hand-winch | SH 7039346568 | PRN: 31635 | Extraction/ tipping |
| Category of Importance (A-E): B | | | |
| Site condition (1-5): 3 | | Site vulnerability (L, M, H): High | |
| Management recommendation: Level 3 to 4 | | | |
| A collapsed structure of large sub-angular cobbles 5m square. There are the remains of iron cables, anchors, and a hand-winch mechanism in very good condition. This feature is not depicted on either the historical or modern edition OS maps. | | | |
| 06 Sheepfold | SH 7036346562 | PRN: 31636 | Unrelated |
| Category of Importance (A-E): C | | | |
| Site condition (1-5): 3 | | Site vulnerability (L, M, H): High | |

Management recommendation: Level 2

A dry-stone structure 1.2m high, and approximately 6m by 4m orientated east to west. The structure hugs the base of a rock escarpment and is most likely a sheepfold of post-medieval date. The structure is not depicted on either the historical or modern OS map editions.

Area C

Area C is located to the northeast of the current quarry and is typified by a flat spit of land some 500m long and 150m wide, flanked by the steep slopes of Moel Bowydd to the east.

07 Footpath SH 7081847106 PRN: 31637 **Transport**

Category of Importance (A-E): C

Site condition (1-5): 4 Site vulnerability (L, M, H): Medium

Management recommendation: Level 2

The second edition 1901 OS map depicts a footpath running from southwest to northeast across area C. This path presumably led from the quarry proper in the south, up into the hills to the north. It is not depicted on the later OS maps and it can be surmised that it had gone out of use by the production of the third edition OS map in 1920. The track is just visible today as an overgrown flat area.

08 Peat-drying platform SH 7074247153 PRN: 31638 **Unrelated**

Category of Importance (A-E): B

Site condition (1-5): 2 Site vulnerability (L, M, H): High

Management recommendation: Field evaluation to ascertain status of site

A grassed mound some 11m in length, 5m in width, and 1m in height is located towards the centre of the area. Due to the presence of peat within the area and the existence of other peat-drying platforms in fairly close proximity, it seems likely that this feature is a peat-drying platform.

09 Trackway SH 7081147285 PRN: 31639 **Transport**

Category of Importance (A-E): D

Site condition (1-5): 1 Site vulnerability (L, M, H): High

Management recommendation: Level 1

A rough track some 5m wide connects area C with the fields to the west. The track is constructed from slate chippings and is approximately 20m long. The track is not depicted on either the historical or modern OS maps, and it can be surmised that it is a modern farmer's track.

10 Leat SH 7074047102 PRN:14625 NPRN: 65720 **Power**

Category of Importance (A-E): B

Site condition (1-5): 1 Site vulnerability (L, M, H): Medium

Management recommendation: Level 3

A leat is depicted on the third edition 1920 OS map running north to south on the western limit of area C. The leat is currently well preserved and exists as an open drain running alongside the area.

11 Current road SH 7081647119 PRN: 31641 **Transport**

Category of Importance (A-E): D

Site condition (1-5): 1 Site vulnerability (L, M, H): High

Management recommendation: Level 1

A current track runs from southwest to northeast across area C. This track is not depicted until the modern edition OS map and is presumably a modern farm track linking route-ways through the quarry to the mountains beyond.

Area Q

Area Q is located to the southeast of the quarry and measures approximately 140m square. It is flanked to the south by a large slate tip, and to the north and west by a quarry access track. The grade II* listed slate dressing mill building lies immediately to the east of the area.

12 Disused canteen building SH 7126946622 PRN: 31642 **Domestic**
 Category of Importance (A-E): C
 Site condition (1-5): 3 Site vulnerability (L, M, H): High
 Management recommendation: Level 2
 A rectangular building some 20m by 3m is disused to the north of area Q. The building has a mono-pitch roof extension to the west which has rafters and narrow roof battens surviving. The main structure stands 2m to the eaves. It is rendered on the exterior, with plaster on the interior walls. The roof of the main structure was supported on 'A' frame timber trusses but the rafters and battens have all but collapsed. No roof slates remain on the structure. .

13 Upright concrete pillars SH 7128346566 PRN: 31643 **Ancillary**
 Category of Importance (A-E): C
 Site condition (1-5): 4-5 Site vulnerability (L, M, H): High
 Management recommendation: Level 2
 A series of reinforced concrete pillars stand to the immediate southwest of the slate dressing mill. They possibly form the footings of a structure no longer in existence. They are not shown on the historical edition OS maps, but are depicted on the 1:10,000 county series OS map.

14 Footpath SH 7118746516 PRN: 31644 **Transport**
 Category of Importance (A-E): C
 Site condition (1-5): 4-5 Site vulnerability (L, M, H): Medium -High
 Management recommendation: Level 1
 A footpath is depicted on the first edition 1889 OS map as running across the southern part of area Q from east to west. The footpath appears to have linked the levels in the west with the main quarry face to the east. No sign of this footpath is apparent today, and it has quite likely been quarried away to the west, and buried with slate spoil to the south. The track is not depicted on the second edition historical OS map, and it can be surmised that it had gone out of use by this point.

15 Tramway and ancillary structures SH 7117446586 PRN: 31645
Transport
 Category of Importance (A-E): D
 Site condition (1-5): 4-5 Site vulnerability (L, M, H): Medium -High
 Management recommendation: Level 1
 The second edition 1901 OS map depicts a series of tramways running east to west across the area, connecting the slate dressing mill with the quarry face to the west. The map also depicts at least two small ancillary structures, probably associated with the tramways. None of these structures exist today and have most likely been quarried away.

16 Footpath and stairway SH 7114046500 PRN: 31646
Transport
 Category of Importance (A-E): D
 Site condition (1-5): 4-5 Site vulnerability (L, M, H): Medium -High
 Management recommendation: Level 1
 The second and third edition OS maps (1901, 1918) depict a footpath and stairway zigzagging up the quarry face to the southwest of the area. No visible trace remains of this feature today, and it has probably been quarried away.

17. Buried features
 It is clear from archive maps that many features from earlier phases of the quarry's history may be buried under subsequent workings. Should any attempt be made to remove the tips they should be monitored for buried features.

5. SUMMARY AND RECOMMENDATIONS

5.1 Summary of findings

The four areas lie within or on the periphery of Llechwedd Quarry. Two of the areas (F and Q) lie entirely within former quarry workings, whereas Areas E and C lie outside former quarry workings and contain features relating to pre-quarrying agricultural use.

The table below summarises the sites identified within each area

Area F

| Site no. | Site name | Assessment of significance | Mitigation proposal |
|----------|-----------|----------------------------|---------------------|
| 1 | Tramway | D | Level 1 |

Area E

| Site no. | Site name | Assessment of significance | Mitigation proposal |
|----------|------------------------------------|----------------------------|---------------------|
| 2 | Field boundary | C | Level 3 |
| 3 | Footpath | C | Level 2 |
| 4 | Disused weighbridge | D | Level 2 |
| 5 | Cable tension point and hand winch | B | Level 3-4 |
| 6 | Sheepfold | C | Level 2 |

Area C

| Site no. | Site name | Assessment of significance | Evaluation / Mitigation proposal |
|----------|----------------------|----------------------------|----------------------------------|
| 7 | Footpath | C | Level 2 |
| 8 | Peat drying platform | E | Field evaluation |
| 9 | Trackway | D | Level 1 |
| 10 | Leat | B | Level 3 |
| 11 | Road | D | Level 1 |

Area Q

| Site no. | Site name | Assessment of significance | Mitigation proposal |
|----------|---------------------|----------------------------|---------------------|
| 12 | Disused canteen | C | Level 2 |
| 13 | Upright pillars | C | Level 2 |
| 14 | Footpath | C | Level 1 |
| 15 | Tramway | D | Level 1 |
| 16 | Footpath and stairs | D | Watching brief |

5.2 Conclusions

This scoping report has identified remains of regional significance in Areas E and C. These two areas lie outside former quarry workings, and there is therefore greater potential for the survival of buried

archaeology within these areas. A programme of field evaluation may therefore be necessary in these areas prior to any impact.

Area F contains no visible archaeological remains, though there is potential for the survival of former remains buried within or under the tip.

Area Q contains three sites of local significance, however it is also sited close the slate dressing mill, which is a Listed Building. If this area were to be used it may be necessary to establish a buffer zone between the mill and the tipping area.

5.3 Recommendations for further work

This scoping report has identified potential for archaeology on each of the sites. There is greater potential in Areas E and C, where buried archaeology pre-dating quarry working may be preserved. Areas F and Q retain some potential for buried archaeology within the slate tips. The nature of the material which makes up the tips is also indicative of past phases of use. It is therefore recommended that a full archaeological assessment be undertaken of the preferred site prior to its use. This might need to include a phase of field evaluation.



YMDDIRIEDOLAETH
ARCHAEOLEGOL
GWYNEDD



GWYNEDD
ARCHAEOLOGICAL
TRUST

Craig Beuno, Ffordd y Garth, Bangor, Gwynedd. LL57 2RT
Ffon: 01248 352535. Ffacs: 01248 370925. email: gat@heneb.co.uk