

Cors Ceidio, Boduan, Lleyn Peninsula, Gwynedd. January 2014

Archaeological Watching Brief

Project Code: A0028.1

Report no. 0032





Cors Ceidio, Boduan, Lleyn Peninsula, Gwynedd. January 2014

Report no. 0032 v1.0

Archaeological Watching Brief Aeon Archaeology 17 Cecil Street Chester CH3 5DP

> Project Code: A0028.1 Date: 21/02/2014

Client: NRW

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1.0 Non Technical Summary

1.0 NON-TECHNICAL SUMMARY

Aeon Archaeology was commissioned by Natural Resource Wales (NRW) to carry out an archaeological watching brief as a condition of a planning application during the extraction of peat and enriched soil, in order to support a programme of conservation to restore the wetland fen habitat at Cors Ceidio, Boduan.

The archaeological watching brief did not identify any archaeological remains or artefacts during any part of the works. In terms of the overall contribution of the project to the regional research agenda the mitigatory works can be seen as being disappointing. However, the future potential of the marshland to retain preserved archaeological remains and to greatly contribute to the knowledge and understanding of the historical development of this part of Wales should not be overlooked. Indeed, there is a distinct likelihood that preserved archaeological material may exist at lower levels and it is recommended that if a similar project arises which enables greater depths to be observed then a similar archaeological mitigation is placed upon the project.



2.0 Introduction, Aims and Project Design

2.0 INTRODUCTION, AIMS AND PROJECT DESIGN

Aeon Archaeology was commissioned by Natural Resource Wales (NRW) to carry out an archaeological watching brief as a condition of a planning application (ref: C13/0825/33/MW) for the extraction of peat and enriched soil, in order to support a programme of conservation to restore the wetland habitat at Cors Ceidio, Boduan. The site comprises a c.0.75ha area of wetland located in open countryside approximately 4.8km northwest of the village of Efailnewydd. It lies approximately 0.5km to the southwest of the junction between the A497 (Pwllheli to Nefyn road) and the B4354 road at Boduan (centred on NGR SH 30671 38099) (figures 1 and 2).

The site forms part of the Cors Geirch National Nature Reserve (NNR). The B4415 Efailnewydd to Nanhoron road lies 3.0 km to the south of the application site. The surrounding land is agricultural in character although extensive areas of marshland exist to the north, east and south of the site.

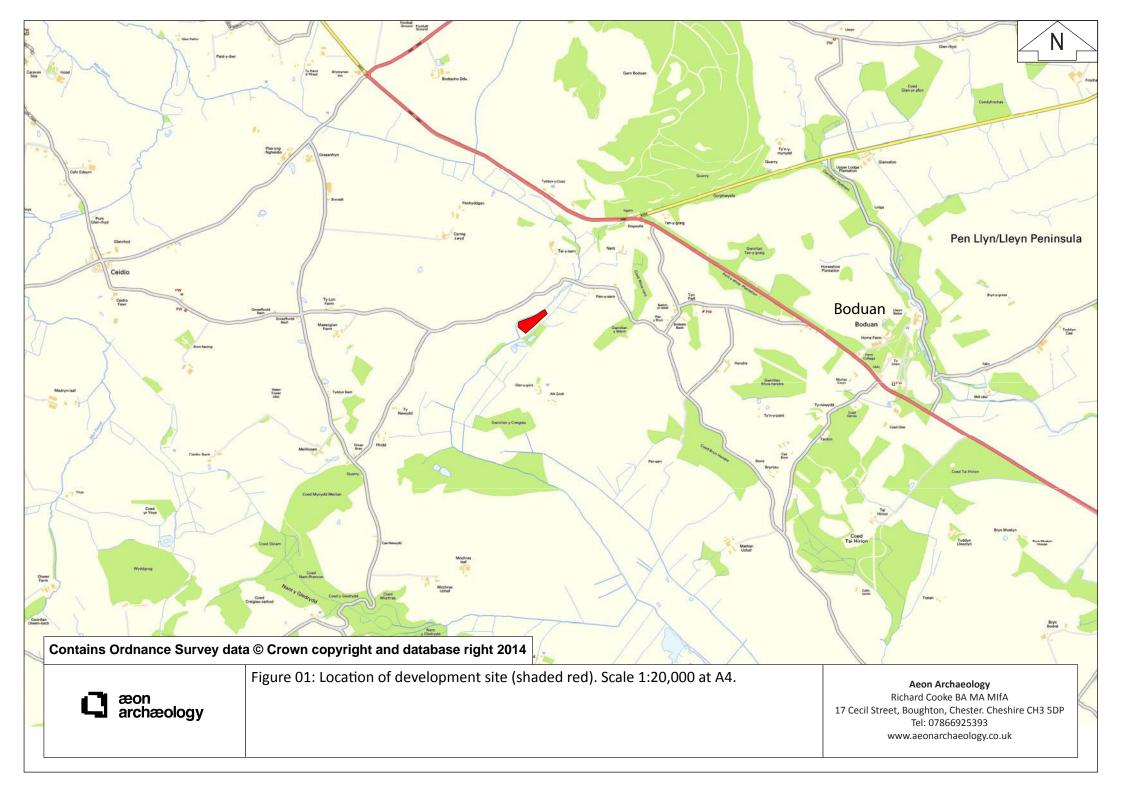
The proposed development necessitated the removal of approximately 2,500m³ of soils and peat to result in the exposure of an area of peat within the SAC that will enable the restoration of conservation grade habitat (i.e. the colonisation of that area by specific flora and fauna that thrive in such conditions). Some of the extracted peat and soils were retained on site and used in the infilling of drainage ditches.

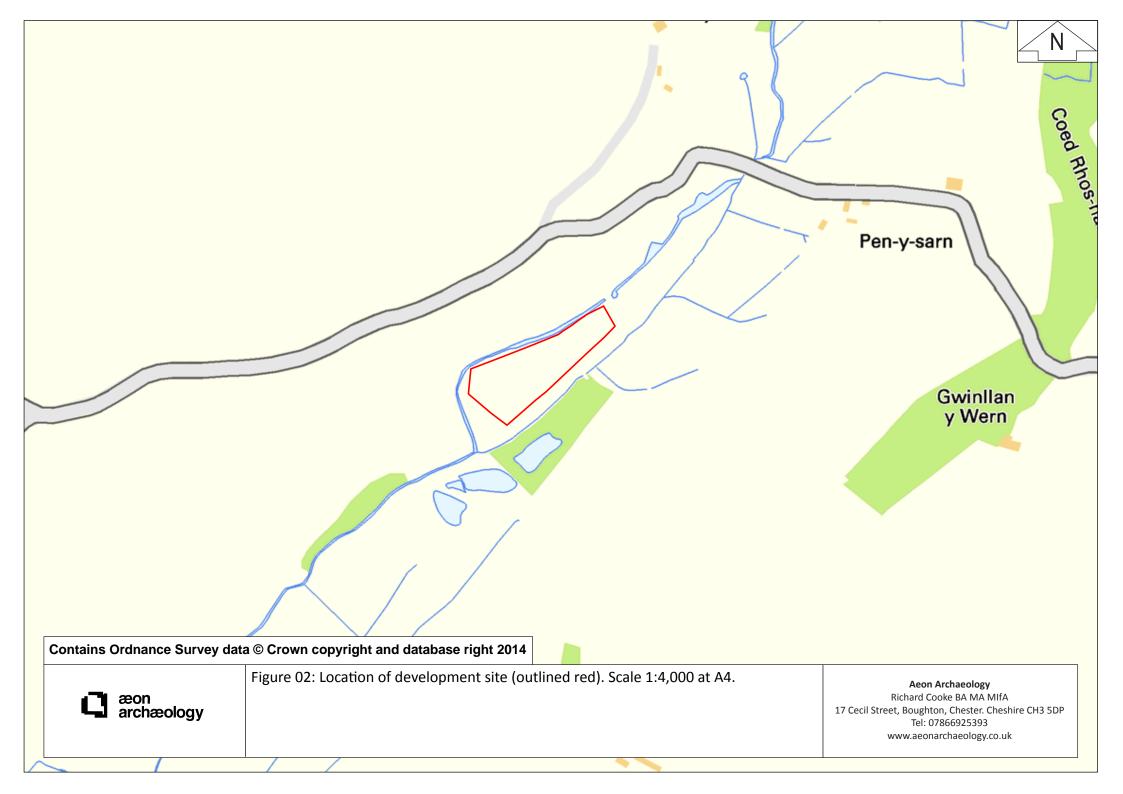
In order to achieve improved site conditions, the work at Cors Ceidio entailed the removal, on average, of a depth of 250mm over the site of surface peat, including minimal amounts of topsoil where necessary, in order to expose underlying peat. A similar project was undertaken by Aeon Archaeology on behalf of NRW at Cors Geirch, Mathan Uchaf located approximately 1.5km to the southeast. The results of that report are presented in Aeon Archaeology report no. 0022.

The site lies within the following designated areas:

- (i) Within the Cors Geirch National Nature Reserve (NNR).
- (ii) Within the Cors Geirch Special Area of Conservation (SAC).
- (iii) Within the Cors Geirch Site of Special Scientific Interest (SSSI).
- (iv) Within the Cors Geirch Ramsar site.

The following people and organisations are thanked for their help and contribution to the project. Dyfed Jones of NRW; Justin Hanson of NRW; Dewi James of G.H. James Cyf; and Jenny Emmett of the Gwynedd Archaeological Planning Service (GAPS).







3.0 Project Aims

3.0 PROJECT AIMS

The aim of the works was to monitor and where relevant characterise the known, or potential archaeological remains uncovered during the removal of enriched soil at the site. A design brief was not produced by the Gwynedd Archaeological Planning Service (GAPS), but GAPS stated in a letter to NRW dated 15th October 2013 (ref: 1015je01/D1834) that:

'No development (including any ground disturbing works or site clearance) shall take place other than in accordance with an archaeological specification which has been submitted by the applicant and agreed in advance by the archaeological advisor to the The specification and the subsequent archaeological Local Planning Authority. programme must meet all relevant archaeological standards and the approval of the archaeological advisor.

Reason: To ensure the implementation of an appropriate programme of archaeological mitigation in accordance with the requirements of *Planning Policy Wales 2012* and Welsh Office Circular 60/96 Planning and the Historic Environment: Archaeology'.

The broad aims of the archaeological watching brief were:

- To determine, as far as is reasonably possible, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains on the site, the integrity of which may be threatened by the site works.
- To assess the degree of archaeological survival of buried deposits of archaeological significance.

The detailed objectives of the archaeological watching brief were determined to be:

- Insofar as possible within methodological constraints, to explain any temporal, spatial or functional relationships between the structures/remains identified, and any relationships between these and the archaeological and historic elements of the wider landscape.
- Where the data allows, identify the research implications of the site with reference to the regional research agenda and recent work in Gwynedd.

An Archaeological Written Scheme of Investigation (WSI) (appendix II) was written by Aeon Archaeology and submitted to GAPS in November 2013. This formed the basis of a method statement submitted for the work. The archaeological watching brief was undertaken in accordance with this WSI.

The management of this project has followed the procedures laid out in the standard professional guidance Management of Archaeological Projects (English Heritage, 1991), Management of Research Projects in the Historic Environment Project Manager's Guide (English Heritage 2006), and in the Institute for Archaeologists Standard and Guidance for an archaeological watching brief (1994 rev. 2001 and 2008). Five stages are specified:

- Phase 1: project planning
- Phase 2: fieldwork
- Phase 3: assessment of potential for analysis and revised project design
- Phase 4: analysis and report preparation
- Phase 5: dissemination

The current document reports on the phase 4 analysis and states the means to be used to disseminate the results. The purpose of this phase is to carry out the analysis identified in phase 3 (the assessment of potential phase), to amalgamate the results of the specialist studies, if required, with the detailed site narrative and provide both specific and overall interpretations. The site is to be set in its landscape context so that its full character and importance can be understood. All the information is to be presented in a report that will be held by the Gwynedd Historic Environment Record (HER) so that it can be accessible to the public and future researchers. This phase of work also includes archiving the material and documentary records from the project.



4.0 Methodology

4.0 METHODOLOGY

4.1 Watching Brief

(Reproduced from IFA. 2001. Institute for Archaeologists 1994 rev. 2001 and 2008 Standard and Guidance for an archaeological watching brief)

The definition of an archaeological watching brief 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.

This definition and standard does not cover chance observations, which should lead to an appropriate archaeological project being designed and implemented, nor do they apply to monitoring for preservation of remains *in situ*.

An archaeological watching brief is divided in to four categories according the IFA. 2001. *Institute for Archaeologists 2001 Standard and Guidance for an archaeological watching brief:*

- comprehensive (present during all ground disturbance)
- intensive (present during sensitive ground disturbance)
- intermittent (viewing the trenches after machining)
- partial (as and when seems appropriate).

A partial watching brief was maintained during the removal of enriched soil at the site.

4.2 Data Collection from Site Records

A database of the site photographs was produced to enable active long-term curation of the photographs and easy searching. The site records were checked and cross-referenced and photographs were cross-referenced to contexts. These records were used to write the site narrative and the field drawings and survey data were used to produce an outline plan of the site.

All paper field records were scanned to provide a backup digital copy. The photographs were organised and precisely cross-referenced to the digital photographic record so that the Gwynedd Historic Environment Record (HER) can curate them in their active digital storage facility.

4.3 Artefact Methodology

All artefacts were to be collected and processed including those found within spoil tips. Finds numbers would be attributed and they would be bagged and labelled as well any preliminary identification taking place on site. After processing, all artefacts would be cleaned and examined in-house at Aeon Archaeology.

4.4 Environmental Samples Methodology

The sampling strategy and requirement for bulk soil samples was related to the perceived character, interpretational importance and chronological significance of the strata under investigation. This ensured that only significant features would be sampled. The aim of the sampling strategy was to recover carbonised macroscopic plant remains, small artefacts particularly knapping debris and evidence for metalworking.

4.5 Storage and curation

All artefacts recovered would be the property of the landowner but it is strongly recommended that these are donated to a museum for long-term storage. Acceptance of this report by the client is taken as agreement to this transfer of ownership to a museum; to be confirmed with the Gwynedd HER and GAPS.

4.6 Report and dissemination

This report will be placed in the public domain by submitting it to the Gwynedd HER within 6 months of completion unless the client specifically requests the report to remain confidential for a longer period. The report will also be archived with the Royal Commission on the Ancient and Historical Monuments in Wales (RCAHMW).



5.0 The Historical Context

5.0 THE HISTORICAL CONTEXT

The following sections describe the known archaeological record within the general area of the proposed development. Sites are identified by their Primary Reference Number (PRN) which is the number by which they are identified in the Gwynedd Historic Environment Record (HER), or by their Scheduled Ancient Monument reference, Listed Building reference and/or there National Primary Reference Number (NPRN) if applicable. The intention of this section is to provide a historic and archaeological context to the site. This aids in establishing the relative importance of an archaeological feature within its landscape, as well as assessing the potential for unknown buried archaeological remains on the proposed development site.

The beginning and end of certain periods is a contentious issue. In the Gwynedd Historic Environment Record (HER) the following dates are used. This is a standard convention across all of the Welsh HERs.

Table 1. Historic periods

Palaeolithic (prehistoric)	500,000 BC – 10,001 BC
Mesolithic (prehistoric)	10,000 BC – 4,001 BC
Neolithic (prehistoric)	4,000 BC – 2,351 BC
Bronze Age (prehistoric)	2,350 BC – 801 BC
Iron Age (prehistoric)	800 BC – 47 AD
Romano-British	48 AD – 409 AD
Post-Roman (Early Medieval)	410 AD – 1065 AD
Medieval	1066 AD – 1539 AD
Post-Medieval	1540 AD – 1900 AD
Modern	1901 AD – 2050 AD

5.1 Prehistoric and Roman Period

It is probable that peat was cut, dried and burnt for domestic fuel from the earliest times, especially in areas rich in peat bogs. However, right up to the medieval period, peatlands were scarcely used except for game hunting and were mostly avoided, for the most part being unusable in their undrained state and liable to be flooded in winter (Taylor. J. A.). Indeed, Mesolithic sites have been discovered located on the coastal headlands of the Llyn Peninsula, around Uwchmynydd and Trwyn Bychestyn, which most likely represent the remains of hunting settlements which exploited the coastal plains (Gwynedd HER). Further activity can be seen in the Neolithic period with the quarrying of hard igneous stone from Mynydd Rhiw for the manufacture of polished stone axes in the area, but there is not currently any evidence for early prehistoric activity along marshland fringe within this region of Wales.

The prehistoric and Roman periods are fairly well represented in the wider landscape of the peninsula. Approximately 920.0m to the north of the proposed development area lays the prehistoric hillfort and Scheduled Ancient Monument of Garn Boduan (CN009). The fort covers a large area, approximately 10.0 hectares, and has the ruinous remains of at least 170 hut circles. The fort is constructed upon a natural rocky hill with large fortification walls constructed from rampart masonry and enclosing approximately 11.3 hectares. There are two periods of Iron Age construction, followed by a small fort of late Roman or post Roman date upon the summit.

The fort's namesake, as with the town of *Boduan*, bears reference to *Buan*, who is believed to have been a grandson of Llywarch Hen, the 6th century prince of the Brythonic kingdom of

Rheged, a ruling family in the Hen Ogledd 'Old North' of Britain. It is therefore possible that both the fort and area may have been his residence in the early 7th century AD (HER).

Lying approximately 3.1km to the southwest is the prehistoric hillfort and Scheduled Ancient Monument of Carn Fadryn Camp (CN011). The hillfort was defended by two large stone walls, probably representing two periods of the pre-Roman fortification, a smaller fort of about 4.9 hectares having been succeeded by a larger of about 10.5 hectares. The defences enclose stone hut circles in addition to numerous small, irregularly shaped huts cut into the ruins of the earlier defensive wall. Within the fort enclosure and upon the summit of Carn Fadryn lies the robbed and ruined remains of a Bronze Age stone burial cist. The cist is constructed from large slabs set on edge, and scatterings of loose stones suggest the presence of a former cairn which may have been robbed to construct the nearby fortifications of the hillfort (Gwynedd HER).

Approximately 3.79km to the southeast of the proposed development site lies a suspected Roman cremation cemetery (PRN: 3650) found by Hyde Hall and near to Cefn Mine in Llanor parish, where vases containing ashes and suspected to be Roman were discovered at the start of the 19th century. Despite the presence of several Roman sites on the Llyn Peninsula, there are no known Roman military sites or roads within the localised area, and it is believed that Roman influence upon the native Celtic traditions within the area may have been relatively minor (GAT report 284).

5.2 Early Medieval and Medieval Periods

The Lleyn Peninsula and Bardsey Island played an important part during the early Christian period. The ecclesiastical site on Bardsey is believed to have been founded by St Cadfan, and by the 12th century was believed to have been the burial place of twenty thousand saints, from which it became an important place of pilgrimage. On the mainland, the church at Aberdaron is dedicated to St Hywyn and is first mentioned in 1094 when the Augustinian canons provided a boat for Gruffydd ap Cynan to escape (HER).

Lying approximately 3.9km to the east of the proposed development site is the Scheduled Ancient Monument and medieval motte and bailey castle of Ty Newydd (CN096). The motte lies at approximately 61.0m above sea level on ground which slopes away gently. A large hollow was excavated on the northern side to provide material for the construction of the motte and for a bank on the southern side to retain water from a small stream for a defensive moat (HER).

In the later medieval period most of the peninsula fell within the cantref of the Llyn, and was divided into the commotes of Cymydmaen, Dinllaen, and Cafflogion, with the centres being located at Neigwl, Nefyn, and Pwllheli. Much of the land was held by the church and monasteries, in particular Bardsey, Clynnog Fawr and Cymer. During the 13th and 14th centuries Nefvn flourished through the fishing industry and as a staging point for pilgrims travelling to Bardsey, becoming one of the principal towns of Gwynedd. The town became a borough after the Edwardian conquest but was devastated during the Glyndwr rebellion of 1400.

The nearest town to the proposed development site, Boduan, retains the roots of a medieval constituent township and gained its name from Buan, who is believed to have been a grandson of Llywarch Hen, the 6th century prince of the Brythonic kingdom of Rheged (see 5.1). The town exists today as a loosely nucleated settlement but its medieval origins is recognisable in the occurrence of *uchaf* or *isaf* in farm place names. This can be seen in close proximity to the proposed development area in the nearby farm Mathan Uchaf, which almost certainly has medieval origins and would have worked the land and proposed development area since such times.

There are no known medieval sites located within the proposed development area, however it is probable that the land had been utilised for the extraction of peat for burning as fuel since such times. The extraction of peat leaves little trace except for rectangular depressions where the peat was cut from, as well as occasionally peat drying platforms. Such evidence of peat cutting has been found approximately 1.6km to the south of the proposed development area, northwest of Tyn y Coed (PRN 1742).

5.3 Post Medieval Period

In approximately 1780 Pennant described the Llyn Peninsula:

The houses of the common people are very mean; made with clay, thatched, and destitute of chimneys. Notwithstanding the laudable example of the gentry, the country is in an unimproved state, neglected for the sake of the herring fishery. The chief produce is oats, barley and black cattle.

This reference to the land of the Lleyn Peninsula is relevant to the proposed development site as it forms a part of the marsh of *Cors Geirch* which means 'marsh oats'. It therefore seems probable that the site was utilised for the farming of that crop, although it is probable that the name refers to a variety of wild oat which was gathered from the wetland site. The site name of *Cors Ceidio* means 'Ceidio's marsh' which was one of three free townships that extended across the area during the middle ages. Ceidio had a detached hamlet in the upland cow pastures near Gwynus at Rhoswyniasa which, by the fourteenth century had come into the hand of Thomas Brereley. Ceidio had no mill of its own and milled at Kirgh (Ceirch). The hamlet of Rhoswyniasa milled at Gwynus. Ceidio had a church in the thirteenth century. The upper portion and west gable have been rebuilt but the fifteenth-sixteenth-century trusses have survived (HER).

The Buan parish tithe map of 1849 (figure 3) depicts the proposed development area rather similarly to how it exists today. The site is depicted lying to the north of the farm *Glan-y-Gors* which is still in existence today, and is connected to the main road via a trackway which was utilised to access the site during the works. The development area is depicted as being within one large field (no. 71) orientated roughly east to west, with a field boundary shown dividing it from a second large field (no. 70) to the immediate west. This division still exists today as a stream which runs from north to south from the upland area close to Garn Boduan. The tithe map also shows that the strip of land to the north of the study area was divided into seven small individual paddocks, although these have since been amalgamated into one enclosed piece of land orientated roughly northwest to southeast.

Table 2. The tithe apportionment of 1839

Plot	Landowner	Occupier	Plot Name	A/R/P
71	Lord	Griff Roberts	Weirglodd	6/2/36
	Newborough		Fawr	

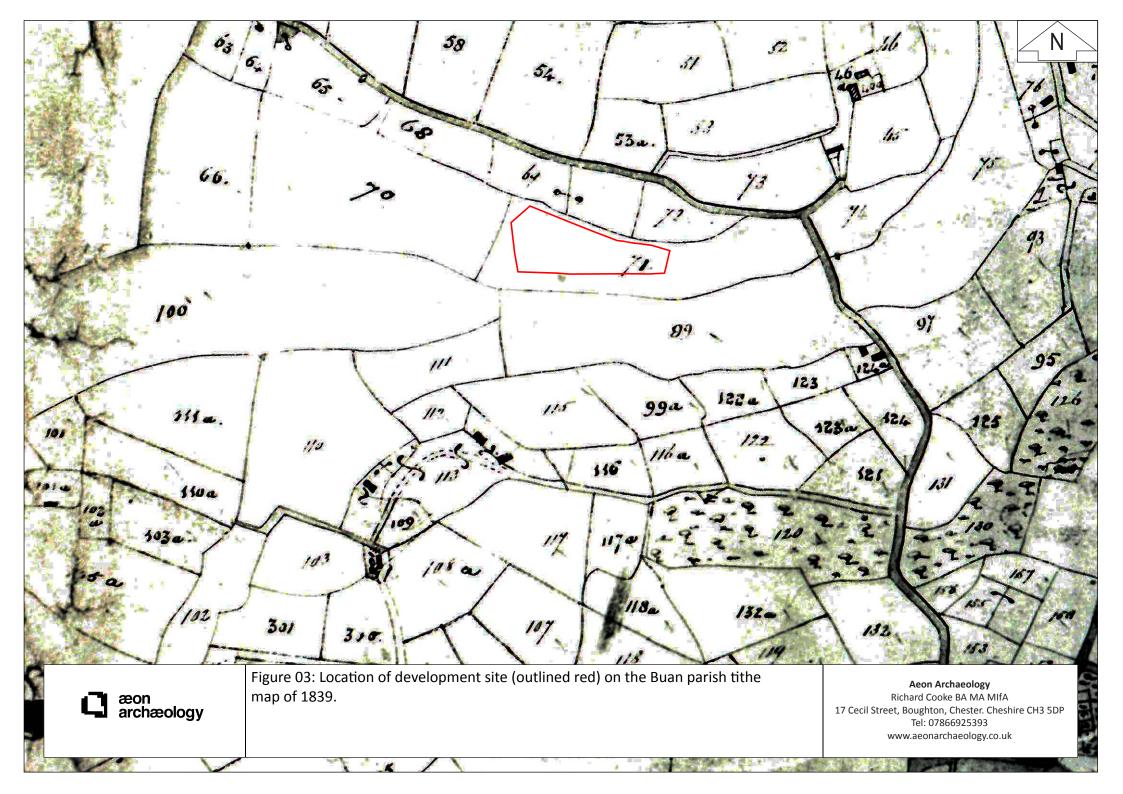
As can be seen from the 1839 tithe apportionment, the proposed development site was owned by Lord Newborough of the Glynllifon Estate. At this point in time the title was held by Spencer Bulkeley Wynn, 3rd Baron Newborough who was born on 23rd May 1803 and married his cousin Frances Maria de Winton on the 10th May 1834. She was the first daughter of the Rev. WalterWilkins *later* de Winton of Hay Castle, co. Brecon. Spencer Bulkeley Wynn became the High Sheriff of Anglesey in 1847 and died on 1st November 1888. He was initially interred at Llandwrog, but was reinterred in 1889 in Bardsey Island (Carcroft's Peerage).

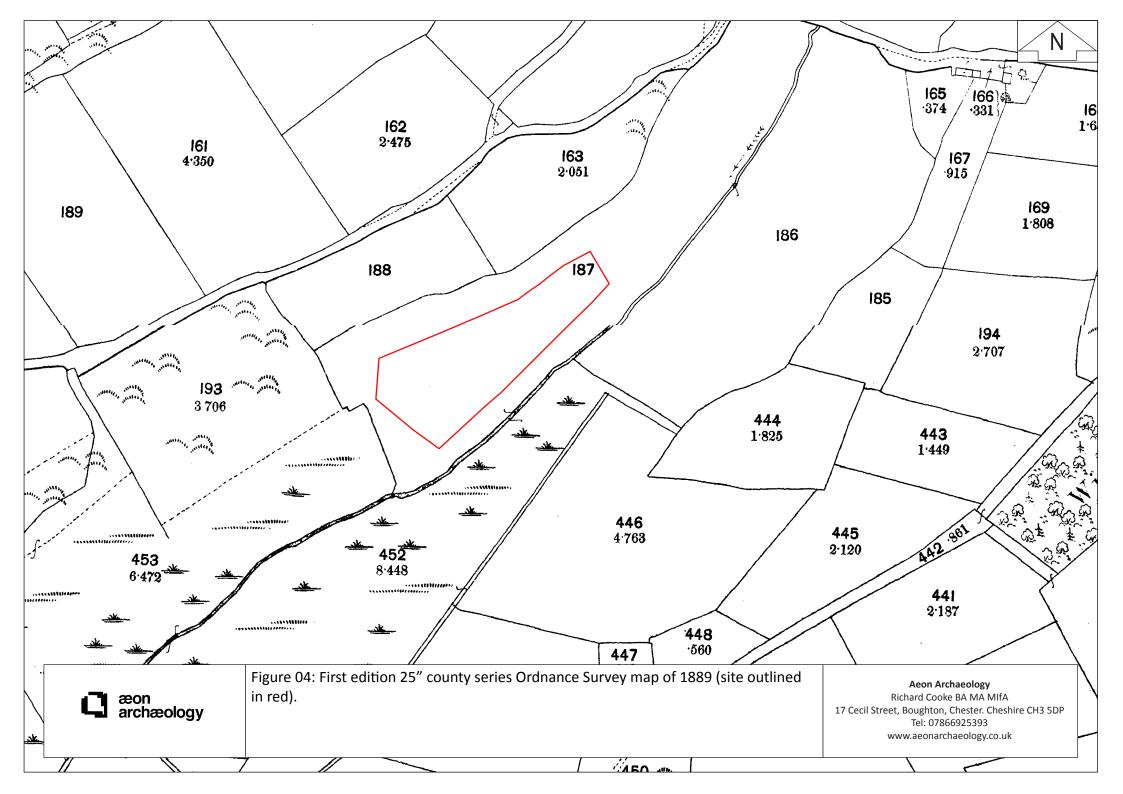
The 1839 tithe apportionment details that the plot name of the development site was *Weirglodd Fawr* which means 'large meadow'. This suggests that the area was perhaps not waterlogged all year round and was quite probably used for the grazing of animals.

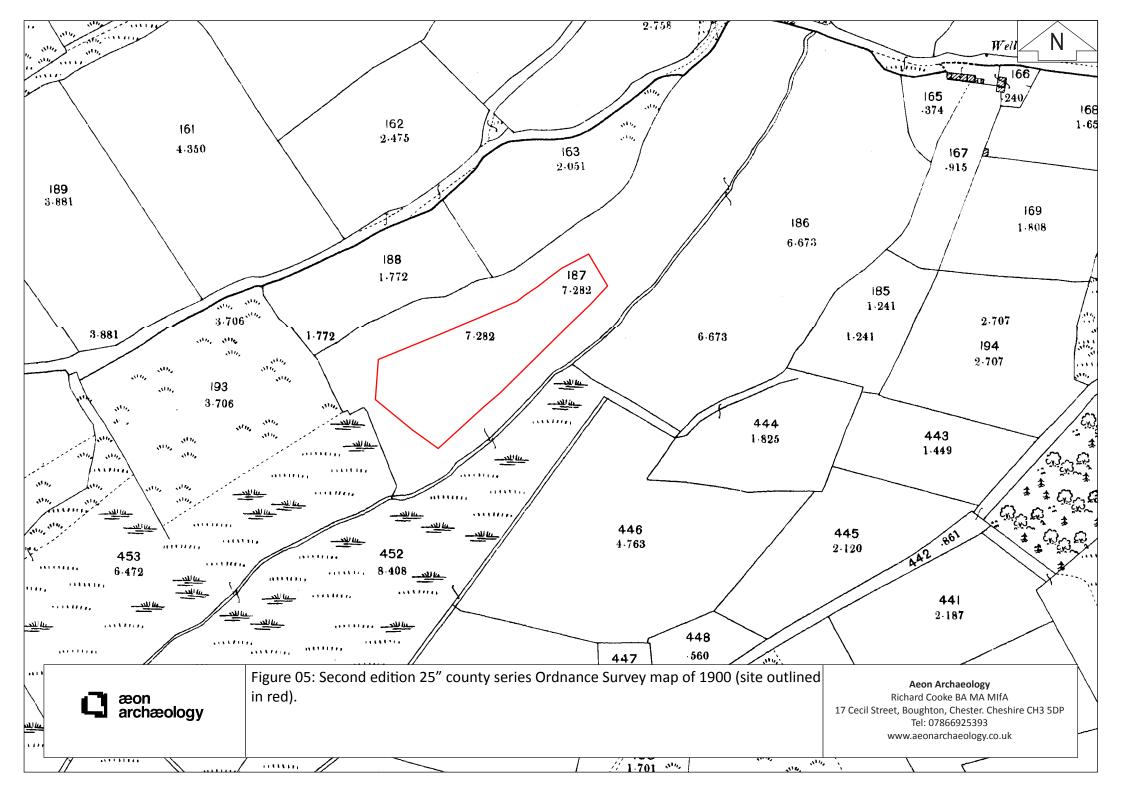
Cors Ceidio is depicted in detail on the first, second and third edition 25" Ordnance Survey maps of 1889, 1900, and 1918 respectively (figures 4, 5 and 6). On all three maps the site is shown as a large enclosed field orientated from northeast to southwest, with enclosed fields to the north. There are no features depicted within the marsh and it is shown much like it exists today.

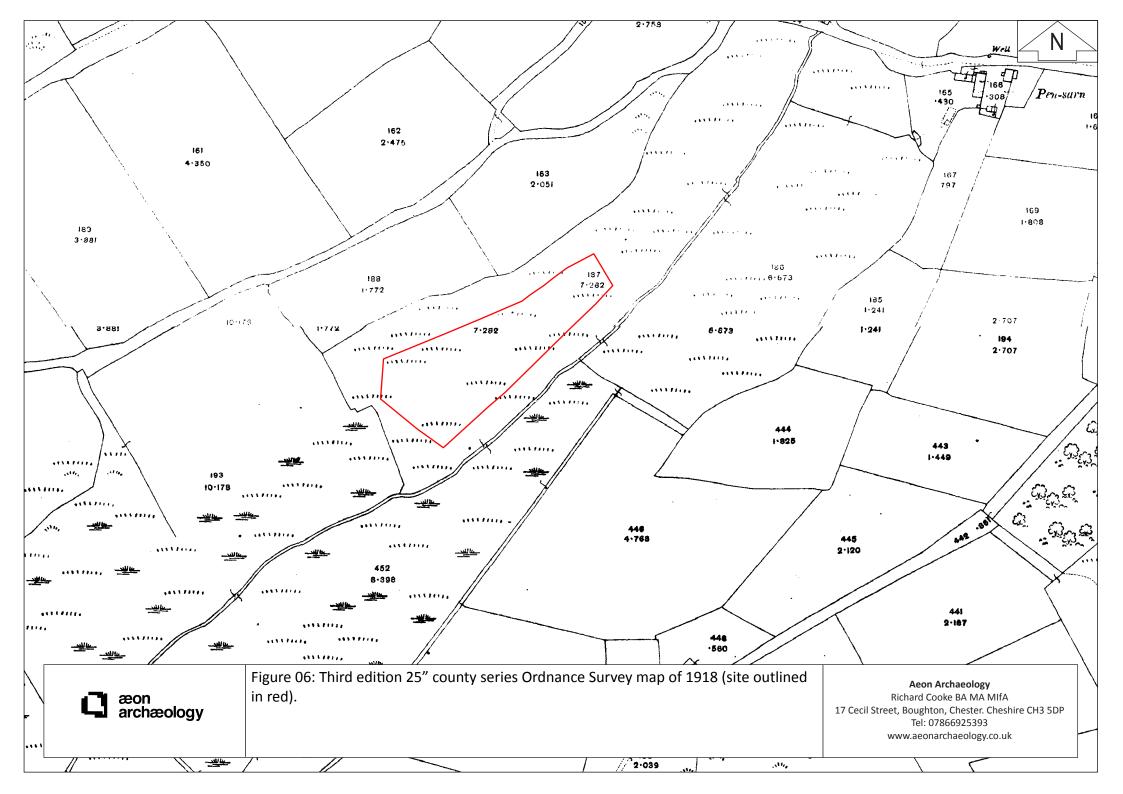
5.4 Aerial Photographs

A range of aerial photographs of the proposed development area were examined from the Welsh Government. This included a high level photograph taken by the Royal Air Force in 1945, although the study area was covered by cloud. Recent aerial coverage of the proposed development area from 2012 was also inspected. No new archaeological sites were observed on the photographs.











6.0 Quantification of Results

6.0 QUANTIFICATION OF RESULTS

6.1 The Documentary Archive

The following documentary records were created during the archaeological watching brief.

Context sheets 3
Watching brief day sheets 5
Drawings 0
Digital photographs 24

6.2 Environmental Samples

No environmental samples were taken as part of the watching brief as no suitable archaeological deposits were encountered.

6.3 Artefacts

No artefacts were recovered during the archaeological watching brief.



7.0 Results of the Archaeological Watching Brief

7.0 RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF

A partial watching brief was maintained during the stripping of the enriched soil from 28th January 2014 to 14th February 2014 with five visits made to site (figure 7).

The location and orientation of photographs are shown on figure 7.

28th January 2014 (figure 7; Plates 1 and 2)

An area measuring 0.06 hectares was stripped at the north-eastern end of the site. Approximately 0.25m depth of material was stripped comprising a dark black-brown peaty topsoil (1001) on to a dark brown peat subsoil (1002) interspersed with frequent juncus roots. No archaeological features or artefacts were observed.

4th February 2014 (figure 7; Plate 3)

An area measuring 0.33 hectares was stripped towards the centre of the site. Approximately 0.25m depth of material was stripped comprising a dark black-brown peaty topsoil (1001) on to a dark brown peat subsoil (1002) interspersed with frequent juncus roots. No archaeological features or artefacts were observed.

7th February 2014 (figure 7; Plate 4)

An area measuring 0.15 hectares was stripped towards the south-western end of the site. Approximately 0.25m depth of material was stripped at the north-eastern part of the site reducing to 0.2m at the south-western end. The removed material comprised a dark black-brown peaty topsoil (1001) on to a dark brown peat subsoil (1002) interspersed with frequent juncus roots. In two small areas small patches of light grey slightly silty clay substrata were exposed (1003). No archaeological features or artefacts were observed.

13th February 2014 (figure 7; Plate 5)

An area measuring 0.07 hectares was stripped towards the south-western end of the site. Approximately 0.2m depth of material was stripped comprising a dark black-brown peaty topsoil (1001) on to a dark brown peat subsoil (1002) interspersed with frequent juncus roots. No archaeological features or artefacts were observed.

14th February 2014 (figure 7; Plates 6 and 7)

An area measuring 0.16 hectares was stripped towards the south-western end of the site. Approximately 0.2m depth of material was stripped comprising a dark black-brown peaty topsoil (1001) on to a dark brown peat subsoil (1002) interspersed with frequent juncus roots. No archaeological features or artefacts were observed.



Plate 01: Peat stripping to the northeast of the site, from the southeast. Scale 1.0m.





Plate 02: Limit of excavation at the northeast of the site, from the south. Scale 0.5m.





Plate 03: Peat stripping towards the centre of the site, from the northeast. Scale 1.0m.





Plate 04: Peat stripping towards the centre of the site, from the northeast. Scale 1.0m.





Plate 05: Peat stripping towards the southwest of the site, from the southwest. Scale 1.0m.





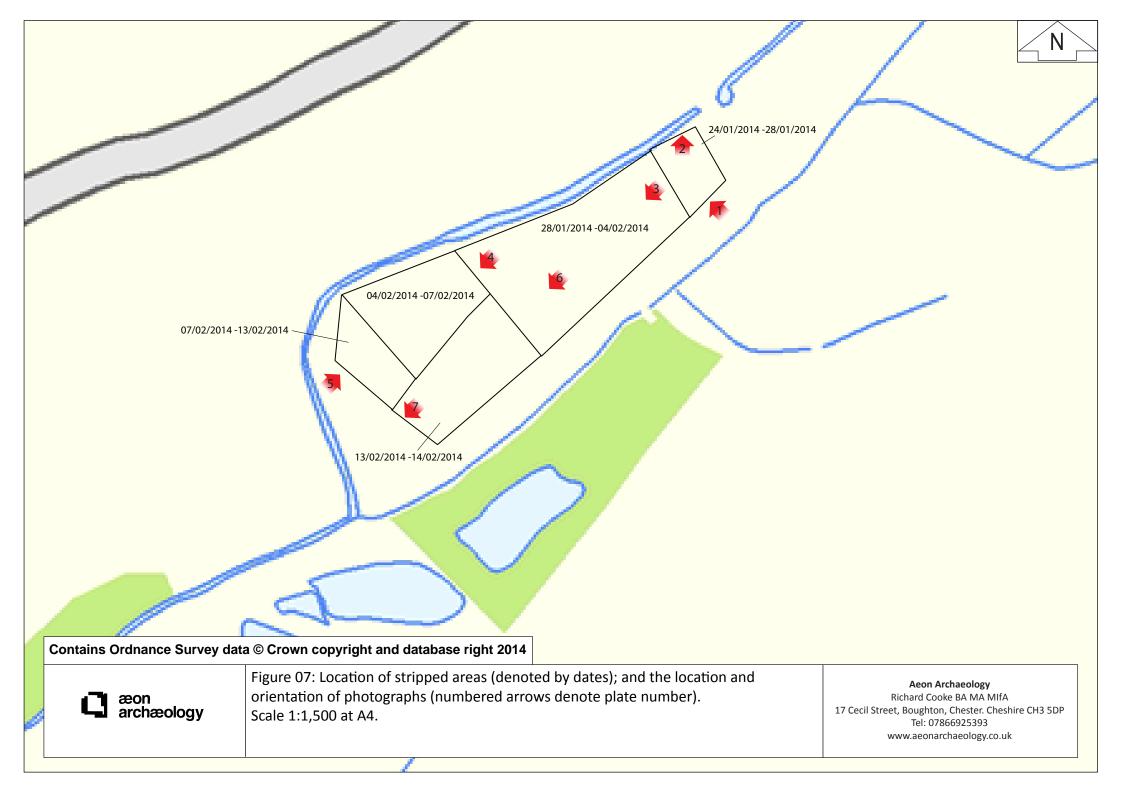
Plate 06: Peat stripping towards the southwest of the site, from the northeast. Scale 1.0m.





Plate 07: Limit of excavation at the southwest of the site, from the northeast. Scale 0.5m.







8.0 Conclusion and Recommendations

8.0 CONCLUSION AND RECOMMENDATIONS

The archaeological watching brief at Cors Ceidio did not identify any archaeological remains or artefacts during any part of the works. In terms of the overall contribution of the project to the regional research agenda the mitigatory works can be seen as being disappointing. However, the potential of the marshland to retain preserved archaeological remains and to greatly contribute to the knowledge and understanding of the historical development of this part of Wales should not be overlooked. As the archaeological mitigation work focused upon monitoring the excavation of enriched soil rather than actively searching for archaeological remains, the depth of material removed was dictated by the scheme of works. As such this meant that a maximum depth of 0.25m of soil was removed at the site and if it is expected that a centimetre of peat accumulates every ten years, then the active window into the past is estimated at only 250 years.

This would help to explain the absence of archaeological remains and associated artefacts despite the waterlogged conditions being favourable for the preservation of organic remains. Indeed, there is a distinct likelihood that preserved archaeological material may exist at lower levels and it is recommended that if a similar project arises which enables greater depths to be observed then a similar archaeological mitigation is placed upon the project.



9.0 Sources

9.0 SOURCES

OS Maps

1st edition 25 inch Ordnance Survey Map of 1889.

2nd edition 25 inch Ordnance Survey Map of 1900.

3rd edition 25 inch Ordnance Survey Map of 1918.

OS 1:10 000 Series sheet SH 33NE, SH 33SE, SH 33SW, and SH 33NW.

Aerial Photographs

RAF Aerial Photographs

1945 RAF. 106G UK 664. Fr 3140

OS Aerial Photographs

Ordnance Survey 2012

Google Maps: 2012

Primary Sources

Tithe Map and Apportionment of the Parish of Buan 1839.

Secondary sources

Aeon Archaeology report 0003, 2013. Cors Geirch, Mathan Uchaf, Boduan, Gwynedd: Archaeological desk-based assessment

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Leigh, D. 1972. First Aid for Finds

Robinson, W. 1998. First Aid for Underwater Finds

www.carcroftspeerage.co.uk



Appendix I: Details of recorded contexts

APPENDIX I – DETAILS OF RECORDED CONTEXTS

Context Number	Form	Description	Artefacts
1001	Topsoil	0.15m in depth and	None.
		constituted a soft dark	
		black-brown peat.	
1002	Subsoil	>0.05m in depth and	None.
		constituting a dark	
		brown peat with	
		frequent juncus root	
		inclusions.	
1003	Glacial substrata	light grey silt-clay	None.
		substrata	



Appendix II:
Scheduled and Non-Scheduled Sites within 1km

APPENDIX II: SCHEDULED AND NON-SCHEDULED SITES WITHIN 1.0KM

Undesignated monuments within 1.0km of the study area as listed on the Gwynedd HER (figure 8)

PRN	Name	Туре	Broadclass	Period
841	Homestead, Possible, Eithinfynydd	Hut circle settlement	Domestic	Roman
842	?Cairn, E of Eithinfynydd	Cairn	Religious, Ritual and Funerary	Prehistoric
867	Clearance Cairns and Field Boundaries, Eithinfynydd	Clearance cairn	Agriculture and Subsistence	Roman
868	Clearance Cairns and Field Boundaries, Eithinfyndd	Clearance cairn	Agriculture and Subsistence	Roman
955	Platform House and Fields, Pen y Dinas	House platform	Agriculture and Subsistence	Medieval
956	Round Hut, Pen y Dinas	Hut circle	Domestic	Prehistoric
957	Round Hut, Pen y Dinas	Hut circle	Domestic	Prehistoric
1071	Defended Settlement, Eithinfynydd	Defended settlement	Defence	Roman
1078	Sub-Roman Homestead, Tyddyn y Felin	Hut circle settlement	Domestic	Roman
1079	Egryn 1: Circular Enclosure/Concentric Circle	Enclosed settlement	Domestic	Roman
1080	Circular Enclosure/Concentric Circle, Egryn (2)	Enclosed settlement	Domestic	Roman
1081	Carneddau Hengwm Long Cairn, Burial Chamber (S)	Chambered tomb	Religious, Ritual and Funerary	Neolithic
1082	Carneddau Hengwm Long Cairn, Burial Chamber (N)	Chambered tomb	Religious, Ritual and Funerary	Neolithic
1085	Alleged Long Barrow/Natural Mound, Eithinfynydd	Barrow	Religious, Ritual and Funerary	Unknown
1087	Stone Circle, Hengwm	Stone circle	Religious, Ritual and Funerary	Prehistoric
1088	Stone Circles, Hengwm	Stone circle	Religious, Ritual and Funerary	Prehistoric
1089	Llecheiddior Stone Circle and Cup Mark	Stone circle	Religious, Ritual and Funerary	Prehistoric
				Bronze
1097	Round Cairn, Pen y Dinas	Cairn	Religious, Ritual and Funerary	Age
1098	Clearance Cairn/Round Cairn, E of Eithinfynydd	Cairn	Unassigned	Prehistoric
1099	Round Cairn/Clearance Cairn, Pen y Dinas	Cairn	Unassigned	Unknown
1100	Round Cairn/Clearance Heaps, Pen y Dinas	Cairn	Unassigned	Unknown
1101	Round Cairn/Clearance Mound, Eithinfynydd	Cairn	Unassigned	Prehistoric
1102	Mound/Cairn, Above Egryn Abbey	Mound	Unassigned	Unknown
1103	Mound/Cairn, Above Egryn Abbey	Mound	Unassigned	Unknown
1104	Complex Ring Cairn, Hengwm	Cairn	Religious, Ritual and Funerary	Unknown

1106	Pen y Dinas Camp	Hillfort	Defence	Prehistoric
1110	Hut Group, Ceunant Egryn	Hut circle settlement	Domestic	Unknown
1111	Hut Group (Unenclosed), Mynydd Egryn	Hut circle settlement	Domestic	Unknown
1115		T 1	101	Early
1115		Enclosure	Agriculture and Subsistence	Medieval
1116	Ceunant Egryn Enclosed Settlement	Enclosed settlement	Domestic	Roman
1141	Medieval Farmstead, Above Egryn Abbey	Deserted rural settlement	Domestic	Medieval
1163	Hut Circle, E of Eithinfynydd	Hut circle	Domestic	Unknown
1165	Hut Circles, Hengwm	Hut circle settlement	Domestic	Prehistoric
1166	Cairn, Hengwm	Cairn	Religious, Ritual and Funerary	Unknown
1168	Hut Circle and Medieval Complex, Ffridd Llwyn Gurfal	Hut circle	Domestic	Medieval
1169	Hut Group, Above Egryn Abbey	Hut circle settlement	Domestic	Medieval
1193	Enclosed Homestead, Tal y Bont	Enclosed settlement	Domestic	Unknown
2916	,	House platform	Religious, Ritual and Funerary	Medieval
2922	Field System, Above Egryn Abbey	Field system	Agriculture and Subsistence	Medieval
2924	Field System, Above Egryn Abbey	Field system	Agriculture and Subsistence	Medieval
2940	Decorated Lead Spindle Whorl, Findspot, Egryn	Findspot	Object	Medieval
				Post-
3866	Trackway: Pont Fadog - Bwlch y Rhiwgyr	Trackway	Transport	Medieval
3914	Bronze Horse-Tackle - Findspot, Nr. Carnedd Hengwm	Findspot	Object	Prehistoric
4284	Egryn - Prehistoric Hearth	Hearth	Unassigned	Prehistoric
4957	House, Egryn Abbey, Supposed Site of Hospital, Llanaber	Hospital	Civil	Medieval
4958	Romano-British Homestead	Enclosed settlement	Domestic	Roman
4961	Homestead	Farmstead	Domestic	Unknown
4964	Barn - Hendre Eirian	Barn	Agriculture and Subsistence	Medieval
5069	Settlement, Tyddyn y Felin	Deserted rural settlement	Domestic	Medieval
5630	Hut Circle, Tyddyn y Felin	Hut circle	Domestic	Prehistoric
5632	Pond, Egryn	Pond	Water Supply and Drainage	Unknown
				Bronze
5799	Hut Group and Paddock Remains, Egryn	Hut circle settlement	Domestic	Age
5800	Unenclosed Huts, Egryn	Hut circle settlement	Domestic	Bronze

				Age
				Bronze
5801	Possible Hut Circle, Egryn	Hut circle	Domestic	Age
5802	Platform House, Egryn	House platform	Domestic	Medieval
5803	Hut Remains, Egryn	Hut	Domestic	Medieval
5804	Hut Circle, Egryn	Hut circle	Domestic	Prehistoric
5805	Hut Circle Remains Egryn	Hut circle	Domestic	Prehistoric
5806	Enclosed Hut Group, Egryn	Hut circle settlement	Domestic	Prehistoric
5807	Platform House, Egryn	House platform	Domestic	Medieval
5808	Platform House, Egryn	House platform	Domestic	Medieval
5809	Platform House, Egryn	House platform	Domestic	Medieval
5810	Platform House, Egryn	House platform	Domestic	Medieval
				Post-
5811	Rectangular Structure, Egryn	Structure	Unassigned	Medieval
				Post-
5812	Platform House, Egryn	House platform	Domestic	Medieval
				Post-
5813	Platform House, Egryn	House platform	Domestic	Medieval
5814	Platform House, Egryn	House platform	Domestic	Medieval
5815	Platform House, Egryn	House platform	Domestic	Medieval
5816	Platform House, Egryn	House platform	Domestic	Medieval
				Post-
5817	Platform House, Egryn	House platform	Domestic	Medieval
				Post-
5818	House and Enclosure, Egryn	House	Domestic	Medieval
				Post-
5819	Platform House, Egryn	House platform	Domestic	Medieval
#0* 0				Post-
5820	Platform House, Egryn	House platform	Domestic	Medieval
E061	D 11 11 E	**	·	Post-
5821	Possible House, Egryn	Hut	Domestic	Medieval

				Post-
5822	Platform House, Egryn	House platform	Domestic	Medieval
				Post-
5823	Platform House, Egryn	House platform	Domestic	Medieval
				Post-
5824	Platform House, Egryn	House platform	Domestic	Medieval
5825	Platform House, Egryn	House platform	Domestic	Medieval
				Post-
5826	Platform House and Paddock, Egryn	House platform	Domestic	Medieval
				Post-
5827	Platform House, Egryn	House platform	Domestic	Medieval
				Post-
5828	Two Platform Houses, Egryn	House platform	Domestic	Medieval
5829	Enclosed Homestead, Egryn	Enclosed settlement	Domestic	Medieval
				Post-
5830	Platform House, Egryn	House platform	Domestic	Medieval
				Post-
5831	Platform House, Egryn	House platform	Domestic	Medieval
T000				Post-
5832	Two Platform Houses, Egryn	House platform	Domestic	Medieval
5000	DI C II D	YI 1.6	B	Post-
5833	Platform House, Egryn	House platform	Domestic	Medieval
5045	Distance France	D1-46	Damastia	Post-
5845	, ,	Platform	Domestic	Medieval
5852	Possible Homestead, Hendre-fechan	Enclosure	Domestic	Unknown
5855	Field System Remains, Egryn	Field system	Agriculture and Subsistence	Unknown
5856	Enclosed Homestead, Hendre-fechan	Enclosure	Domestic	Prehistoric
5857	Rectangular Feature, Eithin-fynydd	Feature	Unassigned	Unknown
5858	Possible Moated Farmstead, Bryn-y-bwyd	Farmstead	Domestic	Unknown
5859	Rectangular Feature, Hengwm	Enclosure	Unassigned	Unknown
5860	Sub-Circular Feature, Egryn Abbey	Enclosure	Unassigned	Unknown

5861	Field System and Possible Settlement, Egryn	Deserted rural settlement	Agriculture and Subsistence	Medieval
5862	Circular Enclosure, Hendre-eirian	Enclosure	Unassigned	Prehistoric
5863	Circular Enclosure, Hendre-eirian	Enclosure	Unassigned	Prehistoric
5864	Possible Homestead, Cae-mur-poeth	Enclosure	Domestic	Unknown
	•			Post-
5926	Sheepfold	Sheep fold	Agriculture and Subsistence	Medieval
6188	Possible Hut, Hengwm	Hut	Domestic	Unknown
6312	Lynchets/Cultivation Ridges, Is Mynydd	Lynchet	Agriculture and Subsistence	Unknown
6670	Walls and Circular Features, Eithinfynydd	Field system	Unassigned	Unknown
				Post-
6672	Ruined House, Eithin Fynydd	House	Domestic	Medieval
				Post-
6673	Sheepfold, Eithin Fynydd	Sheep fold	Agriculture and Subsistence	Medieval
6674	Sub-Circular Feature, Eithin Fynydd	Feature	Unassigned	Unknown
				Post-
6676	, , ,	House	Domestic	Medieval
6677	Lynchets, Eithinfynydd	Lynchet	Agriculture and Subsistence	Unknown
6678	, , ,	Enclosure	Agriculture and Subsistence	Unknown
6679	Circular Enclosure, Eithin Fynydd	Enclosure	Agriculture and Subsistence	Unknown
6680	Lynchets, Eithin Fynydd	Lynchet	Agriculture and Subsistence	Unknown
6681	Rectangular Enclosure, Eithin Fynydd	Enclosure	Agriculture and Subsistence	Unknown
6682	Possible Enclosure, Eithin Fynydd	Enclosure	Agriculture and Subsistence	Unknown
6683	Possible Hut Circle, Eithin Fynydd	Hut circle	Domestic	Prehistoric
				Post-
6684	Rectangular Building, Eithin Fynydd	Building	Domestic	Medieval
9832	Llanaber Medieval Township	Township	CIVIL	Medieval
11512	Enclosure, Bwlch Y Rhiwgyr	Enclosure	Monument by form>	Prehistoric
				Post-
12355		Building	Domestic	Medieval
15648	DRS, Cae-mur-poeth	Deserted rural settlement	Domestic	Medieval
15649	DRS, Cae-mur-poeth	Deserted rural settlement	Domestic	Medieval

15650	DRS, Near Pen y Dinas	Deserted rural settlement	Domestic	Medieval
15651	DRS, Near Pen y Dinas	Deserted rural settlement	Domestic	Medieval
15652	DRS, Near Pen y Dinas	Deserted rural settlement	Domestic	Medieval
15653	DRS, Near Pen y Dinas	Deserted rural settlement	Domestic	Medieval
15654	DRS, Near Pen y Dinas	Deserted rural settlement	Domestic	Medieval
15655	DRS, Tyddyn y Felin	Deserted rural settlement	Domestic	Medieval
15668	Platform House, Pen y Dinas	Deserted rural settlement	Domestic	Medieval
15669	Platform House, Pen y Dinas	Deserted rural settlement	Domestic	Medieval
16975	Is-y-graig Medieval Township	Township	CIVIL	Medieval
				Multi-
18234	Fieldscape, Lower Hill Slopes - Landscape	Landscape	Unassigned	Period
				Multi-
18240	Fieldscape, Mid-hill Slopes Around Cae'r-llwyn - Landscape	Landscape	Unassigned	Period
				Post-
18330	,	Homestead	Agriculture and Subsistence	Medieval
	Sub-Circular Enclosure/Settlement Platform, SW Of Hendre			
19164	Waelod	Platform	Domestic	Iron Age
				Post-
20364	Slate Quarry, Egryn	Slate quarry	Industrial	Medieval
				Post-
20365	Slate Quarry, Hendre Eirian	Slate quarry	Industrial	Medieval
				Post-
21819	Hafod Uchaf Mine	Gold mine	Industrial	Medieval
33923	Cairns, Eithinfynydd	Cairn	Religious, Ritual and Funerary	Prehistoric
33924	Cairn, Eithinfynydd	Cairn	Religious, Ritual and Funerary	Prehistoric
33925	Rectangular Feature, Eithinfynydd	Structure	Domestic	Medieval
33926	, , ,	Bank (earthwork)	Agriculture and Subsistence	Medieval
33927	Wall, Possible, Eithinfynydd	Wall	Unassigned	Unknown
33928	Building, Possible, Eithinfynydd	Structure	Unassigned	Unknown
				Post-
33929	Field Wall, Eithinfynydd	Wall	Agriculture and Subsistence	Medieval

				Post-
33930	Field Wall, Eithinfynydd	Wall	Agriculture and Subsistence	Medieval
33931	Field Wall, Eithinfynydd	Wall	Agriculture and Subsistence	Unknown
33932	Enclosure and Platform, Possible, Eithinfynydd	Enclosure	Domestic	Medieval
				Post-
33933	Field Barn, Possible, Eithinfynydd	Field barn	Agriculture and Subsistence	Medieval
33934	Enclosure, Possible, Eithinfynydd	Enclosure	Unassigned	Unknown
				Bronze
33935	Cairn, Possible, Eithinfynydd	Cairn	Religious, Ritual and Funerary	Age
				Post-
33936	Trackway, Eithinfynydd	Trackway	Transport	Medieval

Scheduled Ancient Monuments within 1.0km of the study area (figure 8)

SAM no.	Name	Туре	General	Broadclass
ME007	Carneddau Hengwm Long Cairns	Chambered long cairn	Prehistoric	Religious, Ritual and Funerary
ME076	Pen y Ddinas Camp	Hillfort	Prehistoric	Defence
ME099	Ceunant Egryn Enclosed Settlement	Enclosed hut circle	Prehistoric	Domestic
ME122	Settlement & Fields Systems above Egryn Abbey	House platform	Medieval	Domestic
ME129	Llecheiddior Stone Circle	Stone circle	Prehistoric	Religious, Ritual and Funerary
ME136	Hengwm Stone Circles	Stone circle	Prehistoric	Religious, Ritual and Funerary
ME153	Enclosed Hut Circle Settlement and Long huts E of Egryn Abbey	Enclosed hut circle settlement	Prehistoric	Domestic
ME154	Ceunant Egryn Hut Group	Enclosed hut circle	Prehistoric	Domestic
ME156	Mynydd Egryn Ring Cairn	Ring cairn	Prehistoric	Religious, Ritual and Funerary
ME157	Mynydd Egryn Settlement	Enclosed hut circle	Prehistoric	Domestic
ME159	Enclosed Hut Circle North of Tyddyn Mawr	Enclosed hut circle	Prehistoric	Domestic
ME202	Eithin-Fynydd Platform House Settlement	Deserted Rural Settlement	Medieval	Domestic
ME236	Pen y Dinas Cairn	Round cairn	Prehistoric	Religious, Ritual and Funerary

Listed Buildings within 1.0km of the study area (figure 9).

Number	Name	Locality	Grade
4717	Egryn Abbey	Llanaber	II*
84332	'Old House' to south of Egryn Abbey	Dyffryn Ardudwy	II
84339	Barn to NW of Old House		II

84345	Field cow-house at Egryn		II
84347	Former Mill and Store	Llanaber	II
84354	Milepost	Llanaber	II
84361	Root clamp at Egryn	Llanaber	II
84363	Shelter Shed	Llanaber	II
84364	Stable, cartshed and attached cowhouse at Egryn	Llanaber	II

NMR Monument Points within 1.0km of the study area (figure 9).

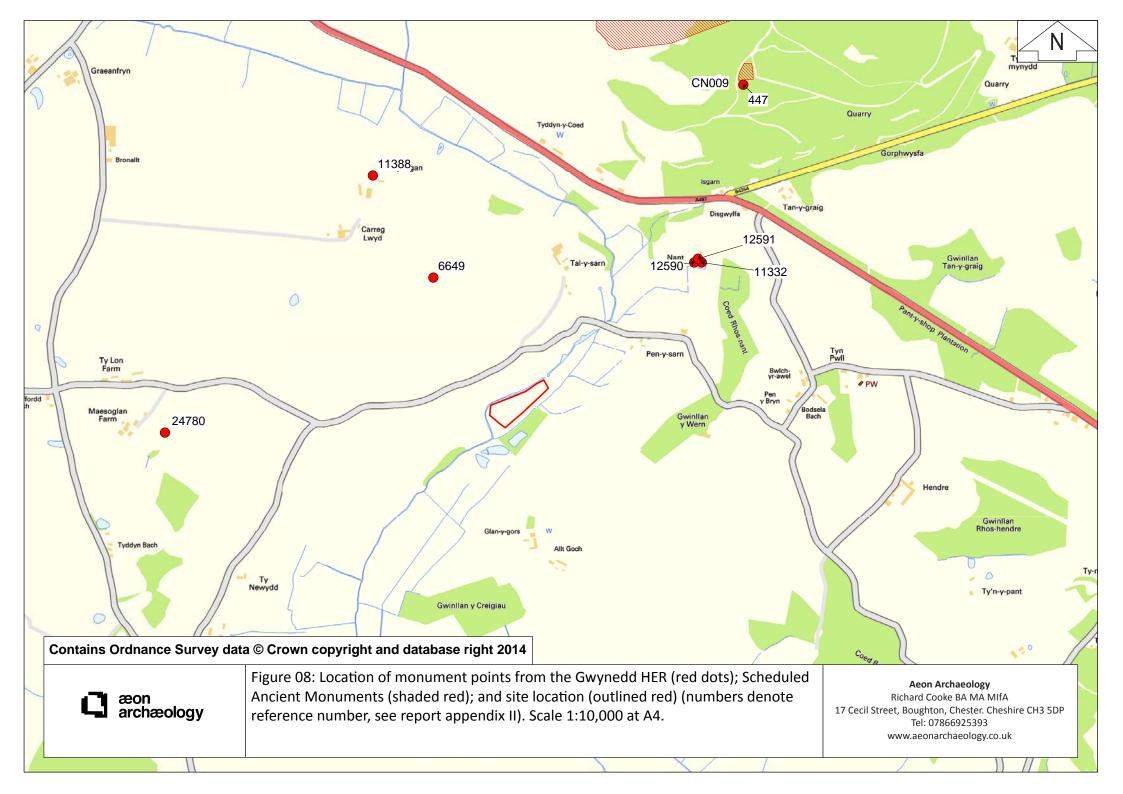
NPRN	Name	Broadclass	Туре	Period
		Religious, ritual and		
8426	Egryn calvinistic methodist sunday school (capel egryn), egryn	funerary	Chapel	Post medieval
15484	Cae-mur-poeth, n.e. Of	Agriculture and subsistence	Farmstead	Medieval?
15490	Eithin-fynydd	Civil	Settlement	Medieval?
24339	Field system s of egryn quarry	Agriculture and subsistence	Field system	Medieval
24512	Egryn quarry, e.of, ?Homestead	Domestic	Homestead	Unknown
28234	Cae hir	Domestic	House	Post medieval?
28371	Egryn hall;egryn abbey;plas yn egrin;abbey farm, llanaber	Domestic	Farmhouse	Medieval;post medieval
28490	Hendre eirion	Domestic	House	Post medieval?
28493	Hendre fechan	Domestic	Dwelling	Post medieval?
33973	Egryn manganese mine	Industrial	Manganese mine	Unknown
41692	Hendre einion - barn	Agriculture and subsistence	Barn	Post medieval?
55990	Pen-y-dinas; castell dinas cortin or gortyn	Defence	Hillfort	Iron age
55005		A 1 1 1 1 1 1	Unenclosed hut circle	D 11 / 1
55995	Mynydd egryn hut circle settlement	Agriculture and subsistence	settlement	Prehistoric
56000	Ceunant egryn enclosed settlement - 'esgryn fort'	Domestic	Enclosed settlement	Iron age
56006	Hengwm	Domestic	Hut circle	Prehistoric
56009	Ceunant egryn	Unassigned	Enclosure complex	Medieval
56010	Pen-y-dinas south east	Agriculture and subsistence	Enclosure complex	Medieval;post medieval
56139	Settlement to the east of egryn abbey	Agriculture and subsistence	Settlement; field system	Medieval
60445	Pen-y-dinas	Domestic	Hut circle	Prehistoric
60924	Is mynydd	Agriculture and subsistence	Field system	Prehistoric;unknown
89079	Eithin fynydd	Agriculture and subsistence	Enclosure	Prehistoric?;unknown?
89082	Eithin fynydd e	Agriculture and subsistence	Enclosure?	Prehistoric?;unknown?
89083	Eithin fynydd e	Domestic	Long hut?	Medieval;post medieval

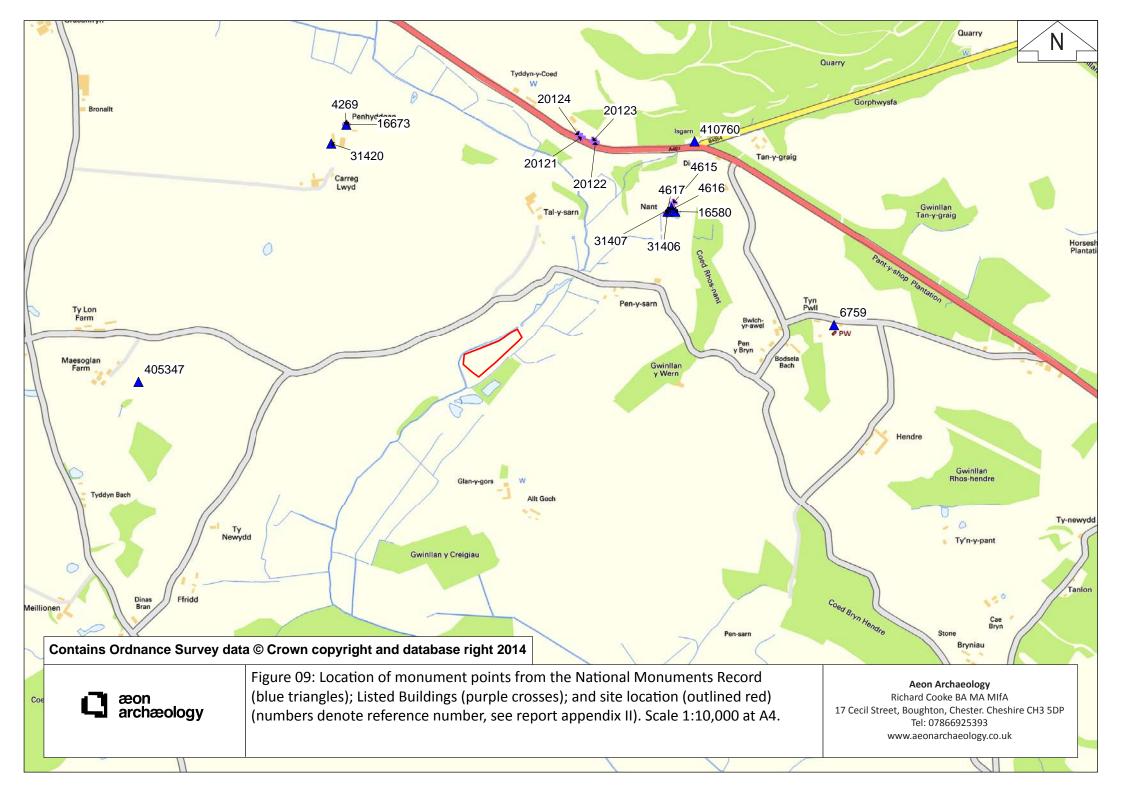
89084	Eithin fynydd e	Agriculture and subsistence	Field system	Prehistoric
89085	Eithin fynydd e	Agriculture and subsistence	Enclosure	Medieval;post medieval
89086	Eithin fynydd e	Agriculture and subsistence	Hut circle;homestead	Prehistoric
89087	Eithin fynydd e	Agriculture and subsistence	Settlement	Medieval;post medieval
89088	Enclosure west of hengwm stone circles, mynydd egryn	Religious, ritual and funerary	Enclosure	Prehistoric
89089	Sheepfolds, hengwm, mynydd egryn	Agriculture and subsistence	Sheep fold	Medieval;post medieval
89090	Clearance cairns, hengwm, mynydd egryn	Agriculture and subsistence	Clearance cairn	Medieval;post medieval;unknown
89091	Enclosure, hengwm, mynydd egryn	Unassigned	Enclosure;natural feature	Unknown
89092	Pen-y-dinas n	Domestic	Hut circle settlement	Prehistoric
89093	Pen-y-dinas n	Agriculture and subsistence	Long hut;enclosure	Medieval;post medieval
89094	Pen-y-dinas n	Agriculture and subsistence	Terraced ground	Prehistoric;unknown
89095	Pen-y-dinas, buildings and enclosures	Agriculture and subsistence	Long hut	Medieval;post medieval
89096	Pen-y-dinas	Agriculture and subsistence	Hut;field	Medieval;post medieval
89097	Pen-y-dinas w	Agriculture and subsistence	Enclosure?;natural feature?	Unknown
89098	Ceunant egryn	Industrial	Spoil tip	Post medieval
89099	Ceunant egryn	Agriculture and subsistence	Enclosure;hut circle settlement	Prehistoric?;medieval?
89100	Ceunant egryn	Domestic	Hut	Medieval;post medieval
89101	Mynydd egryn	Agriculture and subsistence	Settlement	Medieval;post medieval
89102	Mynydd egryn	Agriculture and subsistence	Hut circle;enclosure	Medieval;post medieval
89103	Mynydd egryn	Agriculture and subsistence	Long hut	Medieval;post medieval
89104	Mynydd egryn	Domestic	Unenclosed hut circle settlement	Prehistoric
89105	Mynydd egryn	Agriculture and subsistence	Enclosure	Prehistoric?;unknown?
89106	Mynydd egryn	Agriculture and subsistence	Longhouse; field system	Medieval;post medieval
89107	Mynydd egryn	Agriculture and subsistence	Hut circle settlement	Prehistoric?;unknown?

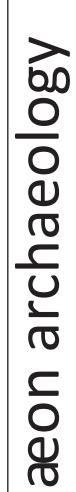
89108	Mynydd egryn	Agriculture and subsistence	Terraced ground	Medieval;post medieval
89109	Mynydd egryn	Agriculture and subsistence	Settlement	Medieval;post medieval
89110	Mynydd egryn	Agriculture and subsistence	Sheep fold?	Medieval;post medieval
89111	Mynydd egryn	Agriculture and subsistence	Enclosure	Medieval;post medieval
89112	Mynydd egryn	Domestic	Enclosure?	Medieval?;post medieval?;unknown?
89113	Mynydd egryn	Religious, ritual and funerary	Enclosure	Prehistoric?;unknown?
89114	Hengwm	Agriculture and subsistence	Enclosure	Prehistoric
89115	Egryn manganese mine and linear mining features	Industrial	Mining feature	Post medieval
89116	Hengwm	Industrial	Level	Post medieval
89136	Bwlch-y-rhiwgyr	Religious, ritual and funerary	Enclosure	Prehistoric
89145	Eithin fynydd	Agriculture and subsistence	Cultivation marks	Prehistoric?;unknown?
89150	Eithin fynydd e	Domestic	Enclosure?	Unknown
89151	Eithin fynydd e	Agriculture and subsistence	Hut circle settlement	Prehistoric
89153	Trawsdir e	Agriculture and subsistence	Hut	Prehistoric?;unknown?
89154	Trawsdir e	Agriculture and subsistence	Sheep fold	Medieval;post medieval
89155	Trawsdir se	Agriculture and subsistence	Settlement?	Prehistoric
89156	Is mynydd w	Domestic	Homestead;enclosure	Prehistoric
89157	Is mynydd w	Agriculture and subsistence	Platform?	Prehistoric
89158	Is mynydd w	Agriculture and subsistence	Settlement	Medieval;post medieval
89159	Is mynydd w	Agriculture and subsistence	Hut circle settlement	Prehistoric?;unknown?
89160	Is mynydd w	Agriculture and subsistence	Hut circle settlement	Prehistoric
89161	Is mynydd w	Domestic	Long hut?	Medieval;post medieval
89236	Is mynydd n	Agriculture and subsistence	Sheep fold	Post medieval
89268	Pen-y-dinas e	Agriculture and subsistence	Farmstead	Medieval;post medieval
89269	Mynydd egryn w	Agriculture and subsistence	Enclosure	Medieval;post medieval

89270	Mynydd egryn w	Agriculture and subsistence	Sheep fold	Post medieval
89273	Hafotty mines n0rth west	Unassigned	Building	Post medieval
89283	Eithin fynydd e	Domestic	Settlement	Post medieval
89290	Ceunant egryn sheep fold	Agriculture and subsistence	Sheep fold	Post medieval
89295	Mynydd egryn n	Agriculture and subsistence	Enclosure	Prehistoric
89298	Ceunant egryn	Domestic	Hut circle	Prehistoric
89388	Ceunant egryn enclosure complex	Agriculture and subsistence	Enclosure complex	Medieval;post medieval
89705	Hendre fechan	Domestic	Homestead?;enclosure?	Iron age?;unknown?
89706	Hendre eirian e	Agriculture and subsistence	Terraced ground	Unknown
89707	Cae gwyn	Domestic	Homestead	Medieval;post medieval
89708	Cae gwyn	Agriculture and subsistence	Field system	Unknown
89709	Egryn abbey east	Agriculture and subsistence	Settlement;farmstead	Medieval;post medieval
89710	Egryn abbey e	Agriculture and subsistence	Enclosure	Unknown
89711	Cae mur poeth	Domestic	Homestead?;enclosure?	Unknown
265197	Hengwn, garden, talybont	Gardens, parks and urban spaces	Garden	Post medieval
302717	Homestead, sebonig	Domestic	Homestead	Roman
302719	Mynydd egryn, homestead	Domestic	Homestead	Early medieval
302720	Homestead, mynydd egryn	Domestic	Homestead	Roman
302721	Tyddyn- y- felin, homestead	Domestic	Homestead	Roman
302750	Hendre eirian, circular enclosure	Domestic	Homestead	Iron age;roman
302785	Hengwm cairn circle	Religious, ritual and funerary	Cairn	Bronze age
302786	Carneddau hengwm, south cairn	Religious, ritual and funerary	Chambered tomb	Unknown;neolithic
302789	Llecheiddion stone circle	Religious, ritual and funerary	Stone circle	Bronze age
302790	Hengwm stone circles	Religious, ritual and funerary	Stone circle	Bronze age

		Religious, ritual and		
302875	Round cairn, w. Of eithen-fynydd	funerary	Cairn	Bronze age
308408	Egryn abbey potato clamp	Agriculture and subsistence	Potato clamp	Post medieval
		Religious, ritual and		
401800	Carneddau hengwm, north cairn	funerary	Chambered tomb	Unknown;neolithic
404113	Eithin fynydd platform house settlement	Domestic	House platform	Post medieval;medieval
407801	Egryn, dower house	Domestic	House	Medieval
407802	Egryn, prehistoric enclosure	Agriculture and subsistence	Enclosed settlement	Iron age;roman
411807	Stone clearance west of trawsdir	Agriculture and subsistence	Field	Modern
413031	Egryn abbey, field barn	Agriculture and subsistence	Field barn	18th century
413033	Egryn abbey, hengwm, round hut	Domestic	Hut circle	Iron age









Appendix III:

Project design for archaeological watching brief

WRITTEN SCHEME OF INVESTIGATION (WSI) FOR ARCHAEOLOGICAL WATCHING BRIEF v2.0

AEON PROJECT CODE: A0028

SITE: Land at Cors Ceidio (Cors Geirch), Boduan, Gwynedd

NGR: 230671 338099

PLANNING REF: C13/0825/33/MW

DATE: 20th November 2013

PREPARED FOR: Natural Resource Wales (NRW)

æon archæology

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1.0 INTRODUCTION

Aeon Archaeology has been asked by Natural Resource Wales (NRW) to provide a cost and written scheme of investigation (WSI) for carrying out an archaeological watching brief as a condition of a planning application (ref: C13/0825/33/MW) for the extraction of peat and enriched soil, in order to support a programme of conservation to restore the wetland habitat. The site comprises a c.1.0ha area of wetland located in open countryside approximately 4.8km northwest of the village of Efailnewydd. It lies approximately 0.5km to the southwest of the junction between the A497 (Pwllheli to Nefyn road) and the B4354 road at Boduan (centred on NGR SH 30671 38099).

The site forms part of the Cors Geirch National Nature Reserve (NNR). The B4415 Efailnewydd to Nanhoron road lies 3.0 km to the south of the application site. The surrounding land is agricultural in character although extensive areas of marshland exist to the north, east and south of the site.

The proposed development will necessitate the removal of approximately 2,500m³ of soils and peat and result in the exposure of an area of peat within the SAC that will enable the restoration of conservation grade habitat (ie the colonisation of that area by specific flora and fauna that thrive in such conditions). Some of the extracted peat and soils will be retained on site and used in the infilling of drainage ditches. Any surplus extracted material will be removed from the site and made available to the local community as a soil conditioner.

In order to achieve improved site conditions, the work at Cors Ceidio entails the removal, on average, of a depth of 250mm over the site of surface peat, including minimal amounts of topsoil where necessary, in order to expose underlying peat.

A mitigation brief has not been prepared for this work by **The Gwynedd Archaeological Planning Services** (GAPS), but GAPS stated in a letter to NRW dated 15th October 2013 (ref: 1015je01/D1834) that:

'No development (including any ground disturbing works or site clearance) shall take place other than in accordance with an archaeological specification which has been submitted by the applicant and agreed in advance by the archaeological advisor to the Local Planning Authority. The specification and the subsequent archaeological programme must meet all relevant archaeological standards and the approval of the archaeological advisor.

Reason: To ensure the implementation of an appropriate programme of archaeological mitigation in accordance with the requirements of *Planning Policy Wales 2012* and Welsh Office Circular 60/96 *Planning and the Historic Environment: Archaeology*'.

<u>It is requirement that the content of this WSI be approved by GAPS prior to the commencement of works.</u>

The watching brief will be carried out on a **partial** basis during the removal of enriched soil across the site. If archaeological remains or artefacts are encountered during the observation of ground disturbance then the watching brief may be required to be increased to an **intensive** scale.

Reference will be made to the guidelines specified in Standard and Guidance for Archaeological Watching Brief (Institute for Archaeologists, 1994, rev. 2001 and 2008).

2.0 STATUTORY AND NON-STATUTORY DESIGNATIONS

The site lies within or in proximity to the following designated areas:

- (i) Within the Cors Geirch National Nature Reserve (NNR).
- (ii) Within the Cors Geirch Special Area of Conservation (SAC).
- (iii) Within the Cors Geirch Site of Special Scientific Interest (SSSI).
- (iv) Within the Cors Geirch Ramsar site.

3.0 ARCHAEOLOGICAL BACKGROUND

The application area is within the Llŷn and Bardsey Island Registered Landscape of Outstanding Historic Interest, which is identified as an archaeologically diverse landscape. In the vicinity of the application site the archaeological resource is mainly characterised by prehistoric enclosures, medieval settlement, and post-medieval gentry farmhouses located on the fringes of the fen. The application site is likely always to have been wet and therefore unsuited to settlement, but may have been used for activities unlikely to leave archaeological traces (such as growing reeds for thatching) as well as more archaeologically visible features, e.g. burnt mounds are usually located adjacent to a water source.

Wetland environments are generally conducive to the preservation of organic material – relatively rarely preserved in dry-land contexts – including palaeoenvironmental evidence such as pollen, grains and molluscs, which can provide information about historic landscape development, including evidence of human agency. Palaeoenvironmental analysis undertaken in connection with the recent work at nearby Mathan Uchaf (Allen, 2013) produced a landscape sequence from the Neolithic through to the 18th century, identifying phases of woodland clearance and re-colonisation. Although no direct human action was identified, the analysis demonstrates the preservation of archaeological information within the fen deposits which contributes to understanding of the local historic environment (Emmett, J. 1015je01/D1834).

4.0 ARCHAEOLOGICAL AIMS

The watching brief will consist of the following:

- Observation of excavation works associated with the scheme.
- A drawn, written and photographic record of any archaeological features, including structures that may be revealed by the work.
- Preparation of a full archive report.

If archaeological remains are encountered during the watching brief it may be necessary to suspend development work in that area. The client should have a suitable contingency in place in case of such a scenario.

5.0 PROGRAMME OF WORK

5.1 Archaeological Watching Brief

(Reproduced from IFA. 2001. Institute for Archaeologists 1994 rev. 2001 and 2008 Standard and Guidance for an archaeological watching brief)

The definition of an archaeological watching brief 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.

This definition and *Standard* do not cover chance observations, which should lead to an appropriate archaeological project being designed and implemented, nor do they apply to monitoring for preservation of remains *in situ*.

An archaeological watching brief is divided in to four categories according the IFA. 2001. *Institute for Archaeologists 2001 Standard and Guidance for an archaeological watching brief:*

- comprehensive (present during all ground disturbance)
- intensive (present during sensitive ground disturbance)
- intermittent (viewing the trenches after machining)
- partial (as and when seems appropriate).

A partial watching brief is to be maintained during the removal of enriched soil at the site.

All soil removal will be undertaken using a mechanical excavator fitted with a toothless ditching bucket. A photographic record will be maintained throughout, using a digital SLR camera (Canon 550D) set to maximum resolution and any subsurface remains will be recorded photographically, with detailed notations and a measured survey using a handheld GPS (Satmap Active 10).

In the event of archaeological discovery features will be excavated by hand and will be fully recorded using Aeon Archaeology pro-formas, digital photographs, and plan and section drawings taken at a suitable scale (usually 1:20 for plan drawings and 1:10 for section drawings).

The archive produced will be held at Aeon Archaeology under the project code A0028.

6.0 FURTHER ARCHAEOLOGICAL WORKS

- The discovery of substantial buried archaeological remains during the watching brief may result in the requirement for a wider programme of archaeological mitigation. This may require the submission of revised quotes to the client.
- This WSI does not include a methodology or cost for examination, conservation and archiving of finds discovered during the watching brief, nor of any radiocarbon dates required, nor of examination of palaeoenvironmental samples. The need for these will be identified in the post-fieldwork programme (if required), and a new WSI will be issued for approval by the GAPS Archaeologist.

7.0 ENVIRONMENTAL SAMPLES

If necessary, relevant archaeological deposits will be sampled by taking bulk samples (a minimum of 10.0 litres and maximum of 30.0 litres) for flotation of charred plant remains. Other bulk samples, for example from middens, may be taken for small animal bones and small artefacts.

Bulk environmental samples will also be taken from any fills, deposits or structures which yield archaeological artefacts, charcoal flecks/ fragments, bone, or any other historic remains.

8.0 HUMAN REMAINS

Any finds of human remains will be left *in-situ*, covered and protected, and both the coroner and the GAPS Archaeologist informed. If removal is necessary it will take place under appropriate regulations and with due regard for health and safety issues. In order to excavate human remains, a licence is required under Section 25 of the Burials Act 1857 for the removal of any body or remains of any body from any place of burial. This will be applied for should human remains need to be investigated or moved.

9.0 ARTEFACTS

All artefacts and ecofacts will be retrieved for identification and recording and will be treated in accordance with IfA 2008 Guidelines for the collection, documentation, conservation and research of archaeological materials

All finds are the property of the landowner (NRW) but it is recommended that finds are deposited with the rest of the project archive within an appropriate museum. Furthermore, the client agrees to granting access to all finds recovered by Aeon Archaeology for analysis, study and publication as necessary. All finds would be treated according to advice provided within *First Aid for Finds* (Rescue 1999). Aeon Archaeology staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants.

The recovery policy for archaeological finds will be kept under review throughout the watching brief. Any changes in recovery priorities will be under guidance from an appropriate specialist and agreed with the GAPS Archaeologist. There will be a presumption against the disposal of archaeological finds regardless of their apparent age or condition.

All finds will be collected and processed including those found within spoil tips. Their location and height will be plotted; finds numbers attributed, bagged and labelled as well any preliminary identification taking place on site. Where specialist advice is required provision will be made to do so at the earliest possible convenience.

After processing, artefacts which are suitable will be cleaned and conserved in-house. Artefacts requiring specialist cleaning and conservation will be sent to the relevant specialist. All finds will then be sent to a specialist for analysis, the results of which will then be assessed to ascertain the potential of the finds assemblage to meet the research aims of the project. The value of the finds will also be assessed in terms of the wider educational and academic contributions.

The cost of additional staff and guidance from Cardiff Conservation Services are not included within this quote. Any such requirement will result in the production of a new WSI with additional fees.

Depending upon the material of the remains the following experts will be consulted regarding the conservation of waterlogged material:

- Organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)
- Non-organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)

Once waterlogged material has been stabilised and conserved the following experts will be consulted:

- Bone: Nora Bermingham
- Glass: Hilary Cool, Barbican Research Associates.
- Metal artefacts: Phil Parkes, Cardiff Conservation Services, Cardiff.
- Slag, burnt clay, hammerscale: Dr. Tim Young, Geoarch, Cardiff.
- Stone artefacts: George Smith, Gwynedd Archaeological Trust, Bangor.
- Wood artefacts: Jane Foley, Foley Conservation, Builth Wells.
- Leather: Quita Mould, Barbican Research Associates.
- Environmental Material: Dr Mike Allen, Allen Environmental Archaeology.
- Numismatics: Peter Guest, Barbican Research Associates.

The cost for examination, conservation and archiving of finds discovered during the watching brief are not included within this quote.

If well preserved materials are found it may be necessary to employ additional staff. Furthermore, it may be necessary to suspend work within a specific region of the site, or across the whole site, while conservation and excavation/recording takes place. Aeon Archaeology accepts no responsibility for any costs incurred from delays as a result of unexpected archaeological finds.

The cost for the additional staff, resources, and time required to excavate/ record unexpected archaeological finds/ features are not included within this quote and a separate WSI and costs will be submitted to the client if necessary.

10.0 UNEXPECTED DISCOVERIES: TREASURE TROVE

Treasure Trove law has been amended by the Treasure Act 1996. The following are Treasure under the Act:

- Objects other than coins any object other than a coin provided that it contains at least 10% gold or silver and is at least 300 years old when found.
- Coins all coins from the same find provided they are at least 300 years old when found (if the coins contain less than 10% gold or silver there must be at least 10. Any object or coin is part of the same find as another object or coin, if it is found in the same place as, or had previously been left together with, the other object. Finds may have become scattered since they were originally deposited in the ground. Single coin finds of gold or silver are not classed as treasure under the 1996 Treasure Act.
- Associated objects any object whatever it is made of, that is found in the same place as, or that had previously been together with, another object that is treasure.
- Objects that would have been treasure trove any object that would previously have been treasure trove, but does not fall within the specific categories given above. These objects have to be made substantially of gold or silver, they have to be buried with the intention of recovery and their owner or his heirs cannot be traced.

The following types of finds are not treasure:

- Objects whose owners can be traced.
- Unworked natural objects, including human and animal remains, even if they are found in association with treasure.
- Objects from the foreshore which are not wreck.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown.

The British Museum will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

11.0 REPORT PRODUCTION

Following completion of the watching brief as outlined above, a report will be produced incorporating the following:

- Non-technical summary
- Introduction
- Project Design
- Methodology
- Archaeological Background
- Description of the results of the watching brief
- Summary and conclusions
- Bibliography of sources consulted.

Illustrations will include plans of the location of the study area and archaeological sites. Historical maps, when appropriate and if copyright permissions allow, will be included. Photographs of relevant sites and of the study area where appropriate will be included.

A draft copy of the report will be sent to the GAPS archaeologist and to the client prior to production of the final report.

12.0ARCHIVING

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. All plans, photographs and descriptions will be labelled, and cross-referenced, and lodged in the Gwynedd Historic Environment Record within six months of the completion of the project.

Bound copies of the report and an archive CD will be sent to the regional HER (Gwynedd Archaeological Trust, Craig Beuno, Garth Road, Bangor, Gwynedd LL57 2RT) and to The Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW) for long term archiving. Furthermore, a summary of the project will be sent to *Archaeology in Wales* for publication.

13.0 PERSONNEL

The work will be managed and undertaken by Richard Cooke, Archaeological Contractor and Consultant at Aeon Archaeology.

14.0 MONITORING

Monitoring visits can be arranged during the course of the project with the clients and with the appropriate GAPS archaeologist.

15.0 HEALTH AND SAFETY

Aeon Archaeology has a Health and Safety Policy Statement which can be supplied upon request. Furthermore, site-specific Risk Assessments and Method Statements are compiled and distributed to every member of staff involved with the project prior to the commencement of works.

16.0 INSURANCE

Liability Insurance – Towergate Insurance Policy 000467

- Employers' Liability: Limit of Indemnity £10m in any one occurrence
- Public Liability: Limit of Indemnity £2m in any one occurrence
- Legal Defence Costs (Health and Safety at Work Act): £250,000

The current period expires 30/09/14

Professional Indemnity Insurance – Towergate Insurance Policy 2011025521290

• Limit of Indemnity £500,000 any one claim

The current period expires 30/09/14

17.0 SOURCES CONSULTED

GAPS correspondence: 1015je01/D1834

Natural Resource Wales (NRW): Planning Statement

Robinson. W. 1998. First Aid for Underwater Finds

Standard and Guidance for Archaeological Watching Brief (Institute for Archaeologists, 1994, rev. 2001 and 2008).

COST ESTIMATE

All costs are based on a £150 day rate and include travel			
1. Partial watching brief (2	6 days		
days per week)			
2. Outline desk-based research	2 days		
Report, illustration and archiving	4 days		

By commissioning Aeon Archaeology to undertake this work the client agrees to be invoiced directly at the end of each calendar month for works to date or once the project concludes, whichever occurs first. In addition, the client agrees to pay the invoice no more than 1 calendar month after issue from Aeon Archaeology.

