
Field to the rear of Capel En-gedi, Rhiwgoch, near Harlech



Assessment Report

GAT Project No. 2081
Report No. 800
April 2009

Field to the rear of Capel En-gedi, Rhiwgoch, near Harlech
An Archaeological Assessment

GAT Project no. G2081

GAT Report No. 800

Prepared for Egniol Consulting
on behalf of Dŵr Cymru/Welsh Water

By J Kenney

April 2009

Cover: Capel En-gedi with the field behind

Gwynedd Archaeological Trust
Ymddiriedolaeth Archaeolegol Gwynedd

G2081. FIELD TO THE REAR OF CAPEL EN-GEDI, RHIWGOCH, HARLECH

ARCHAEOLOGICAL ASSESSMENT

CONTENTS

<i>SUMMARY</i>	2
1. INTRODUCTION	2
2. DESIGN BRIEF AND SPECIFICATION	2
3. METHODS AND TECHNIQUES	3
4. ARCHAEOLOGICAL RESULTS	4
5. SUMMARY OF ARCHAEOLOGICAL POTENTIAL	9
6. SUMMARY OF RECOMMENDATIONS	10
7. CONCLUSIONS	10
8. ARCHIVE	10
9. REFERENCES AND OTHER SOURCES CONSULTED	10
APPENDIX I: HER sites and listed buildings near the development area	12
APPENDIX II: Definitions of categories used for impact, field evaluation and mitigation	17
Figures	
Plates	

Figures

- Figure 1. Location of the site
Figure 2. Sites and features visible on aerial photographs around the study area
Figure 3. Part of John Evans' Map of Wales (1795)
Figure 4. Map and Survey of the Parishes of Llandanwg and Llanfihangel y Traethau in the County of Merioneth 1810 (Mostyn MSS 8604).
Figure 5. Part of tithe map for Llanfair parish (1840).
Figure 6. Part of Ordnance Survey First Edition County Series map Merionethshire XXVI.1 (1889).
Figure 7. Part of Ordnance Survey Second Edition County Series map XXVI.1 (1901).
Figure 8. Part of Ordnance Survey 1:10,560 map sheet XXVI NW (1953).
Figure 9. Features identified within the study area

Plates

- Plate 1. Capel En-gedi (PRN 28919) from north-east
Plate 2. Culvert/drain (PRN 30324) from south-east
Plate 3. Terraced ancient field boundary (PRN 30325) from south-west (arrows point to ends of scarp)
Plate 4. Ancient field boundary (PRN 30326) from south-west
Plate 5. Cairn overlying ancient field boundary (PRN 30326)
Plate 6. Post medieval field wall with probable ancient foundations (PRN 30327)

FIELD TO THE REAR OF CAPEL EN-GEDI, RHIWGOCH, HARLECH (G2081)

ARCHAEOLOGICAL ASSESSMENT

SUMMARY

An archaeological assessment was carried out in advance of the use of a field at Rhiwgoch, near Harlech as a temporary site compound for works being carried out by Dŵr Cymru Welsh Water. Probable Iron Age/Romano-British field boundaries were seen to extend into this field and the north-western boundary of the field probably also has origins in the Iron Age. It would be preferable for another field to be chosen for the compound but if this is not possible it is recommended that the ancient field boundaries are avoided by the compound. The area of the compound should be evaluated by strip and map techniques to check that no buried archaeology is put at risk from using this area.

1. INTRODUCTION

Gwynedd Archaeological Trust (GAT) was asked by Egniol Ltd on behalf of their clients Dŵr Cymru Welsh Water to carry out an archaeological assessment in advance of the use of a field at Rhiwgoch near Harlech as a temporary site compound (figure 1). The site covers an area of about 0.97 hectares immediately west of the cross roads at Rhiwgoch, where the roads to Llanfair and to Harlech meet.

The site compound is to be used as part of the upgrading works being carried out on the Harlech water supply system. These included a new link main from Llanfair to Harlech, a new water treatment works at Rhiwgoch and replacement of the raw water pipe from Llyn Eiddew Mawr to Rhiwgoch. All sections of the work have been preceded by archaeological assessments, strip and map evaluation was carried out on the link main and evaluation trenches followed by full excavation has taken place on the water treatment site. Further background information can be found in these reports: Evans 2008a (GAT report 753); Evans 2008b (GAT report 754), and Kenney 2009 (GAT report 775).

It is necessary to strip the topsoil from the area of the compound so that this can be retained in good condition to reinstate the field after use. No other groundworks are anticipated.

2. DESIGN BRIEF AND SPECIFICATION

A detailed project design has not been produced for this desk-based assessment but it follows a generic project design, which conforms to the guidelines specified in *Standard and Guidance for Archaeological Desk-based Assessment* (Institute of Field Archaeologists, 1994, rev. 2001 and 2008).

A desk-based assessment is defined as ‘a programme of assessment of the known or potential archaeological resource within a specified area or site on land, inter-tidal zone or underwater. It consists of a collation of existing written, graphic, photographic and electronic information in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource in a local, regional, national or international context as appropriate’ (*Standard and Guidance for Archaeological Desk-based Assessment*, IFA 2008, 2).

The aims of the assessment are:

- to identify and record the cultural heritage within the defined study area;
- to evaluate the importance of what has been identified;
- to recommend ways in which impact upon the cultural heritage can be avoided or minimised.

To comply fully with the aims expressed above it can be necessary to undertake a programme of Field Evaluation following the Desktop study and Field Visit. This is because some sites cannot be assessed by desktop or field visit alone, and additional fieldwork is therefore required. This typically takes the form of

geophysical survey or trial excavation, although measured survey and other investigations are also possible options. A full programme of assessment and evaluation may therefore consist of:

- Desktop study
- Field walkover
- Initial report
- Field evaluation
- Draft report
- Final report

This phase of the project concerns the first three phases only, and recommendations will be made for any field evaluation required.

3. METHODS AND TECHNIQUES

3.1 Desk top study

The desktop study comprised the consultation of maps, documents, computer records, written records and reference works that form part of the Historic Environment Record (HER), located at Gwynedd Archaeological Trust (GAT), Bangor. The HER includes Cadw's information on listed buildings, and also holds copies of documents from the Mostyn Collection in the Bangor University Archives. The archives held by the Meirionnydd Record Office, Dolgellau were consulted, particularly for information from the relevant tithe maps. Aerial photographs from the collection at the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) were examined. Published and unpublished papers on the area and on relevant aspects of archaeology in North Wales in general were consulted to gain a broader understanding of the study area. In particular the assessment reports carried out for other Dŵr Cymru works in the area have been used for background information (Evans 2008a (GAT report 753); Evans 2008b (GAT report 754), and Kenney 2009 (GAT report 775)).

Appendix I contains a list of sites, buildings and find spots listed in the GAT HER, the National Monuments Record (NMR) and Cadw's register of listed buildings around the study area. These sites are located on figure 2. The numbers marked on figure 2 are PRNs (Primary Record Numbers) identifying the sites on the HER, NPRN (National Primary Record Numbers) identifying the sites on the National Monuments Record and listed building record numbers.

3.2 Field Search

The field search was undertaken on 31st March 2009. The field is currently under short grass and earthworks and other features were clearly visible. Weather conditions were also favourable for the field search. In the north-eastern end of the field was a hole measuring about 3m by 6m used to insert equipment for pipe bursting to replace the pipe along this section of the water main. This hole had been dug on the line of the existing pipe through ground already disturbed by the pipe trench.

3.3 Report

The available information was synthesised to give a summary of the archaeological and historic background and of the assessment and recommendations, as set out below. The separate features, their evaluation and recommendations are listed separately, and a summary of the overall assessment of the area is given at the end.

The criteria used for assessing the value of features was based upon those used by the Secretary of State for Wales when considering sites for protection as scheduled ancient monuments, as set out in the Welsh Office circular 60/96. The definitions of categories used for impact, field evaluation and mitigation are set out in Appendix II.

4. ARCHAEOLOGICAL RESULTS

4.1 Topographic description

The proposed site of the temporary compound lies in a small pasture field on the north-west facing hill slope above the town of Harlech at between c. 200 and 210m OD (figure 1). The ground continues to rise to the east until it reaches a higher plateau, before rising again to the hills. The site overlooks the coastal plain and Cardigan Bay to the west. The field is roughly triangular, bounded by narrow roads on its south-eastern and north-eastern side, and defined by a noticeably wandering wall on its north-western side. The field is under pastureland, which has been improved in that there were few weed species or bushes growing within the field but no significant stone removal has been undertaken. Occasional stones lie on the surface of the field and these become denser at the south-western end. The condition of the field suggests that it has not been ploughed within recent centuries and may not have been ploughed since antiquity.

This landscape is defined by the Cambrian rocks of the Harlech dome (Bowen and Gresham 1967, 1), which the British Geological Survey describes as Cambrian shales, sandstones and quartzites (British Geological Survey 1930). The upper part of the town and castle of Harlech stand on a rocky shelf, which falls steeply to the former shoreline, masked by the sands of Morfa Harlech. The soils have developed on boulder clay and exposed undifferentiated drift, but this is probably quite shallow. In the fields to the south of the site there are numerous boulders on the ground surface, but to the north the fields have been more intensively farmed and these boulders have been removed.

4.2 Archaeological and historical background

The previous assessments (Evans 2008a, Evans 2008b and Kenney 2009) carried out for other stages of this project have discussed the archaeological and historical background of the area and this report will concentrate on those aspects directly relevant to the development area. See figure 2 for the location of sites mentioned.

4.2.1. Prehistoric period

No Mesolithic sites are known in the area but there is some environmental evidence for early forest clearance (Chambers and Price 1988). Neolithic activity is represented by chamber tombs, but all of these are to the south of the study area (Bowen and Gresham 1967). The Bronze Age is represented mainly by burial cairns and cists survive, but these are concentrated in the uplands, and none are known from close to the site (Lynch 1984; Bowen and Gresham 1967, 88, and Kelly 1982, 132). Occasional objects dating from the Bronze Age have been found including a hoard of palstaves (PRN 2906) (Bowen and Gresham 1967, 113) and a gold torque (PRN 2896) from Harlech (Bowen and Gresham 1967, 124, and OS card SH 53 SE 3). The Royal Commission Inventory records a bronze spear head found near Maes yr Aelfor about 500m south-east of the study area in 1866, but 'nothing is now known of this implement' (RCAHMW 1912, 111).

The present site is close to what may have been a routeway in the Bronze Age. It has been suggested that this starts on the banks of the Afon Artro and is marked by standing stones (Bowen and Gresham 1967, 57-59). The road leading north-east from the cross roads on which the site is located runs along a very straight route known as Y Fonllech Hir, which leads towards the hill of Moel Goedog with an Iron Age enclosure on top. The route is marked by 7 standing stones, and beyond where the route parts from the modern road two Bronze Age burial cairns may also have acted as markers. The route leads over the hills to the Trawsfynydd Basin (Lynch 1984, 34-35). The cairns, one of which has been excavated (Lynch 1984), are certainly Bronze Age and the standing stones are assumed to be so, dating this route to that period. Before the trackway reaches Y Fonllech Hir its route is uncertain, but there is a record of a standing stone (PRN 1048) about 400m from the present site, which may have formed a route marker. This stone seems to have been removed by the farmer, so it cannot now be confirmed if this was a genuine Bronze Age standing stone.

4.2.2 Late Prehistoric / Romano-British

Hut circle settlements and their associated field systems are one of the outstanding features of the archaeology of the Ardudwy Uplands. These sites can be difficult to date without excavation but most stone-built roundhouse settlements are assumed to be Iron Age or Romano-British (Smith 1999, Ghey *et al* 2007). Two circular enclosures with central stone-built roundhouses have been excavated at Moel y Gerddi (PRN 1000) and Erw-wen (PRN 1036) not far from the study area. The excavations suggested a date in the first millennium BC for the main phase of occupation at both sites and in both cases the stone roundhouse was preceded by a timber one (Kelly 1988).

The present site is adjacent to the north-eastern limit of the scheduled area (SAM M010) around the most extensive system of huts, enclosures and fields in the area. This is the site known as Muriau Gwyddelod (PRN 1055) and is composed of two well-preserved courtyard houses, built close together and joined by sub-circular enclosure and surrounded by small fields. The north-eastern courtyard has 3 stone-built roundhouses, while the south-western one seems to have a single roundhouse, which is confused by a later structure (Bowen and Gresham 1967, 199, fig 85). The scheduled area (M010) also includes a single roundhouse in a small stone enclosure (PRN 1054) and a massive roughly circular wall (PRN 1056) that may have enclosed another settlement, although little can be seen of the huts (Bowen and Gresham 1967, 198, 212). The historic maps show that the name 'Muriau Gwyddelod' was originally given to this site and not to the courtyard settlements (figure 6).

The area is rich in ancient field boundaries, many of which are probably contemporary with the roundhouse settlements. Although the scheduled area is 700m in length the ancient field system can be seen on aerial photographs to continue much further. The field boundaries, visible as low, tumbled lines of stones, run through the fields to the south of the study area and into the fields to the north-east of the water treatment works. The fields to the north of the study area have been more intensively farmed and ploughed so remains of stone walls do not survive but terraces can be seen on the aerial photographs. As will be discussed below these may be medieval in date but it is possible that they are earlier. There are hints of perpendicular boundaries dividing strip fields into smaller rectangular enclosures. While strip fields are typical of the medieval period rectangular fields, often referred to as 'celtic fields', are more typical of earlier periods. Certainly some lynchets recorded by Gruffydd (1992) (GAT report 44) seem to relate well to the earlier settlements.

To the south of the study area is the north-eastern end of a trackway known locally as Y Ffordd Wyddelig (the Irishman's road) (PRN 2901) (Kelly 1982, 152). This is defined by two tumbled walls and runs directly to the gap between the two courtyard settlements of Muriau Gwyddelod. This is recorded in the HER as early medieval but as Kelly (1982, 152) says it is 'clearly associated' with the Iron Age/Romano-British settlement. The Inventory suggests that this is the start of Y Fonllech Hir trackway (RCAHMS 1912, 109), due to its alignment, but there is no clear evidence to show that it ever continued on up the hill.

About 70m south of the trackway is a sub-rectangular enclosure defined by tumbled walls (PRN 2902). Its walls are of a similar character to the other early enclosures (Kelly 1982, 152), but it might be medieval rather than prehistoric. Some of the small modern fields in this area have rather irregular walls, some of which seem to reflect or continue the tumbled traces of the earlier field system. The curving wall enclosing Muriau Gwyddelod on its northern side probably traces the original line of the enclosure around this settlement to which its radiating boundaries ran. Many of the modern field boundaries may therefore preserve the ancient field pattern, possibly even dating back to the Iron Age.

A site (PRN 20,613) just south-east of the existing water treatment works has recently been excavated by Gwynedd Archaeological Trust in advance of the works expansion. The post-excavation work is still to be carried out but early indications suggest that this was a Romano-British settlement site and may have been the destination to which Y Ffordd Wyddelig was heading (Robert Evans, *pers comm.*).

About 300m north of the study area is the roundhouse settlement of Cefnfilltir (PRN 1053) enclosed by a large sub-circular wall (Bowen and Gresham 1967, 197). About 500m to the north-east is a hut circle (PRN 1052) defined by earth banks but surrounded by traces of wandering walls (Bowen and Gresham 1967, 186, OS NAR card SH 53 SE 12). The study area must be seen as being in the middle of a remarkably full and well-preserved landscape probably dating largely from the Iron Age and Romano-British period. However, evidence of Roman military activity is very rare in this area. The Roman road between Tomen-y-Mur and Pennal (Margary 1996, 354-5) took an inland route avoiding coastal Ardudwy, but late Roman coin hoards found at Harlech Castle and Llanbedr (Bowen and Gresham 1967, 259) do suggest some trade or other contact between the Ardudwy area and the Roman army.

4.2.2. Medieval Period

There is some evidence for early medieval activity in the area as two early Christian inscribed stones are built into the fabric of Llandanwg old church (Nash Williams 1950, 278-9), and two more stones of similar date have recently been found there (Davidson *pers comm.*). An early foundation for the church (PRN 4790) is suggested by its original circular cemetery that is now buried by sand, though much of the present church appears to be of thirteenth century date (Davidson 2001, 343-4).

The study area lies close to the north-western boundary of the parish of Llanfair in the commote of Arduwy (Thomas 2001). Harlech Castle (PRN 2908), built in the thirteenth century by Edward I, dominates the area, surrounded by the medieval borough. Work on the castle started in 1283 and it was completed by about 1290. The town was not walled, unlike Caernarfon, and did not thrive. Most of the town was destroyed by Owain Glyndŵr in 1404. The castle was used as Glyndŵr's headquarters until 1408-9 and was also a Lancastrian stronghold from 1461-8 (RCAHMW 1921, 59-60, Lloyd 1986).

Closer to the study area there are the remains of several probably medieval settlement or small farmsteads. About 370m south of the study area Gresham noted an unenclosed hut group with two massively built roundhouses (PRN 1050, Bowen and Gresham 1967, 183; OS NAR card SH 53 SE 13). However, revisiting this site for the Ardywy Survey Kelly (1982, 142) considered that the structures were better interpreted as rectangular and he found two more rectangular house platforms in the field to the north with traces of field boundaries around them (Kelly 1982, 158-9). This site seems, therefore, more likely to be a medieval settlement than an Iron Age one. There are also two rectangular house platforms (PRN 2907) just north-west of the Muriau Gwyddelod settlement, possibly reusing the earlier field boundaries. The identification of medieval rather than earlier walls in either the tumbled remains or upstanding walls is difficult as both seem to have used small, irregular fields. It is likely that the field system changed very little in the medieval period from what went before and some walls carried on in use from the Iron Age through to the present day. To the north-west of the study area long terraces can be seen on aerial photographs running parallel to existing walls and creating long, narrow strip fields. These fields are not indicated on the tithe maps but are typical of medieval agriculture. However, the boundaries run from the Muriau Gwyddelod settlement to the Cefnfilltir farmstead and seem to fit very well in the Iron Age/Romano-British landscape. Hints at dividing walls across these strip fields may also indicate an early rather than medieval date for these fields. However it is likely that they were also cultivated in the medieval period.

To the north-east of the water works are the earthwork remains of a rectangular hut probably of medieval date (PRN 20,612). Parallel to this runs a wandering wall (PRN 29,252) much the same as other tumbled walls assumed to be Iron Age/Romano-British in date, but the relationship of this one to the hut suggests a medieval date for this one wall at least.

4.2.3 Post-Medieval

The borough of Harlech failed to recover from Owain Glyndŵr's occupation. The castle was again garrisoned in the Civil War but fell after a brief siege on 10 March 1647, after which orders were given for its demolition. These were not carried out, but the castle was allowed to decay until the 18th century when it became a tourist attraction (Lloyd 1986, 36, 37). The town, however, remained poor. Fenton visited it in 1808 during his *Tours in Wales* and described it as the 'most forlorn, beggarly place imaginable' (Fenton 1917, 105). Improved communications due to the creation of turnpike trusts and then a rail link increased the town's prosperity in the mid 19th century (Lloyd 1986, 61).

John Evans' 1795 map of Wales shows a short track heading east from Harlech, that may suggest the road leading from Harlech to the study area had an 18th century origin, although most of it must have been a footpath rather than a road (figure 3). In 1849 and 1856 Lord Mostyn bought much land in and around Harlech from the Cors y Gedol Estate. With the purchases came some earlier maps and one dated 1801 shows that this road did indeed lead to other tracks and to the road to Cwm Nantcol (figure 4). However, map ends just before the cross roads so it does not show whether the other roads were in use at this date, nor does it give an indication of who owned the study area in the early 19th century.

The field is shown on the tithe map (figure 5) just as it appears today, except that the chapel in the eastern corner of the field had not yet been built. The road on the south-east side of the study area is shown on the tithe map as an unenclosed track, and it remained unenclosed until at least 1953 (figure 8). The present boundaries at each side of the road at this point are fences and this section has never been walled. Symbols on both the tithe map and the County Series maps (figures 6 and 7) show that the study area was considered to be part of land parcel 248, which continued to the south of the road and the rough grazing symbols suggest a very different agricultural regime to parcel 244 just the other side of the wandering wall to the north. The triangle of the study area was originally part of a rectangular field cut in half by the track and partially enclosed by paddocks associated with the house of Pen-rhiw-goch. It is likely that its original south-eastern boundary was formed by the ancient trackway (PRN 2901) and that its north-western boundary probably also dates back to the Iron Age. The tithe map shows that it was part of a pasture field called Tir Goed. Possibly this and the other rough fields in the area, including that containing Muriau Gwyddelod had been covered by woodland, so helping to protect the archaeological remains from agricultural damage.

The chapel in the eastern corner of the field appears on the 1901 map but not on the 1889 map. This fits with the date of construction of 1894 given on a plaque on the gable end of the chapel. This was named Capel En-gedi and was built by the Scotch Baptists. In 1811 the Baptist community of Harlech split, with some families becoming Scotch Baptists, and Capel Rehoboth (listed building number 25508) on the eastern outskirts of Harlech town was built in 1820 to accommodate them (Lloyd 1986, 66), along with an adjacent burial ground. In 1841 the community built a baptismal well (PRN 29309) just outside the town by the road leading to the site later used for Capel En-gedi (figure 1). In the Baptist tradition baptisms normally took place in the open air, but the use of a lake, river or the sea was more usual than a purpose-built structure (Bassett 1977, 73). In Harlech the early Baptist community used the former mill pond near the castle (Lloyd 1986, 44), but the community seems to have been expanding and required a purpose-built well. The construction of Capel En-gedi appears to reflect the increasing popularity of this particular form of worship.

4.3 Statutory and non-statutory designations

The study area lies within the Snowdonia National Park and the Ardudwy Landscape of Outstanding Historic Interest (HLW (Gw) 2), where it is described as ‘a large, exceptionally rich and well-studied landscape, situated on the western flanks of the Rhiniog Mountains, containing extensive relict evidence of recurrent land use and settlement from prehistoric to recent times’ (Cadw 1998, 76). The nearest Scheduled Ancient Monument lies just to the south-west of the study area. This includes the settlements and field systems of Muriau Gwyddelod (Me 10). The homestead of Cefnfilltir about 270m north of the study area is also a Scheduled Ancient Monument (Me 98). There is only one listed building within 500m of the study area, a 18th or 19th century field barn (listed building 81078, PRN 28920).

4.4 Aerial Photographs

Aerial photographs are particularly useful in tracing ancient field boundaries without the time necessary to survey them in detail on the ground. All features visible around the study area have been transcribed from available aerial photographs and are shown on figure 2.

4.5 The Archaeological Survey (Figure 8)

Six features were identified within the study area. These are shown on figure 9 and described below with recommendations for further assessment and mitigatory measures, where appropriate. The new features were allocated PRN numbers and they will be added to the HER.

PRN 28,919 En-gedi Scotch Baptists’ Chapel Plate 1

SH 5905 3043

Period: Post medieval

Category: B Impact: None

Stone built chapel, still in use. Built, according to the plaque on the wall in 1894, in what RCAHMW (NPRN 8479) describes as vernacular style of gable entry type. The plaque located high on the gable end reads:

“EN-GEDI
ADDOLDY
Y

BEDYDDWYR ALBANAIDD
1894”

(En-gedi place of worship of the Scotch Baptists)

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoid

PRN 30323 Hollow

SH 59041 30461

Period: Unknown

Category: E Impact: Significant

A shallow sub-circular hollow measuring about 4.5m in diameter and up to 0.3m deep. The neat, regular shape of this feature suggests a deliberately shaped feature rather than a borrow pit or other quarry hole. It may be a

pond to water livestock but is not shown on the early OS maps. Topsoil stripping may expose the fill of this feature and vehicles tracking over it would cause considerable damage. It is recommended that topsoil stripping does not take place in this area and the feature is fenced off and avoided.

Recommendations for further assessment: *None*

Recommendations for mitigatory measures: *Fence and avoid*

PRN 30324 Drainage Plate 2

SH 59002 30499

Period: Post medieval

Category: D Impact: None

A stream runs across the northern corner of the field in a dug channel. Low gaps have been constructed in the walls to allow it to pass under them. The stream is shown on the 1889 map and was presumably canalised when the present walls were built or rebuilt in the late 18th or early 19th century. Just to the south-west is an 18m section of what appears to be a stone-lined culvert. This has partially collapsed leaving a linear hollow in the field surface. It is shown on the modern map as a drain and seems to run into the stream. To avoid the risks of flooding it is recommended that this corner of the field is avoided.

Recommendations for further assessment: *None*

Recommendations for mitigatory measures: *Fence and avoid*

PRN 30325 Ancient field boundary Plate 3

SH 58975 30449 to SH 59046 30424

Period: Iron Age/Romano-British

Category: A Impact: Significant

Running south-east to north-west across the eastern end of the field is a prominent scarp. This faces south-west and is up to 0.8m high. Its south-eastern end is quite straight and is most clearly defined, it then becomes slighter and more wandering but still continuous. Numerous small stones can be seen in the face of the scarp. This feature was not recognised on the aerial photographs, although knowing its location does allow the more prominent south-eastern end to be recognised on the 1971 photograph. As the sun generally will light this feature from the south-west it is rarely in shadow and this explains the difficulty of seeing it on APs.

The north-western wall of the field bulges out to meet this boundary and it is likely that they formed part of the same field system. The scarp may be largely a lynched created by ploughing but the stones in its face suggest it was either reverted with stone or there was a wall along its top. This almost certainly forms part of the Iron Age/Romano British field system associated with Muriau Gwyddelod. The stones on its face are just below the topsoil and topsoil stripping here is likely to disturb this feature. Vehicles running over the stripped boundary would certainly cause significant damage. It is recommended that the area along and near the boundary is not stripped but is fenced off to prevent access.

Recommendations for further assessment: *None*

Recommendations for mitigatory measures: *Fence and avoid*

PRN 30326 Ancient field boundary Plates 4 and 5

SH 58942 30409 to SH 58937 30366

Period: Iron Age/Romano-British

Category: A Impact: Significant

A slight and wandering line of stones forms a low bank running across the south-western end of the field, running approximately north to south. Most of the stones are grass covered but some protrude. The stony bank is 1.5m wide and generally only about 0.2m high. Towards the northern end is a heap of stones partially overlying the bank. These stones are less overgrown than the bank and probably represent a later clearance cairn. To the south-west of the bank are numerous stones scattered on the field surface. Many of these are natural but some seem to form short lines.

This feature was just visible on the 1971 aerial photograph and could be seen quite clearly on that to be a continuation of the much better preserved ancient wall to the south-east of the road. On the ground this was confirmed and this stony bank is the denuded remains of a wall of the Iron Age/Romano-British field system. All the south-western end of the field should be avoided and excluded from the compound.

Recommendations for further assessment: *None*

Recommendations for mitigatory measures: *Fence and avoid*

PRN 30327 Ancient field boundary Plate 6

SH 59004 30517 to SH 58898 30381

Period: Iron Age/Romano-British

Category: A Impact: Significant

The existing north-western boundary of the field appears on the ground to be similar to the other walls in the area. It is about 1.5m high and constructed of rounded glacial boulders. Its difference is evident from the air or from maps as its irregular line contrasts with the regular rectangular fields surrounding it. Other fields also have these irregular boundaries, particularly the boundary to the north of Muriau Gwyddelod, which continues to the south of the road. The way in which the boundary encircles the settlement and relates to the radiating walls running from the settlement strongly suggests that it is in origin contemporary with the settlement. Similarly the north-western wall of the study area relates well to the Ffordd Wyddelod and related field boundaries including the two identified within the study area. Both these tie into the standing wall at points where the wall seems to bulge to meet the ancient boundaries.

Clearly this wall was rebuilt in the late 18th or early 19th century along with more recent walls but enough of the ancient wall must have remain to make it worthwhile rebuilding exactly along the old line rather than making it more regular. Most of the walls in the area have large stones in their bases but this wall seems to have more and larger stones than others. These stones are likely to be the in situ remains of the earlier wall. For this wall to be reused in recent times it probably also formed part of the medieval field system, which in this area seems to have been little different to the Iron Age field system. Just because some of the walls of the ancient field system have been reused and others largely demolished should not detract from the fact that they have origins in the same system and their foundations at least are likely to be of the same date.

This wall should not be impacted on by the compound but should not be broken through or otherwise disturbed without archaeological investigation.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoid

5. SUMMARY OF ARCHAEOLOGICAL POTENTIAL

5.1 Summary of features identified

The chapel is an important part of the local history of the Harlech area but is not effected by the proposed works. The small hollow (PRN 30323) is probably of a late date but with so much earlier archaeology in the area this cannot be assumed. As the field is to be used as a temporary compound any damage to this feature is best avoided rather than excavating it to determine its importance. The drainage features (PRN 30324) are late and of limited importance but are best avoided, if only because damage to them will cause flooding problems.

Of greatest significance are the ancient field boundaries identified in this field. Other fields to the north have been more intensively used for arable agriculture and most traces of early boundaries have been removed. This study has shown that this field was not ploughed in recent times and may not have been ploughed since the Romano-British period. The ancient field boundaries have therefore survived even if some are not as well preserved as those in the fields to the south of the road. If recent walls built on ancient foundations are combined with denuded ancient walls and ploughed-out terraces an impressively extensive field system can be reconstructed around Muriau Gwyddelod joining it to other contemporary settlements in the area. This is landscape archaeology at a level of detail found in only a relatively small number of places elsewhere in Britain, and the study area forms a significant part of this landscape.

5.2 Environmental Remains, Soil Morphology and Artefactual Potential

The terraced field boundary (PRN 30325) is likely to preserve important soil horizons and other deposits might be preserved under the denuded wall (PRN 30326) and the existing standing wall (PRN 30327). If any disturbance of these features proved to be necessary these deposits should be investigated as they could contain more information than might be expected from artefacts.

Artefacts are sparse on later prehistoric sites excavated in the area (Kelly 1988), and equally so on medieval rural sites, so even if buried archaeology is present few artefacts would be expected.

6. SUMMARY OF RECOMMENDATIONS

The proposed compound requires the stripping of the topsoil within the field to allow its reinstatement after use. Although this would disturb the ground to a depth of little more than 100mm the lack of ploughing in the field means that no significant depth of plough soil has built up and stones relating to archaeological features can be seen on or very close to the ground surface. Topsoil stripping over the features identified would risk disturbance to these features and running vehicles over the stripped features would certainly cause significant damage.

Ideally a different field should be chosen for the compound. All fields in the immediate area have a risk of buried archaeology but fields that have been more intensively cultivated will have a greater soil depth and much of the archaeology may already have been destroyed.

If this alternative is not possible and the Capel En-gedi field must be used it is recommended that the identified features are entirely avoided by the compound. An area either in the middle of the field between the two ancient boundaries or near the north-eastern side of the field might be identified for the compound. This could be fenced off and this area alone would be stripped. There is a risk of unidentified buried archaeology, which could be damaged by repeated vehicular traffic over the thin soils. Due to this risk the stripping would have to expose the natural sub-soil and this would have to be checked for archaeological features. If these were found full excavation might be necessary, although it could be possible to alter the area of the compound and rebury and fence off the archaeology.

7. CONCLUSIONS

Field boundaries forming part of the extensive Iron Age/ Romano-British field system that covers this area have been identified within the field chosen for a temporary compound. It would be preferable to choose another, more intensively cultivated field for the compound but if this is not possible an archaeological strip and map evaluation is recommended over the area of the compound, which should avoid the features identified above.

8. ARCHIVE

The archive consists of copies of historic maps, notes and 34 digital images taken on the field visit. Three copies of the bound report will be sent to the SNPA archaeologist, and a further copy sent to the HER Archaeologist at the curatorial division of Gwynedd Archaeological Trust, Bangor, for deposition in the Regional HER. A copy of the report will be provided to the National Monument Record, Royal Commission on the Ancient and Historic Monuments of Wales, Aberystwyth.

9. REFERENCES AND OTHER SOURCES CONSULTED

Bassett, T.M., 1977. *The Welsh Baptists*, Swansea

Beverley Smith J. and Beverley Smith, L., 2001. *History of Merioneth Vol. II*. Merioneth Historical Society, Dolgellau

British Geological Survey, 1930. *Geological survey of England and Wales*, Solid Edition, sheet 9 and 10

Bowen, E.G. and Gresham, C., 1967. *History of Merioneth Vol. I*. Merioneth Historical Society, Dolgellau

Cadw, 1998. *Register of Landscapes of Outstanding Historic Interest in Wales*. Cadw, Cardiff

Chambers, F.M. and Price, S.M., 1988. 'The Environmental Setting of Erw-wen and Moel y Gerddi: Prehistoric Enclosures in Upland Ardudwy, North Wales', *Proc. Prehistoric Soc.* **54**, 93-100

Davidson A., 2001. 'Parish Churches', in Beverley Smith and Beverley Smith (eds) 2001, 326-385

Evans, R., 2008a. *Harlech to Llanfair Link Main: an archaeological assessment (G2045)* (Unpublished GAT Report No. 753)

- Evans, R., 2008b. *Rhiwgoch Water Treatment Works, Harlech: an archaeological assessment (G2046)* (Unpublished GAT Report No. 754)
- Fenton, R.A., 1917. *Tours in Wales (1807-1813)*
- Ghey, E., Edwards, N., Johnston, R. and Pope, R., 2007. 'Characterising the Welsh Roundhouse: Chronology, Inhabitation and Landscape', *Internet Archaeology* **23**.
- Gruffydd, A., 1992. *Investigations near Muriau Gwyddelod Hut & Field System, Talsarnau* (Unpublished GAT Report No. 44)
- IFA, 2008. *Standard and Guidance for Archaeological Desk-based Assessment* (1994, rev. 2001 and 2008).
- Kelly, R., 1982. *The Ardudwy Survey: Fieldwork in Western Merioneth 1971-81*. *Journal of the Merioneth Historical Record Society* **IX** vol II, 121-162.
- Kelly, R., 1988. 'Two Late Prehistoric Circular Enclosures near Harlech, Gwynedd', *Proc. Prehistoric Soc.* **54**, 151
- Kenney, J., 2009. Rhiwgoch, raw water main replacement works: archaeological assessment (G2055). (Unpublished GAT Report No. 775)
- Lloyd, L.W., 1986. *The Book of Harlech*, Buckingham.
- Lynch, F.M. 1984. 'Moel Goedog Circle: a Complex Ring Cairn near Harlech, *Archaeol. Cambrensis* **CXXXIII**, 8-50
- Margary, I.D., 1973. *Roman Roads in Britain*. Baker, London
- Nash Williams V. E., 1950, *Early Christian Monuments of Wales*. University of Wales Press, Cardiff
- RCAHMW, 1921. *Inventory of the County of Merioneth*. HMSO, London
- Smith, G., 1999. 'Survey of prehistoric and Romano-British settlement in North-West Wales', *Archaeol. Cambrensis* **CXLVIII** (2001), 22-53.
- Thomas, C., 2001. 'Rural society, settlement, economy and landscape', in Beverley Smith and Beverley Smith (eds) 2001, 168-224

GAT Historic Environment Record

- Ordnance Survey 25 inch County Series maps Merionethshire sheet XXVI.1. First Edition (1889); Second Edition (1901)
- Ordnance Survey 1:10,560 map, fourth edition, Merionethshire sheet XXVI NW (1953)
- John Evans' Map of Wales, 1795

Bangor University Archives

- Mostyn MSS 8604: Map and Survey of the Parishes of Llandanwg and Llanfihangel y Traethau in the County of Merioneth 1810

Merioneth Record Office, Dolgellau

- Tithe map for the parish of Llanfair in Merionethshire 1840.
- Tithe Apportionment Schedule for the parish of Llanfair in Merionethshire 1840.

RCAHMW, Aberystwyth

Aerial Photographs

Verticals

- RAF 540/464, frames 3007 and 3008, date 20/04/1951
- OS 71 234, frame 180, date 21/05/1971

APPENDIX I: HER sites and listed buildings near the development area

Table 1. HER sites near the study area

PRN	NPRN	Sitename	NGR	SAM	Site type	PERIOD	Form	
1048	55198	Standing Stone (site of) nr Tyddyn Y Felin	SH59483047		Standing stone	Prehistoric	Recorded	Standing stone at Rhiw-goch, 5ft high by 4ft x 1ft. It stands at SH59483047, on a hillock amongst broken grounds and is one of a series marking an ancient trackway. The standing stone was removed in 1970 whilst ploughing by Mr.J.Evans who could not recall its exact site or what became of it. Two possible stones could account for this site, neither of which appears to be real antiquities. 1- natural slab apparently set into ground and leaning over, some 20m west of 2. 2- natural perched block on rocky eminence at or near Gresham's NGR.
1050	55200	Hut Group + Field System, W of Clogwyn Caseg-Wen	SH59203010		Hut settlement	Medieval?	Stone built feature	Two huts with small paddock on the N side, as described by Gresham. The two huts are not really clear although the whole site has been built over and robbed by recent folds and field walls. Gresham's paddock is in fact part of a much larger field system comprising well defined lynchets and small fields stretching for at least 200m to be N and NE of the site. The area was sketch survey in advance of partial clearance march 1982. Gresham's two round huts are in fact best interpreted as the much disturbed and robbed remains of two rectangular or sub-rectangular structures, probably associated with the clear remains of two platform houses underneath the corners of the recent sheepfolds at SH59223014 and SH59183016. The field system is as noted above. A possible standing stone lies in the corner of the modern field at SH59063012. <3> Two partly destroyed huts, massively built of large laid stones situated beneath a rocky cliff. Small paddock to N; diameter internally of 12ft and 10ft. <5>
1052	55202	Hut Circle + Field System, nr Tyddyn y Felin	SH59413088		Hut circle	Iron Age/Romano-British	Earthworks	SH59413088. Only earth banks remain of a hut circle of 20ft. Internal diameter at above NGR, with traces of adjoining wandering walls. The hut circle is probably of type iv undated. The associated field walls in the vicinity are much robbed and now barely discernable. The wandering walls form only a small part of a substantial field system which extends for at least 150m to the S and SE of the hut. There are a number of terraces and lynchets, some of which are quite well formed.
1053	55203	Cefnfilltir Hut Group (Enclosed)	SH59023080	M098	Hut circle settlement	Iron Age/Romano-British	Stone built feature	Enclosed homestead of a type dating from the Roman and immediate post Roman period. It consists of an almost circular enclosure of about 90ft diameter, with a surrounding wall originally some 8ft thick. Within the enclosure is a massively built hut circle of 28ft diameter, with an entrance on the west. Two smaller hut-circles of 6 and 8 ft diameter may be later additions. The enclosure wall is

								best preserved on the north, to the east it has been covered by dumps of field clearings and to the south mostly destroyed by a field wall built over it. The two smaller hut circles appear to be small square annexes to the main hut circle. There was an application to clear surrounding fields of stone. Site visit:- Clearance dumping of stone to be kept well clear of the site. The site itself is bracken infested and some field clearance material has been dumped on the enclosure wall on the N side of the site.
1055	55205	Muriau Gwyddelod : Hut Circle & Enclosure	SH58603017	M010	Settlement - enclosed			Massive well preserved court yard house of a type dated to Roman and immediate post Roman. Circular in plan with an overall diameter of some 60ft, entered by a doorway facing NW. Within it are the possible remains of one circular room lying beneath a recent construction, which has partly destroyed it. Possibly a beast house (see PRN 2899). This hut is joined to the second hut by a wall forming an enclosure. <2> The southern hut and enclosure appear to have been somewhat rebuilt and may be either type iv bi (3rd-5th century AD) or type iii a (ia) in RCAHM classification. The huts are linked by a bank of earth and stones. <3>
1056	55206	Muriau Gwyddelod : Hut And Field System	SH58233028	M010	Hut circle settlement	Iron Age/ Romano-British	Stone built feature	Hut - circular, enclosure
2899	55257	Muriau Gwyddelod, Enclosed Homestead, Harlech	SH58553016	M010	Settlement - enclosed	Medieval?	Stone built feature	This is a confused entry but PRN 1055 suggests that PRN 2899 is supposed to refer to the later structure over the roundhouse settlement and that it is possibly a beast house.
2900	55258	Muriau Gwyddelod Field System, Harlech	SH58603017	M010	Field system	Unknown	Earthworks	Strip field, ridge & furrow
2901	55259	Y Ffordd Wyddelig (Near Muriau Gwyddelod), Harlech	SH59023035		Trackway	Iron Age/ Romano-British	AP site	Y Ffordd Wyddelig (The Irish Road). Local name for a track about 4m wide between two tumbled walls. Leads to the Muriau Gwyddelod homestead complex and is clearly associated with this (Kelly 1982, 152)
2902	55260	Sub - Rectangular Enclosure Near Muriau Gwyddelod	SH58973024		Enclosure	Unknown	Stone built feature	Sub-rectangular enclosure about 45m by 30m, defined by low tumbled walls similar to those in the field system belonging to Muriau Gwyddelod. No traces of an entrance (Kelly 1982, 152)
2907	55264	Muriau'r Gwyddelod - Two Long Huts, Harlech	SH58513027	M010	Settlement	Medieval	Stone built feature	Hut - rectangular
15641	0	DRS, Muriau Gwyddelod	SH58503027	M010	Deserted rural settlement	Medieval	Stone built feature	Hut - rectangular
15642	0	DRS, Muriau Gwyddelod	SH58523028	M010	Deserted rural settlement	Medieval	Stone built feature	Hut - rectangular

27623	0	Sheepfold W of Maes yr Aelfor	SH59083017		Sheepfold	Post medieval		Sheepfold
27624	0	Maes yr Aelfor	SH59523025		Farmhouse and Outbuildings	Post medieval		Farmhouse and Outbuildings
27628	0	Sheepfold NE of Rhiwgoch	SH59453058		Sheepfold	Post medieval		Sheepfold
27629	0	Enclosure	SH59503055		Enclosure	Unknown		Enclosure
27630	0	Sheepfold? E of Rhiwgoch	SH59513056		Sheepfold?	Unknown		Sheepfold?
28910	0	Sheepfold N of Tyddyn-du	SH59123009		Sheepfold	Post medieval		Sheepfold
28911	0	Irregular shaped enclosure N of Tyddyn-du	SH59213013		Enclosure	Unknown		Enclosure
28912	0	Sheepfold 2 N of Tyddyn-du	SH59273003		Sheepfold	Post-medieval		Sheepfold
28919	8479	Engedi Baptist Chapel	SH59053043		Chapel	Post-medieval	Building	Chapel
28920	0	Field Barn	SH58863008	LB GII	Barn	Post-medieval	Building	Barn
28922	0	Muriau'r Gwyddelod Ancient Landscape	SH58583027	M010	Landscape	Prehistoric-medieval		Landscape
28923	0	Possible Standing Stone (site of?)	SH59063012		Standing stone?	Unknown	Site of	Standing stone?

Table 2. Listed buildings near the study area

Listing number	Name	NGR	Listing grade	Period	Description
81078	Field Barn	SH58863008	Grade II	18 th or 19 th century	C18 or C19 field barn, not shown on the tithe map of the parish, 1849; its isolated location, well away from the nearest farmstead, may have been one reason for not being annotated on the map. Formed part of the extensive farmstead at Tyddyn Du.

Table 3. National Monument Record sites near the study area

NPRN	Name	NGR	Type	PERIOD	
8479	Engedi Baptist Chapel, Penrhiwgoch	SH59063043	Chapel	Post Medieval	Chapel built pre-1900 in vernacular style, gable entry type. Status (2002): unknown. Known locally as the 'bread and cheese chapel' because the congregation was so dispersed and the chapel so remote, that they were given bread and cheese when attending. Local information obtained by T.Driver from Harlech Historical Society in 2006.
300,000	Muriau'r Gwyddelod Ancient Village; Settlement & Field Enclosures	SH58543018	Field system; settlement	Iron Age; Roman; Prehistoric	Muriau'r Gwyddelod, or 'Irishman's walls' above Harlech, is a largely intact farming landscape of Iron Age or Romano-British date with a double hut group enclosed in a curving paddock and radiating field walls linking to other circular and oval homesteads nearby. Some of the field walls still in use fossilize the lines of boundaries first laid out in prehistoric times. The remains here extend over an area, c.450m ENE-WSW by 250m, incorporating a curvilinear settlement complex (NPRN 401818), a pair of rectangular structures (NPRN 401813) occurring within its area.
302729	Cefnfilltir, Homestead	SH59023080	Settlement	Unknown	A stonewalled enclosure, 30-32m in diameter, with a circular structure, c.7.2m internal diameter, & traces of other structures, internally, set on W facing slopes.
302731	Maesyraelfor, Hut Group	SH59243007	Unenclosed hut circle settlement	Early Medieval	Unenclosed hut circle settlement
401813	Muriau'r Gwyddelod. Rectangular Building Features	SH58513027	Building complex	Medieval; Post Medieval	Remains of two stone-founded rectangular structures, oriented NW-SE on NW-facing slopes: i. at SH58523027: 12.5m by 6.0m, defined by walling 0.8m wide & 0.3m high; ii. at SH58503026: set 8.5m SW of i; 12m by 4.5m, internally subdivided. Set amidst an extensive area of relict field boundary features (Nprn 300000).
401818	Muriau'r Gwyddelod, Settlement Complex	SH58543018	Settlement; hut circle settlement	Prehistoric	An oval enclosure, c.40m WNW-ESE by 34m, defined by a horseshoe shaped, ruinous stone wall/bank, open to the ESE, which has enclosed settlement complexes attached to each terminal; the NE complex comprises three stone walled circular structures, in the region of 3.0-6.0m in diameter, linked by lengths of walling, c.26m E-W by 22m overall; the second complex, 12m to the SW, comprises an oval stone-walled

					<p>enclosure, internally subdivided, with a single apparent circular structure, c.3.0m in diameter within, c.24m E-W by 18m overall: set within an extensive area of relict field boundaries (Nprn300000), at the crest of NW-facing slopes.</p> <p>Part of complex of settlements and fields, see NPRN 300000.</p>
--	--	--	--	--	---

APPENDIX II: Definitions of categories used for impact, field evaluation and mitigation

1 Categories of importance

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

Category A - Sites of National Importance.

Scheduled Ancient Monuments, Listed Buildings of grade II* and above, as well as those that would meet the requirements for scheduling (ancient monuments) or listing (buildings) or both.

Sites that 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.

Grade II listed buildings and 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 that are of minor importance or are so badly damaged that too little remains to justify their inclusion in a higher category.

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

Category E - Sites needing further investigation.

Sites, the importance of which 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 usually be no sites remaining in this category. In this case several areas of unknown potential have been allocated to this category. These require environmental sampling which should be carried out during the pipeline works.

2 Definition of Impact

The impact of the works on each site was estimated. The impact is defined as *none, slight, unlikely, likely, significant, considerable or unknown* as follows:

None:

There is no construction impact on this particular site.

Slight:

This has generally been used where the impact is marginal and would not by the nature of the site cause irreversible damage to the remainder of the feature, *e.g.* part of a trackway or field bank.

Unlikely:

This category indicates sites that fall within the band of interest but are unlikely to be directly affected. This includes sites such as standing and occupied buildings at the margins of the band of interest.

Likely:

Sites towards the edges of the study area, which may not be directly affected, but are likely to be damaged in some way by the construction activity.

Significant:

The partial removal of a site affecting its overall integrity. Sites falling into this category may be linear features such as roads or tramways where the removal of part of the feature could make overall interpretation problematic.

Considerable:

The total removal of a feature or its partial removal which would effectively destroy the remainder of the site.

Unknown:

This is used when the location of the site is unknown, but thought to be in the vicinity of the proposed works.

3 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. Various techniques are available depending on the nature of the site to be assessed. The investigation of deposits, such as peat, may require augering to test depth, extent and potential for preserving environmental data. Identifying the date and extent of an artefact scatter on ploughed farmland may involve fieldwalking to recover artefacts in a methodical manner. To achieve a similar result in upland and pasture areas the excavation of a grid of small test pits might be required. Such an approach could also be used to test the depth and nature of deposits.

Three principal techniques are more generally applicable to many situations, and these are topographic survey, geophysical survey and trial trenching.

Topographic survey involves the recording of earthworks and upstanding remains visible on the ground surface. It can be carried out with global positioning technology, an electronic theodolite, hand drawing with tapes, or a combination of any of these. It allows the creation of a plan, rendering the visible remains more understandable and aiding their interpretation and evaluation. It is of particular use over large areas where the relationships of features such as field boundaries and settlements can be identified.

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.

4 Definition of Mitigatory Recommendations

Below are the measures that may be recommended to mitigate the impact of the development on the archaeology.

None:

No impact so no requirement for mitigatory measures.

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.

Basic recording:

Requiring a photographic record and full description prior to commencement of works.

Detailed recording:

This requires a full photographic record and measured survey prior to commencement of works.

Archaeological excavation may also be required depending on the particular feature and the extent and effect of the impact.

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.

Reinstatement:

The feature should be re-instated with archaeological advice and supervision. This particularly applies to nineteenth century field walls parts of which may have to be dismantled. It is important for the landscape character of the area that these are rebuilt in the original style. In general, the presumption should be in favour of returning walls to their pre-impact state, i.e. tumbled walls are to be left tumbled and not rebuilt.

Strip, Map and Sample:

The technique of Strip, Map and Sample (SMS) requires the machine stripping of topsoil and ploughsoil within a defined area to layers capable of preserving archaeological features. The work is undertaken under archaeological supervision. 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.

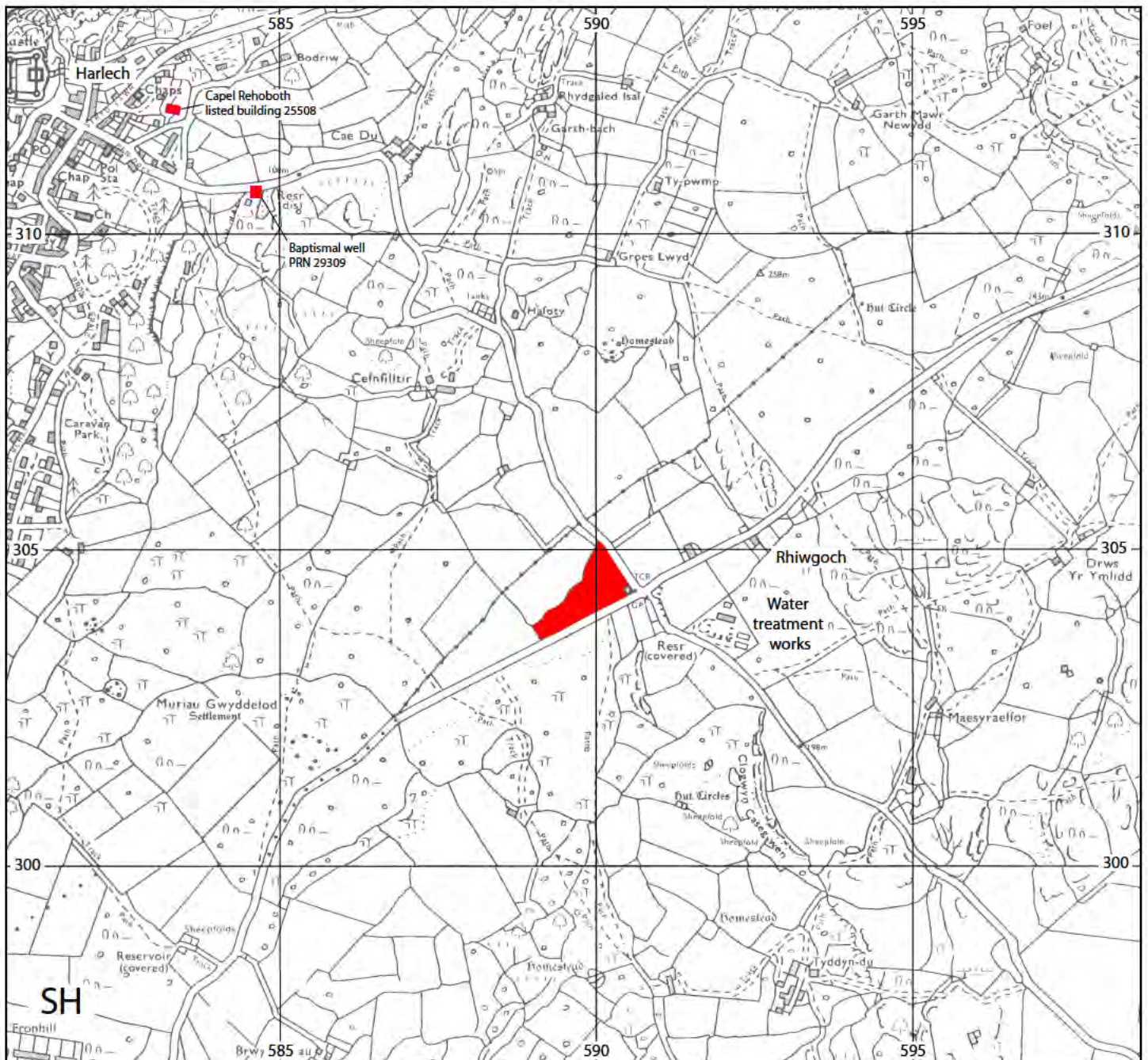
A small team of archaeologists will be responsible for subsequently further cleaning defined areas where necessary and evaluating any potential archaeological features. The evaluation will identify significant archaeological features requiring excavation and recording. Isolated features can be recorded at this stage but complex sites which cannot be avoided will need to be excavated in detail and this will form a new phase of works.

It is not always easy to identify the nature of features without excavation, therefore although strip, map and sample includes the initial assessment of features, it does not include detailed excavation should the features prove to be archaeologically significant. If a site of archaeological significance is found during the strip, map and sample process then a new design and cost estimate will be required for that site.

The advantage the strip, map and sample technique is that all archaeological features will be found, so it removes all risk. It is best undertaken where the reinstatement of the topsoil is not immediately required, so that the easement does not have to be reinstated and stripped again for construction. This method typically results in the identification of a large number of features such as drains, ditches, former field boundaries, the holes caused by the removal of trees, and casual pits etc.

Detailed excavation:

Where the requirement for detailed recording or the results of the strip, map and sample evaluation suggest that full excavation of a feature or features is necessary this would be carried out to a project design based on best practice. This normally involves the full excavation of significant small features and the partial excavation of ditches and other large features. Detailed plans and sections will be drawn, a full photographic record will be made and detailed notes will be written describing each context. The main aims are to establish the date and function of features and to establish the stratigraphic relationships between features. On a complex site this can be a long and labour intensive process.



@ Crown copyright. All rights reserved.
License number AL100020895

Figure 1. Location of the site

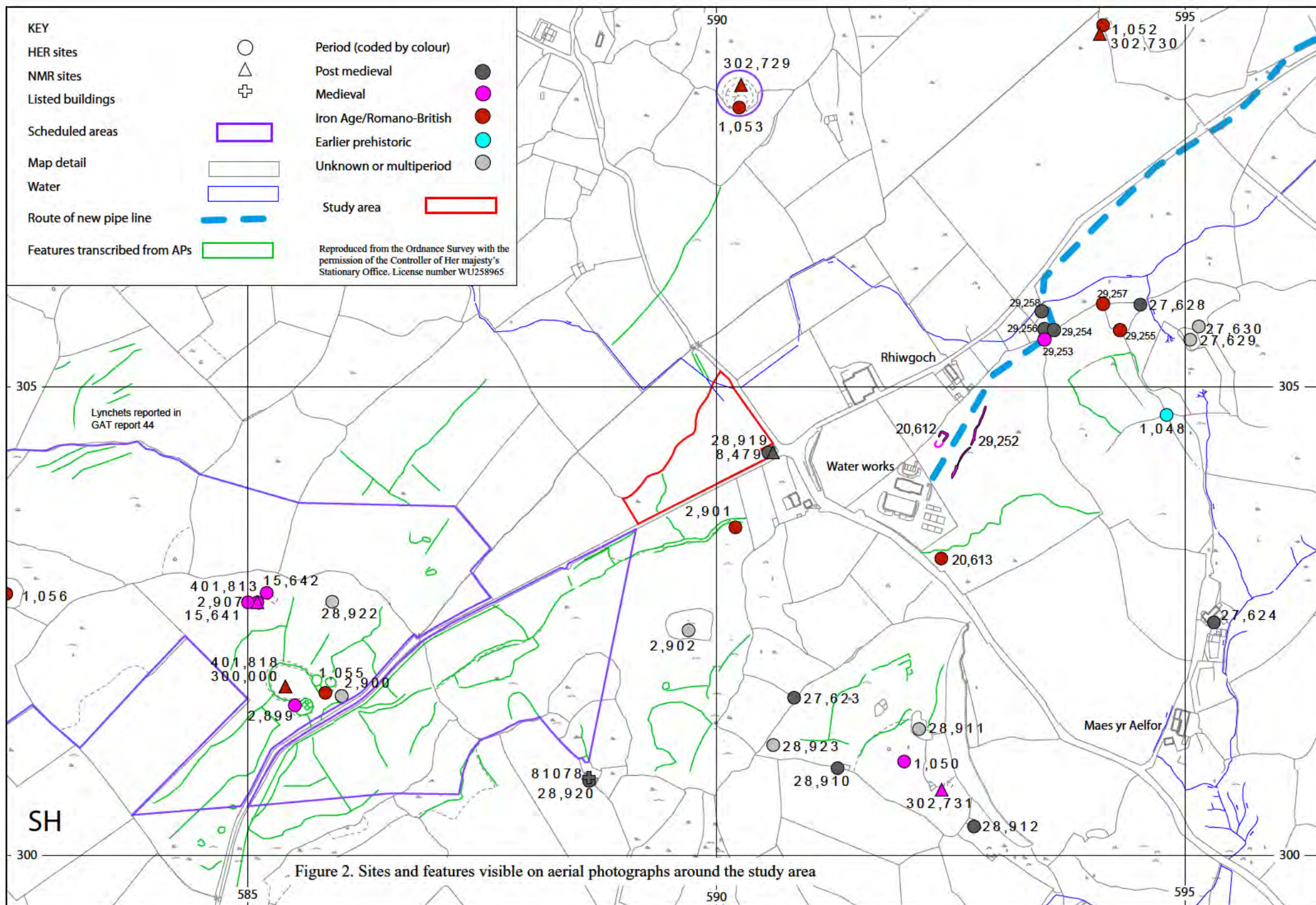




Figure 3. Part of John Evans' Map of Wales (1795)

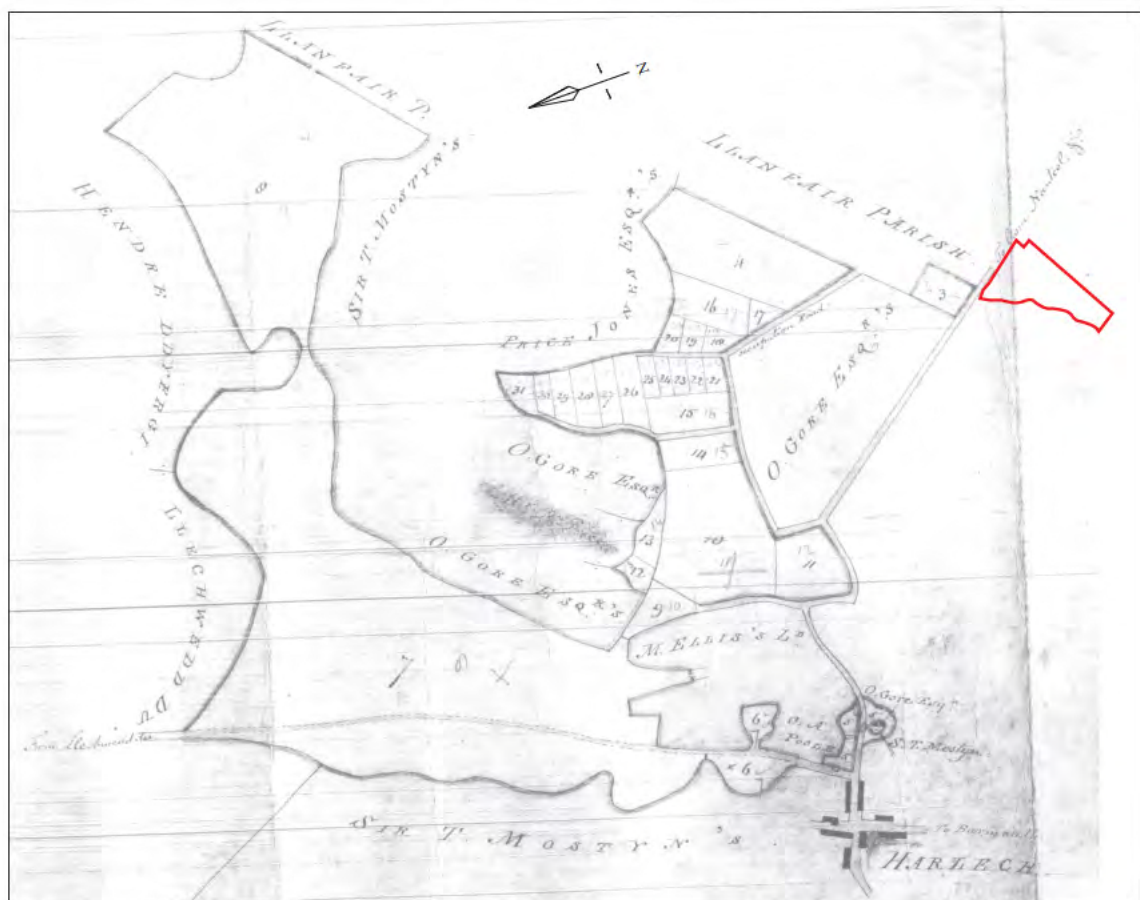


Figure 4. Map and Survey of the Parishes of Llandanwg and Llanfihangel y Traethau in the County of Merioneth 1810 (Mostyn MSS 8604). Approximate location of the study area indicated in red line.



Figure 5. part of tithe map for Llanfair parish (1840). Study area marked by red dashed line

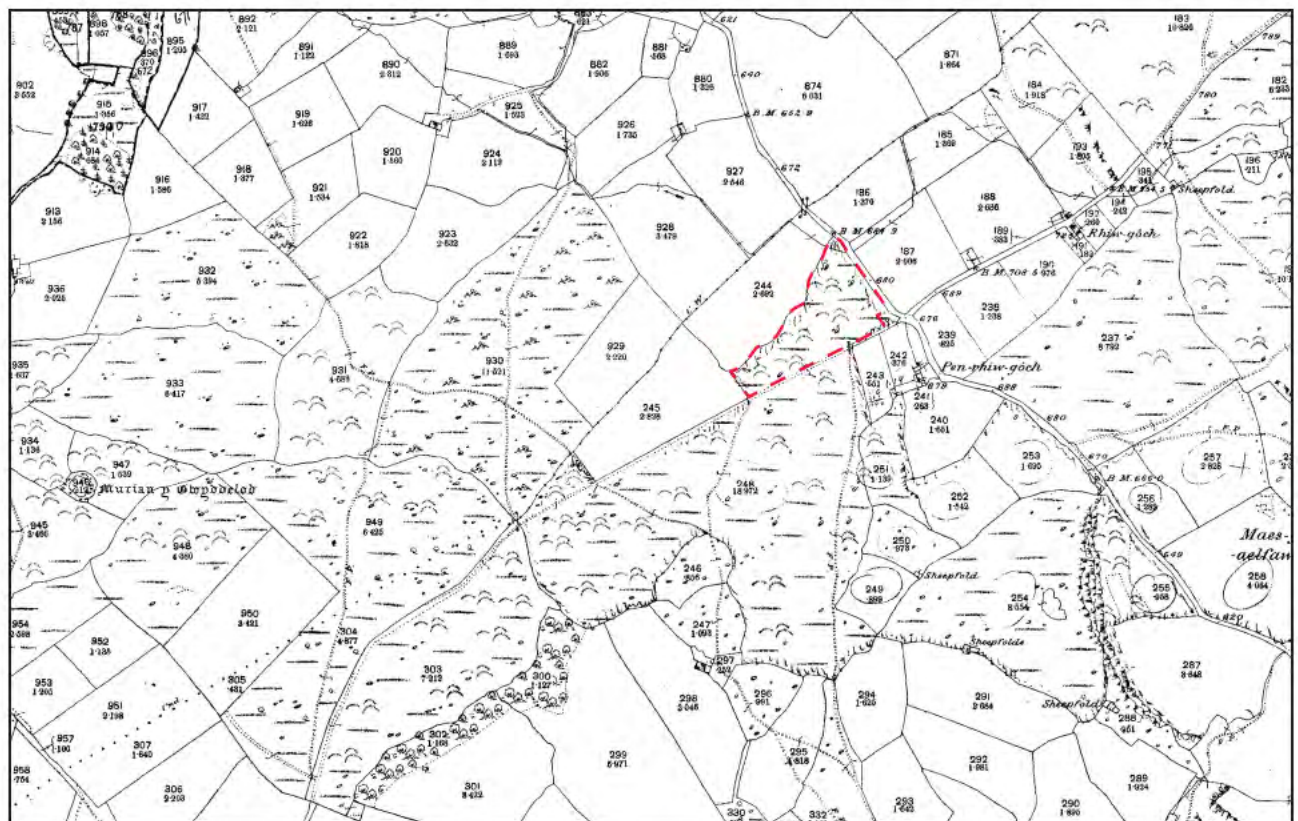


Figure 6. Part of Ordnance Survey First Edition County Series map XXVI.1 (1889). Study area marked by red dashed line

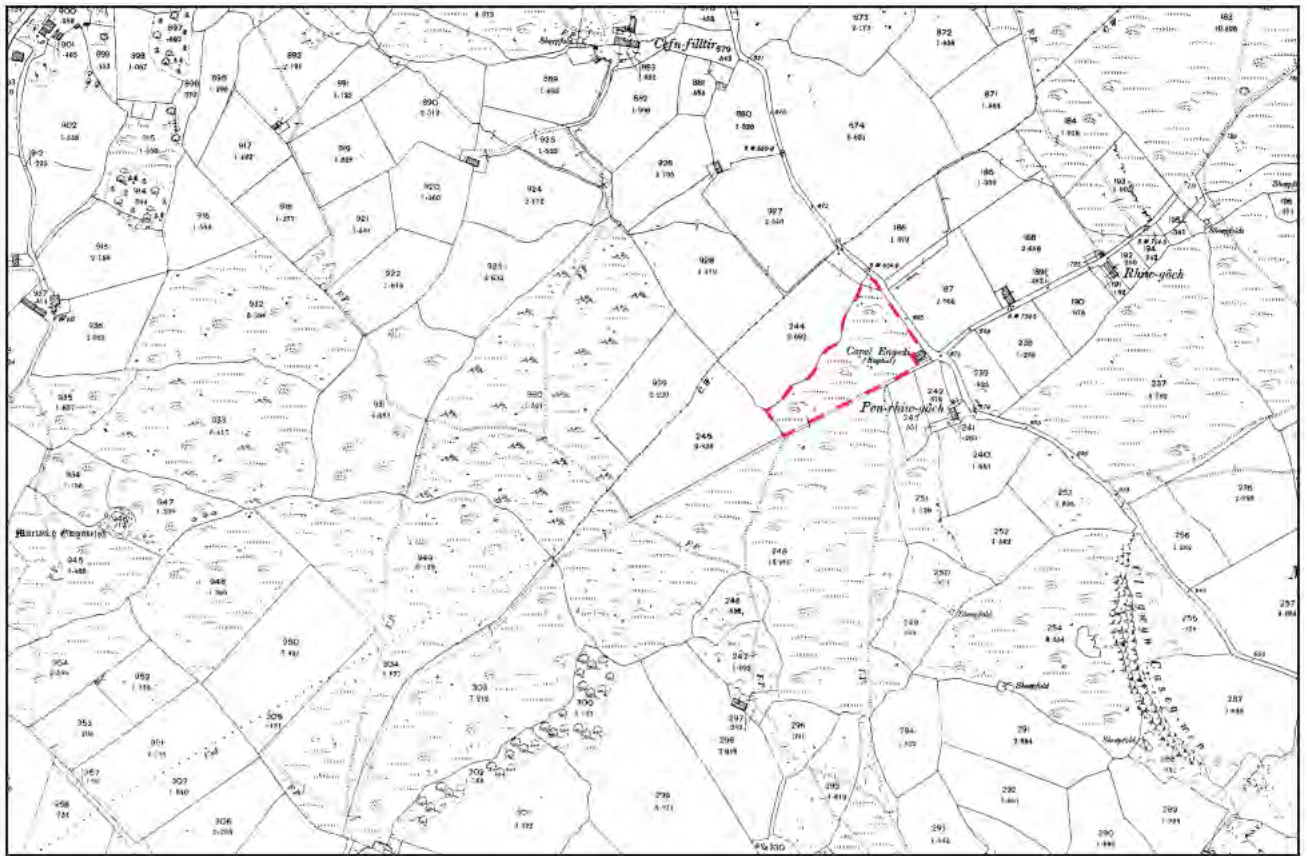


Figure 7. Part of Ordnance Survey Second Edition County Series map XXVI.1 (1901). Study area marked by red dashed line

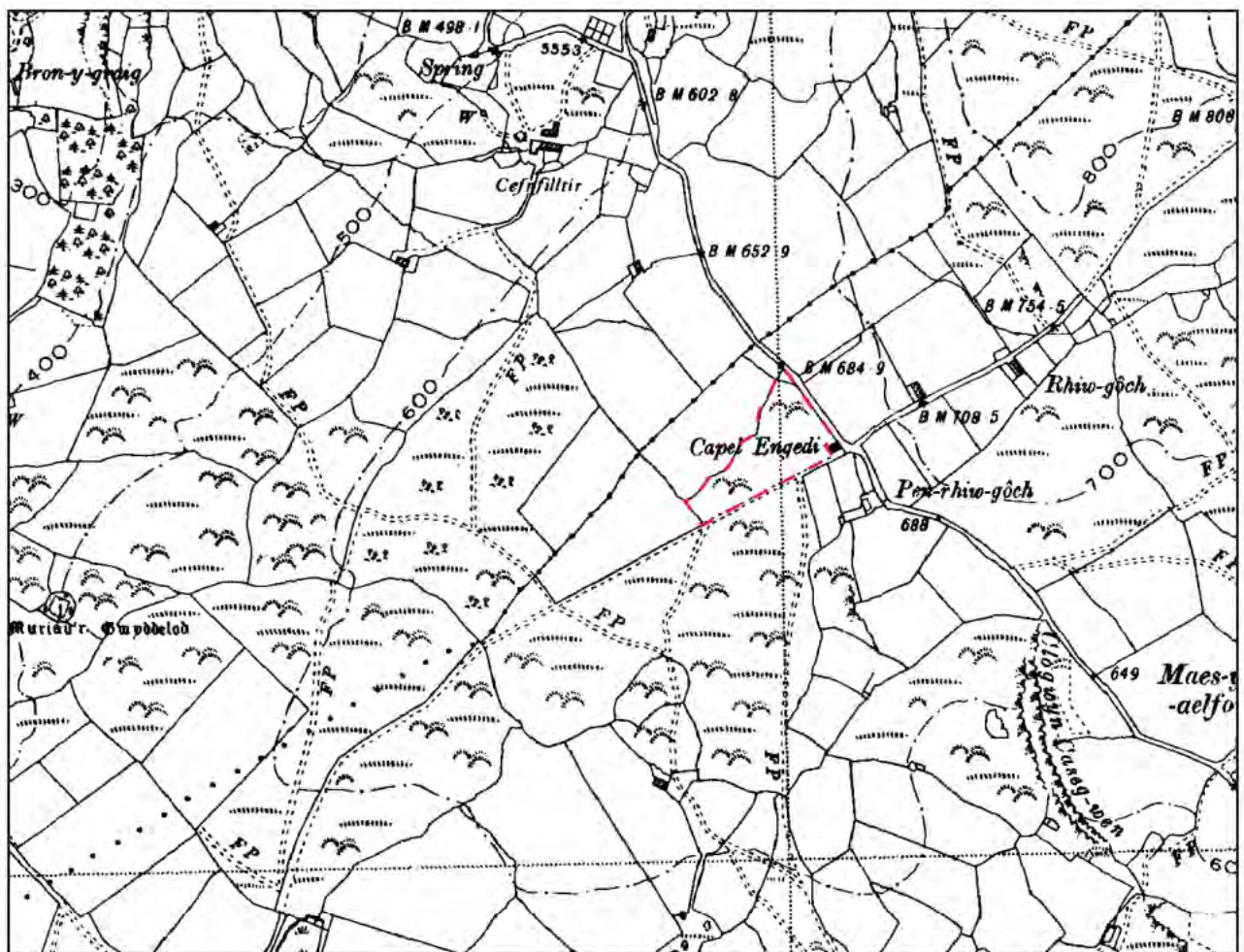


Figure 8. Part of Ordnance Survey 1:10,560 map sheet XXVI NW (1953). Study area marked by red dashed line

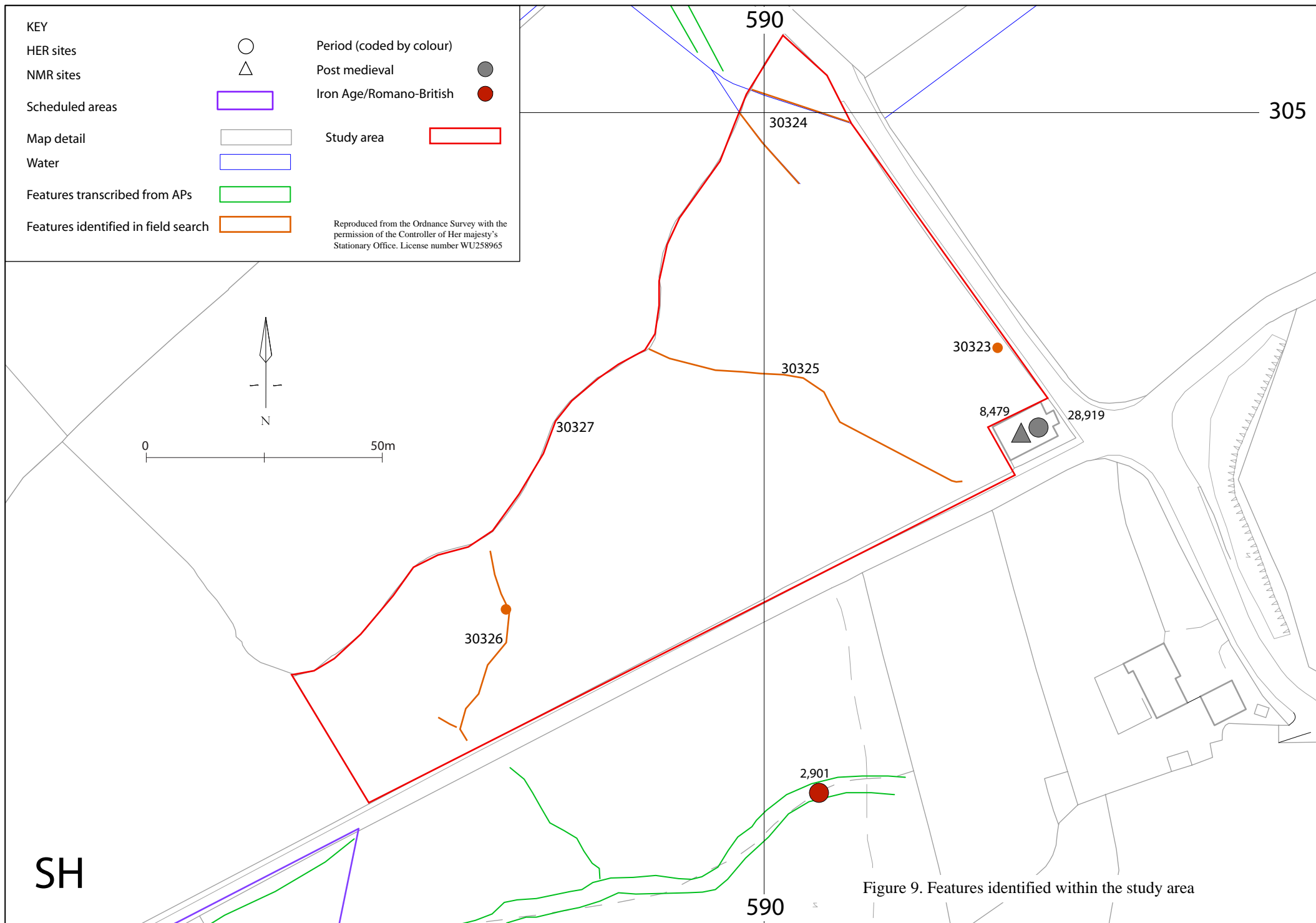




Plate 1. Capel En-gedi (PRN 28919)
from north-east



Plate 2. Culvert/drain (PRN 30324)
from south-east



Plate 3. Terraced ancient field boundary (PRN 30325) from south-west (arrows point to ends of scarp)



Plate 4. Ancient field boundary (PRN 30326) from south-west

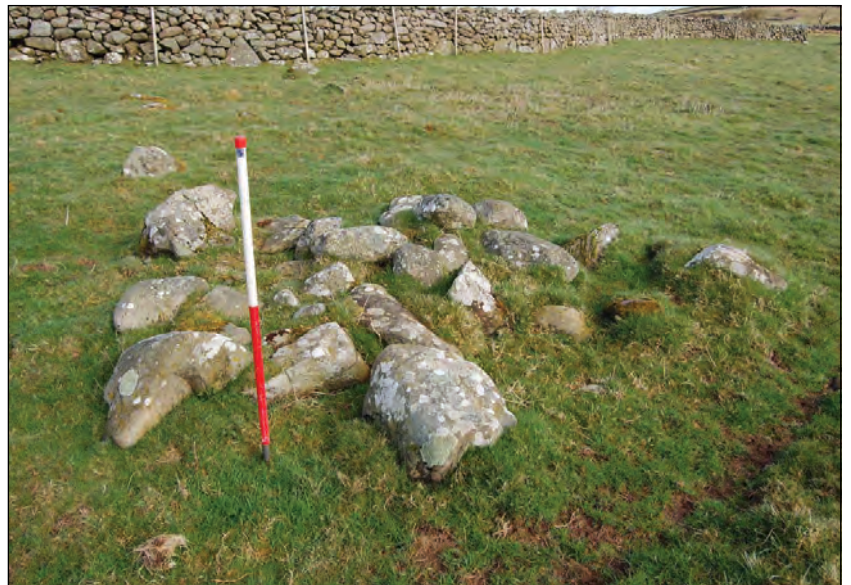


Plate 5. Cairn overlying ancient field boundary (PRN 30326)



Plate 6. Post medieval field wall with probable ancient foundations (PRN 30327)



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