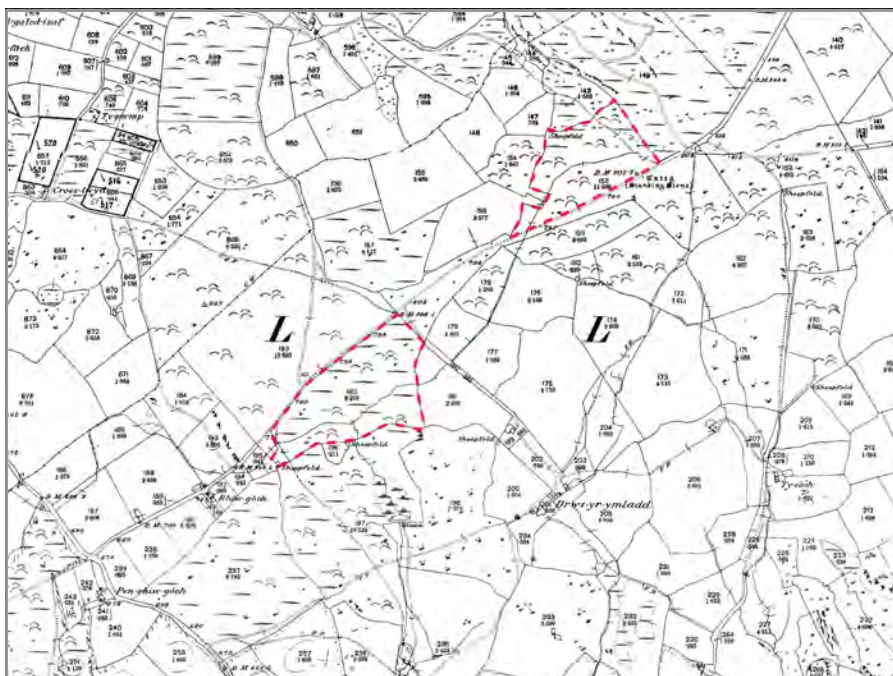


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# Potential compound areas north-east of Rhiwgoch, Harlech

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## Assessment Report

GAT Project No. 2081  
Report No. 803  
April 2009



**Potential compound areas north-east of Rhiwgoch, Harlech**  
**An Archaeological Assessment**

**GAT Project no. G2081**

**GAT Report No. 803**

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

**By J Kenney**

April 2009

Cover: The study fields as shown on the 1889 First Edition 25" OS map

**Gwynedd Archaeological Trust**  
**Ymddiriedolaeth Archaeolegol Gwynedd**



# G2081. POTENTIAL COMPOUND AREAS NORTH-EAST OF RHIWGOCH, HARLECH

## ARCHAEOLOGICAL ASSESSMENT

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# POTENTIAL COMPOUND AREAS NORTH-EAST OF RHIWGOCH, HARLECH (G2081)

## ARCHAEOLOGICAL ASSESSMENT

### SUMMARY

*An archaeological assessment was carried out to aid the choice of a field for a temporary site compound for works being carried out by Dŵr Cymru Welsh Water near Harlech. Two fields were included in the assessment, which identified clearance cairns in one field and a possible prehistoric hut and post-medieval sheepfold in the other. A canalised stream runs through both fields and both have one field boundary that may have early origins, but most of the boundaries are 19<sup>th</sup> century. Both fields have some risk of buried archaeology but the method of compound construction to be used should not impact on this. The compound should be located so as to avoid identified archaeological features and the topsoil removal for the compound should be monitored by an archaeologist.*

### 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 out to aid the choice of a field for a temporary site compound. The compound is to be used for works replacing the raw water main to the east of Rhiwgoch near Harlech. The field initially chosen was considered to have a high archaeological potential (Kenney 2009a, GAT Report 800) and two alternatives have been selected; fields 4766 and 8100 as shown on figure 1. This report assesses the archaeological potential of both fields so that the most suitable one can be chosen. The compound area, once selected and agreed, will be prepared for use by the removal of the topsoil and laying down of hard core over terram matting. No other groundworks are anticipated and the field will be reinstated to its present condition after the end of the works.

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 2009b (GAT report 775).

### 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. 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 2009b (GAT report 775)).

Appendix I contains a list of sites, buildings and find spots listed in the GAT HER and Cadw's register of listed buildings close to the study areas. These sites are located on figure 2. The numbers marked on figure 2 are PRNs (Primary Record Numbers) identifying the sites on the HER.

#### **3.2 Field Search**

Both fields are on the line of the open-cut pipe trench and were inspected during the field search for the assessment of the pipeline (Kenney 2009b, GAT report 775). As use for a compound could cover a broader area than the pipe route and could involve different access issues the fields were visited again on 23<sup>rd</sup> April 2009. Weather conditions were favourable for the field search. Both fields are currently used for rough grazing. Parts of the fields were under short grass in which earthworks and other features would be clearly visible, but both also had parts under rough vegetation such as gorse and reeds, and visibility within these areas was poor. In particular field 8100 had an area of dense gorse, and the ground under this could not be adequately assessed. Boulders can be seen in this area and it is likely that most are natural. Some of the gorse had been cleared over the winter since the field visit for the assessment of the pipeline route. This led to the discovery of a new feature of minor significance (PRN 30435). Both fields were inspected in their entirety but the areas closest to the road were inspected most intensely as this is where the compound will be located.

#### **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 and landuse description**

The two potential sites lie on an undulating plateau above the town of Harlech at between c. 230 and 250m OD (figure 1). To the west the land drops fairly steep down to the coastal plain and to the east are the higher hills and open moorland. The 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.

Both fields are adjacent to a narrow road. Field 4766 is entirely bounded by drystone walls and has a stream running through it. To the south of the stream parts of the field slope quite steeply down towards the south. North of the stream are areas of dense boulders and some large glacial erratics, but the land closer to the road is more level and has fewer stones, although some boulders do protrude through the grass. Field 8100 is bounded on three sides by drystone walls but is fenced along the road. The field is relatively level and has the same stream running through it as runs through field 4766. To the north of the stream there are areas of boulders but some stones protrude through the turf throughout the field. Both fields are under rough pasture that has not been much improved. The condition of the fields suggests that they have not been ploughed within recent centuries and may never have been ploughed.

### **4.2 Archaeological and historical background**

The previous assessments (Evans 2008a, Evans 2008b and Kenney 2009b) 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 most of the 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, which are generally concentrated in the uplands (Lynch 1984; Bowen and Gresham 1967, 88, and Kelly 1982, 132). However, a large ring cairn (PRN 1153) lies about 20m south of field 8100. This is a scheduled ancient monument (Me107). Another possible ring cairn (PRN 29263) was identified about 35m further west during the assessment of the new pipeline route, resulting in the route being altered to avoid this feature.

It has been suggested that the road on which the present fields border is part of a Bronze Age routeway (Bowen and Gresham 1967, 57-59). After the junction with the road to Cwm Bychan this road becomes very straight and is known as Y Fonllech Hir. It leads past the hill of Moel Goedog with an Iron Age enclosure on top and over the hills to the Trawsfynydd Basin. The route is marked by standing stones, and Bronze Age burial cairns (Lynch 1984, 34-35), which give an indication of its date. One of the standing stones (PRN 1049) marking the route is on the south side of the road opposite field 8100. This is a scheduled ancient monument (Me57b).

Occasional objects dating from the Bronze Age have been found in the area 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 but since lost (RCAHMW 1912, 111).

#### **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). About



150m north-west of field 4766 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 roundhouse settlement of Cefnfilltir (PRN 1053) enclosed by a large sub-circular wall (Bowen and Gresham 1967, 197) lies about 370m north-west of the field.

The most extensive system of huts, enclosures and fields in the area is known as Muriau Gwyddelod (PRN 1055(SAM M010)) and its field system extends north-east beyond the limits of the scheduled area, at least as far as the crossroads at Rhiwgoch. Ancient field boundaries can also be seen to the east of the crossroads. Some of these may be medieval, but some may relate to the Iron Age or Romano-British settlements.

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 (Robert Evans, *pers comm.*). Just south of field 4766 is a collection of small sub-circular stone-built huts and enclosures (PRN 29255). These are overlaid by the walls of a sheepfold and their date is uncertain but they may be of a similar as the settlement. They seem to be associated with rectangular fields to the south west, which can be clearly seen on the aerial photographs (plate 1).

Although the ground conditions indicate that both the fields under study were not ploughed the field to the north of field 4766 on the other side of the road does seem to have been used for arable agriculture. This is a large allotment of former commonland but narrow ridge and furrow (PRN 30440) can be seen on aerial photographs and in the right light it is just visible on the ground. This field is called Ffridd Fawr in the tithe schedule and belonged to the farm of Tyddyn Du. There is therefore no indication that it was under arable cultivation in the 18<sup>th</sup> or 19<sup>th</sup> centuries, so the ridge and furrow is likely to be much earlier than this. This field has not been closely inspected on the ground for this project but a boundary scarp can be seen from the road that resembles other ancient boundaries in the area. The ridge and furrow runs at various different angles suggesting several small fields and it is likely that the ridge and furrow represents early agriculture, of either a medieval or possibly Romano-British date. It is possible that this field system continued into field 4766.

#### **4.2.3. Medieval Period**

The study areas lie within the parish of Llanfair in the commote of Ardudwy (Thomas 2001). Harlech Castle (PRN 2908), built in the thirteenth century by Edward I, dominates the area, and is 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. Less than 500m south-west of field 4766 are a group of rectangular house platforms (PRN 1050) with traces of field boundaries around them interpreted as a medieval settlement (Kelly 1982, 158-9). 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. It is possible that the small huts mentioned above (PRN 29255) were animal shelters related to the medieval settlement of the area rather than Iron Age houses. This site is close to the earthwork remains of a rectangular hut probably of medieval date (PRN 20612). Parallel to this runs a wandering wall (PRN 29252) 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.

About 250m east of field 8100 are a series of scarps defining rectangular fields (PRNs 29268 and 29289). Like many of the fields in this area they could be of an Iron Age/Romano-British date but might be medieval, or used in both periods.

#### **4.2.4. 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 18<sup>th</sup> century when it became a tourist attraction (Lloyd 1986, 36, 37). The town, however, remained poor (Fenton 1917, 105) until improved communications increased the town's prosperity in the mid 19<sup>th</sup> century (Lloyd 1986, 61).

Both fields under study are shown on the 1840 tithe map (figure 3) just as they appear today. Field 4766 is field number 330 on the tithe map and is listed as an allotment on the common owned by the farm of Maesyraelfor (Maesyrlfor in 1840). Field 8100 was part of a large field number 323 which was known as Ffridd Ffon Llach Hir and belong to the farm of Drws yr Ymlidd. This explains the lack of a wall along the road as this used to be a single field spanning the road. In 1840 the road to Talsarnau ran along its current route. The road to Cwm Bychan was not continuous, but its western end used a similar route to the present, except it was straighter than it is now, so the junction of the roads was in a slightly different location.

Both the farms of Maesyraelfor and Drws yr Ymlidd are shown on the tithe map and the latter retains several buildings from this period which are grade II listed including the farmhouse, pigsty, brew-house, fowl house and a field barn (PRNs 5251-5254 and 81076).

The northern wall of field 8100 is rather irregular and may be of some antiquity but it is likely that the rest of the boundaries of both fields are of a 19<sup>th</sup> century date. The name 'ffridd' suggests that field 8100 had been part of open land until quite recently and as an enclosed part of the common field 4766 can not date to earlier than 1836 when the enclosure award was drawn up for the parishes of Llanbedr and Llanfair (Merioneth RO QR/En/5). However, the southern boundary of this field is less regular than the others and may have an earlier origin.

The stream through the fields is shown on the tithe map running on its present course. This stream is largely canalised with banks of stone defining its course. This course was probably established when the walls were built in the early 19<sup>th</sup> century.

#### **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 Scheduled Ancient Monuments Me57b and Me107 lie about 15m and 20m south of field 8100. The nearest listed building is the field barn (PRN 81076) about 115m east of the southern corner of field 4766.

#### **4.4 Aerial Photographs**

All features visible around the study areas have been transcribed from available aerial photographs and are shown on figure 2. These mainly include field systems and ridge and furrow, some apparently quite late but some probably ancient.

#### **4.5 The Archaeological Survey (Figure 2)**

Most of the identified features either within or on the edge of the fields under study were located during the assessment of the pipeline route. The mitigatory measures have already been recommended for these features in relation to the open-cut pipe trench. Listed below are additional recommendations relevant only to the use of the areas as site compounds. Six additional features have been added. PRN 30435 is within the area of the initial assessment but was obscured by a gorse bush at the time. The bush has since been cleared, allowing for the identification of this feature. Comments have been added on the field walls around both fields and on the stream running through them. The ridge and furrow present over the road from field 4766 has included because this may have continued into field 4766.

##### **PRN 29254                      Field wall**

*SH 59360 30560*

*Period: Post medieval*

*Category: D Impact: Slight*

Dry stone field wall, c.1.5m high. Irregular coursing. No coping stones survive.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Reinstatement***

**PRN 29256                      Sheepfold**

*SH 59350 30561*

*Period: Post medieval*

*Category: C Impact: None*

Rectangular enclosure built of large boulders in corner of field walls. It measures 10m by 5m and the walls stand 1m high.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Avoid***

**PRN 29257                      Hut circle?**

*SH 59412 30588*

*Period: Prehistoric?*

*Category: B Impact: None*

Arc of large boulders, measuring 7m by 4m and up to 1m high, forming a possible hut circle partly damaged by construction of sheepfold. Probably part of PRN 29255.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Avoid***

**PRN 29258                      Hollow/pond**

*SH 59347 30580*

*Period: Post medieval*

*Category: D Impact: None*

Small oval hollow, 5m by 4m and 0.5m deep, possibly a pond for livestock, although there is a stream nearby.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Avoid***

**PRN 29259                      Field wall**

*SH 59530 30770*

*Period: Post medieval*

*Category: D Impact: Slight*

Dry stone field wall, c.1.5m high. Irregular coursing. No coping stones survive.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Reinstatement***

**PRN 29320                      Field wall**

*SH 59907 30992*

*Period: Post medieval*

***Importance: D                      Impact: Slight***

Well built drystone wall, c.1.5m high. Irregular coursing of rounded boulders. No coping stones.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Reinstatement***

**PRN 29321                      Field clearance cairn**

*SH 59814 30961*

*Period: Unknown*

***Importance: E                      Impact: None***

Low, rather irregular heap of stones very overgrown by grass and gorse, c.6m in diameter and 0.2m high. Field clearance cairn, but possibly of some antiquity. Locate site compound so as to avoid this area.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Avoid***

**PRN 29322                      Hollow**

*SH 59822 30949*

*Period: Unknown*

***Importance: E                      Impact: None***

Small irregular hollow, measuring c.7m by 4m, with fairly steep western side. Up to 1m deep with rushes in base. Some stones are visible around the edge. Will be disturbed by pipe trench and should be investigated during the strip, map and sample process, but should be avoided prior to that process.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Avoid***

**PRN 29323                      Hollow**

*SH 59822 30903*

***Period: Post medieval?***

***Importance: D                      Impact: None***

Shallow, semi-circular hollow next to the road. It measures 10m by 3m and is about 0.5m deep. There are several hollows by the road but this is the deepest and most sharply defined. Base of hollow is fairly flat and sides are quite steep with some stones visible. It is not clear whether this is a natural hollow or possibly part of a borrow pit for building an earlier phase of the road.

Will be disturbed by pipe trench and should be investigated during the strip, map and sample process, but should be avoided prior to that process.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Avoid***

**PRN 29324                      Field wall**

*SH 59690 30880*

***Period: Post medieval***

***Importance: D                      Impact: Slight***

Corner of drystone wall. It was about 1.5m high but largely collapsed at the corner. Rough coursing with rounded boulders. A short section previous ran from the corner to the road edge but this is now only present as overgrown foundations. This section of wall will have to be extensively dismantled. The wall is to be reinstated to its present condition, i.e. the tumbled section is not to be rebuilt and tumbled stones are to be left as a valuable habitat.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Reinstatement***

**PRN 29326                      Road from Rhiwgoch to Talsarnau**

*SH 59599 30830*

***Period: prehistoric-post medieval***

***Importance: B                      Impact: None***

Tarmaced road bounded by fences along much of its length but by walls in parts. The road is shown on the tithe map but also forms part of the proposed ancient route along Y Fonllech Hir. The standing stones and cairns marking this route suggest it could have Bronze Age origins. This will not be impacted by the site compound.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Avoid***

**PRN 30435                      Clearance cairn**

*SH 59843 30969*

***Period: Unknown***

***Importance: E                      Impact: Considerable***

An irregular elongated cairn, basically a heap of stones behind a natural boulder. The heap measures about 6m by 3m and is about 0.5m high maximum. This is a field clearance cairn and its irregular character suggests that it might be quite late, possible 18<sup>th</sup> or 19<sup>th</sup> century, although the stones are well overgrown with grass. This may lie within the easement for the open-cut pipe and if so should be recorded as part of the strip and map programme. It should be avoided by the compound.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Avoid with compound and investigate with strip and map.***

**PRN 30436                      Stream in field 4766**

*SH 59475 30633*

***Period: post medieval***

***Importance: D                      Impact: None***

This is a stream running east-north-east to west-south-west through field 4766. This is canalised along much of its length by low stony banks and is shown on its present line on the tithe map. It is probably a natural stream but one that was canalised and its course altered to improve drainage and provide water in the early 19<sup>th</sup> century when the commons were enclosed.

***Recommendations for further assessment: None***

***Recommendations for mitigatory measures: Avoid***

**PRN 30437                      Stream in field 8100**

*SH 59809 30991*

**Period:** *post medieval*

**Importance:** *D                      Impact: None*

This is a stream running in a curve roughly from north-east to south-west through field 8100. This is canalised along much of its length by low stony banks and is shown on its present line on the tithe map. It is probably a natural stream but one that was canalised and its course altered to improve drainage and provide water in the early 19<sup>th</sup> century when the commons were enclosed.

**Recommendations for further assessment:** *None*

**Recommendations for mitigatory measures:** *Avoid*

**PRN 30438                      Walls around field 4766**

*Centred on SH 59463 30680*

**Period:** *post medieval*

**Importance:** *D                      Impact: Slight*

The boundaries to field 4766 are drystone walls with rough coursing that are up to 1.5m high where best preserved. Along most of their length they have lost their coping stones.

The southern boundary of this field (PRN 30438c) has a rather irregular line. If seen in relation to neighbouring boundaries it appears to form the low limit of the commonland but it may have an origin in much earlier field systems. The compound would have no impact on this wall. The other walls were probably built when previously unenclosed commonland was enclosed in the early 19<sup>th</sup> century. A breach would need to be made through the wall from the road for access and this would have to be reinstated at the end of the works. The stretch of wall to be breached should be recorded photographically before being dismantled so that there is an adequate record of its condition.

**Recommendations for further assessment:** *None*

**Recommendations for mitigatory measures:** *Photographic recording and reinstatement*

**PRN 30439                      Walls around field 8100**

*Centred on SH 59792 31007*

**Period:** *post medieval*

**Importance:** *D                      Impact: Slight*

The north, west and east boundaries to field 8100 are drystone walls with rough coursing. They are up to 1.5m high where best preserved, but are quite tumbled in places. Along most of their length they have lost their coping stones.

The northern boundary of this field (PRN 30439a) has a rather irregular line and fits well with a group of small irregular fields to the north. These are associated with a building shown on the tithe map that was part of the farm of Drws yr Ymlyd in 1840 but had presumably previously been an independent farmstead. Other traces of ancient field boundaries can be seen in the area on aerial photographs and it is possible that there was a Romano-British settlement in this area. The east and west boundaries to the field are likely to date only from the 19<sup>th</sup> century, although they were constructed by the tithe map of 1840 was drawn up.

A breach would need to be made through the wall from the road for access and this would have to be reinstated at the end of the works. The stretch of wall to be breached should be recorded photographically before being dismantled so that there is an adequate record of its condition.

**Recommendations for further assessment:** *None*

**Recommendations for mitigatory measures:** *Photographic recording and reinstatement*

**PRN 30440                      Possible ancient ridge and furrow**

*Centred on SH 59400 30733*

**Period:** *Prehistoric/medieval*

**Importance:** *B                      Impact: None*

Narrow ridge and furrow can be seen on aerial photographs and in certain lights on the ground. Groups of ridges run in different directions suggesting several small fields. One of these fields close to the road is bounded on the western side by a scarp with stone in its face, which resembles the field boundaries recorded as PRNs 29268 and 29289. The hut circle PRN 1052 lies on the north-eastern boundary of this field and the ridge and furrow might be of Iron Age or Romano-British date but it could also be medieval. Evidence from the tithe schedule suggests that it was not under arable agriculture in the 19<sup>th</sup> century.

This field is not to be impacted by any of the pipe replacement works and therefore has not been closely inspected on the ground. However it is possible that this field system continued into field 4766, although no ridges are visible on the ground surface.

**Recommendations for further assessment:** None

**Recommendations for mitigatory measures:** Avoid

## **5. SUMMARY OF ARCHAEOLOGICAL POTENTIAL**

### **5.1 Summary of features identified**

Few significant features have been identified in the fields under study. PRN 29257 on the southern boundary of field 4766 is part of complex PRN 29255. This could be as early as Iron Age in date but the complex seems to be concentrated on the level areas south of field 4766 and there is no evidence of any related features extending further north. Other features in the western corner of the field are probably of a 19<sup>th</sup> century date and are well beyond the area likely to be impacted by a compound. Although the southern wall of this field may have an earlier origin the rest of the walls are likely to be entirely of 19<sup>th</sup> century date. Similarly while the northern wall of field 8100 may have early origins the rest of the boundaries are much later. This field contains some small field clearance cairns. These could date from almost any period, some modern clearance cairns are visible nearby e.g. PRN 29265, but this type of small cairn is typical of prehistoric agriculture. Other hollows are more likely to be recent stone removal holes or hollows caused by the construction of the road.

Field 4766 may have some buried or very fragmentary traces of field boundaries not visible on the surface but there is little evidence to suggest a significant risk of buried remains. The proximity of field 8100 to the standing stone and large ring cairn increases the risk of buried archaeology. If this is present it is likely to be of considerable significance but the process of creating the compound by stripping only topsoil and laying terram matting and hard core should protect any buried archaeology present.

### **5.2 Environmental Remains, Soil Morphology and Artefactual Potential**

The field clearance cairns in field 8100 could preserve important soil horizons but it is recommended that the compound should avoid these features. Similarly any buried archaeology may contain finds and environmental evidence but this should not be negatively impacted by the creation of a compound.

## **6. SUMMARY OF RECOMMENDATIONS**

Both fields have fairly level areas with low archaeological potential. Field 4766 has no visible archaeological features north of the stream, so a compound could be located here, wherever there is an area sufficiently clear of boulders. In field 8100 some small features have been identified. These are PRN 29321, 29322, 29323 and 30435. These features should be avoided when locating the compound. They may need to be temporarily fenced off during the construction process to prevent accidental damage by vehicles driving over them. There should still be large enough areas in this field south of the stream that could be used for the compound

The stripping of the topsoil should be monitored by an archaeologist to ensure it does not penetrate into the natural sub-soil or significant archaeological levels. There is also a small possibility that stripping the turf will reveal stone features not obvious on the surface. If features are found during stripping it is recommended that the compound is moved to avoid them and that they are reburied. Once the terram matting and hard core have been laid even heavy traffic should pose no threat to any buried archaeology that may be present. After the end of the works the area of the compound is to be returned to its original state. This should be done during dry weather to ensure there is not excessive rutting caused by the wheels of the vehicles used.

Any walls breached for the construction and use of the compound should be recorded photographically before being dismantled and should be reinstated to their condition immediately prior to the start of the works. This means that any collapsed walls should be reinstated as collapsed, so retaining wildlife habitats.

## 7. CONCLUSIONS

The construction of a compound in either of these fields should cause minimal disturbance to the archaeology as long as the recommendations above are followed.

## 8. ARCHIVE

The archive consists of copies of historic maps, notes and 21 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.

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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 sheets XXVI.1 and IXX.13. First Edition (1889);  
Second Edition (1901)

Ordnance Survey 1:10,560 map, fourth edition, Merionethshire sheet XXVI NW (1953)

**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*

OS 71-210, date 12<sup>th</sup> May 1971, frame 57

OS 71-234, date 21<sup>st</sup> May 1971, frames 180, 181, 246, 247

OS 71-286, date 4<sup>th</sup> June 1971, frames 89, 90

106G/UK/1455, date 2<sup>nd</sup> May 1946, frames 4309-11

58/RAF/2649, date 5<sup>th</sup> December 1958, frames 116, 117

540/464, date 20<sup>th</sup> April 1951, frames 4010-4015



## APPENDIX I: HER sites and listed buildings near the possible compound sites

### HER sites

PRN	Site	Period	NGR	Description
1049	Garreg Standing Stone	Prehistoric	SH 59886 30968	Standing stone, scheduled ancient monument (Me57b)
1153	Garreg Ring Cairn	Prehistoric	SH 59906 30953	Large, quite well defined ring cairn (c.20m in diameter), scheduled monument (Me 107)
20612	Long hut	Medieval	SH 59246 30455	Rectangular structure with low, overgrown walls
29252	Wandering wall	Medieval	SH 59257 30410 to SH 59282 30464	Rough boulder wall with rather wandering line
29253	Field wall	Post medieval, medieval?	SH 59350 30550	Dry stone field wall. Part of a wandering wall, possibly built along an ancient wall line.
29255	Enclosures and possible hut circles	Prehistoric?	SH 59430 30560	Complex group of small enclosures and possible hut circles underlying a sheepfold. The walls stand up to 0.7m high and some contain large boulders. They seem to be related to a rectangular field to the SW.
29260	Trackway	Post medieval	SH 59542 30773	Track leading to Drws-yr-Ymladd
29261	Heap of stones	Post medieval	SH 59618 30828	Large low heap of stones on uneven ground
29262	Field wall	Post medieval	SH 59680 30870	Dry stone field wall
29263	Ring cairn?	Prehistoric	SH 59848 30949	Low circular bank, about 14m in diameter, enclosing flat stone-free area. Possible slight concentric ditch and bank to W and traces of kerb stones in outer face of bank.
29264	Hollows	Unknown	SH 59944 30924	Very slight undulations, possibly just caused by clearing large boulders from field
29265	Heap of stones	Modern	SH 59940 30990	Pile of very large boulders. Modern, of no archaeological interest.
29266	Field wall	Post medieval	SH 59970 31010	Dry stone field wall
29267	Field wall	Post medieval	SH 60182 31012	Dry stone field wall
29268	Possible field boundary	Medieval?	SH 60206 30976 to SH 60182 30971 to SH 60162 30990	Slight but consistent scarp, about 0.2m high, apparently forming approximate right angled, but rounded, corner of an ancient field
29288	Clearance cairn	Prehistoric?	SH 60025 31018	Small sub-circular cairn, about 3m in diameter and 0.5m high, with stones heaped against a natural boulder.
29289	Field boundary?	Prehistoric? Medieval?	SH 60063 31000 to SH 60117 31028 to SH 60142 31012	Rather irregular but continuous scarp, about 0.2m high, possibly defining the edge of an ancient field. Stones visible in scarp. Joins with scarp of feature 57.
29290	Trackway	Post medieval	SH 59978 31020 to SH 61730 30890	The road to Cwm Bychan
29316	Field wall	Post medieval	SH 59988 31027	Dry stone field wall
29317	Field wall	Post medieval	SH 59981 31030	Dry stone field wall
29318	Field clearance cairn	Unknown	SH 59949 31040	Rough heap of stones, forming a field clearance cairn
29319	Trackway	Post medieval	SH 59948 31016	Track with hard core surface. The track leads to Foel and is not shown on the tithe map, although the farm is.
29325	Disturbed	Unknown	SH 59580 30832	Area of disturbed ground, c.12m in diameter,

	ground			seen as slight hollows and heaps of stone. Some heaps of small sub-rounded stones, but apparently not burnt stone. Some larger stones form rough lines but no real pattern can be discerned.
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#### Listed buildings

PRN	Listing No.	Grade	Name	Eastings	Northings
5251	10362	II	Drws yr Ymlid Farmhouse	259726	330483
5252	13025	II	Pigsty & Brewhouse at Drws yr Ymlid Farm (including rubble-walled yard between)	259751	330504
5253	11626	II	Fowl House at Drws yr Ymlid Farm (including rubble-walled yard)	259740	330507
5254	10610	II	Barn at Drws yr Ymlid Farm	259763	330516
81076	11480	II	Field Barn at Drws yr Ymlid	259684	330604

## **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.



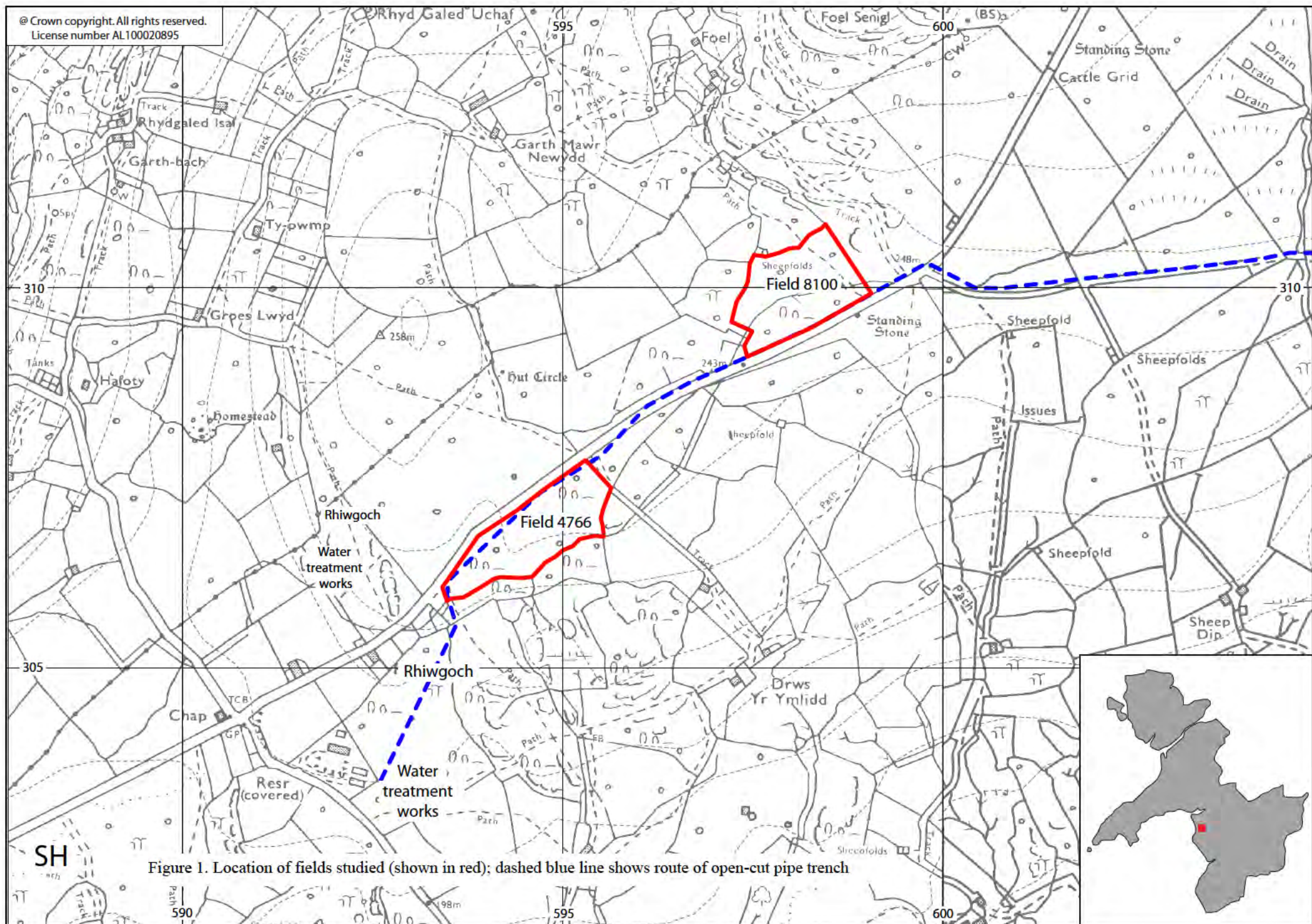


Figure 1. Location of fields studied (shown in red); dashed blue line shows route of open-cut pipe trench





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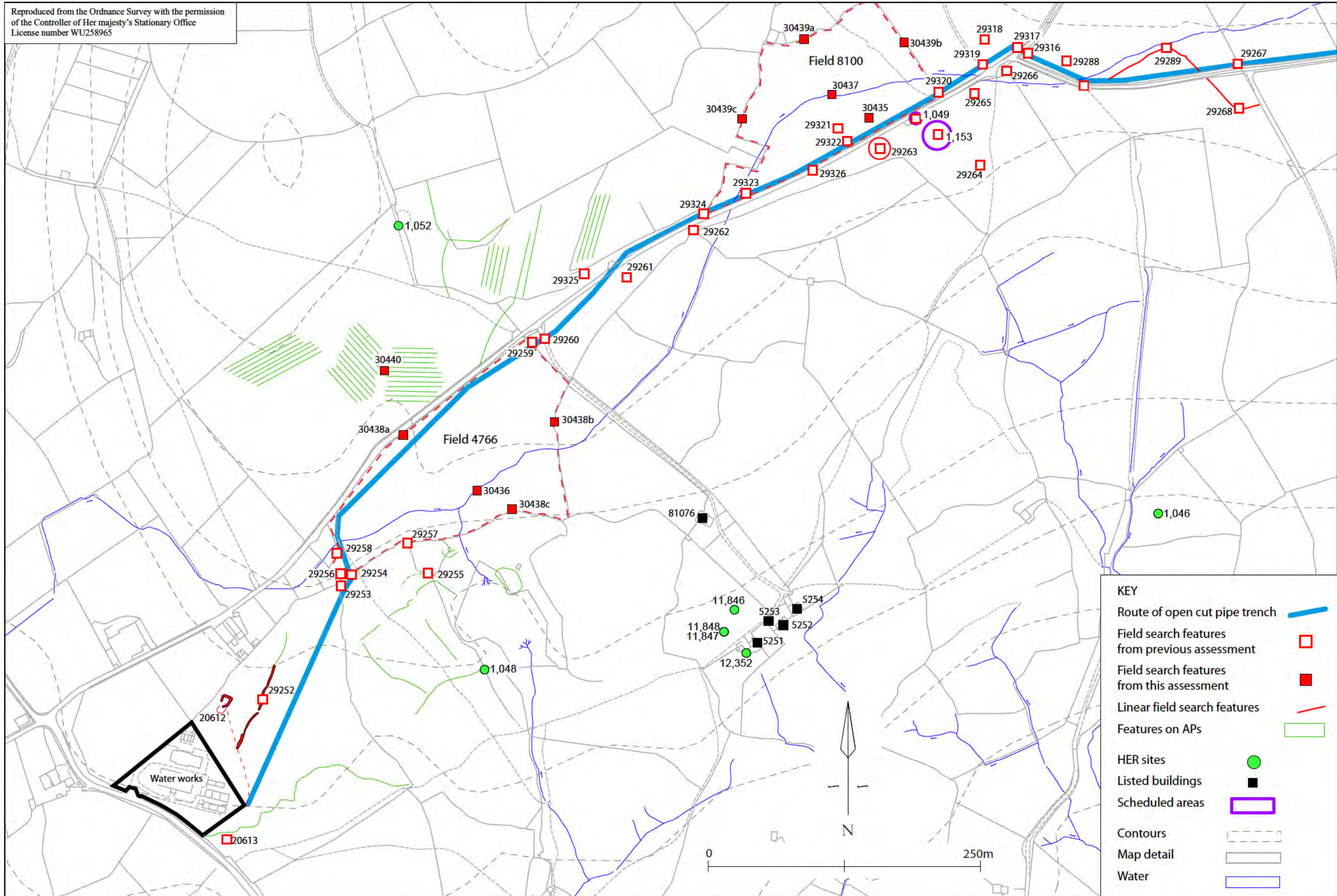


Figure 2. Features identified along or close to the route of the pipe line and within the fields suggested for the compound (See appendix I for list of features)





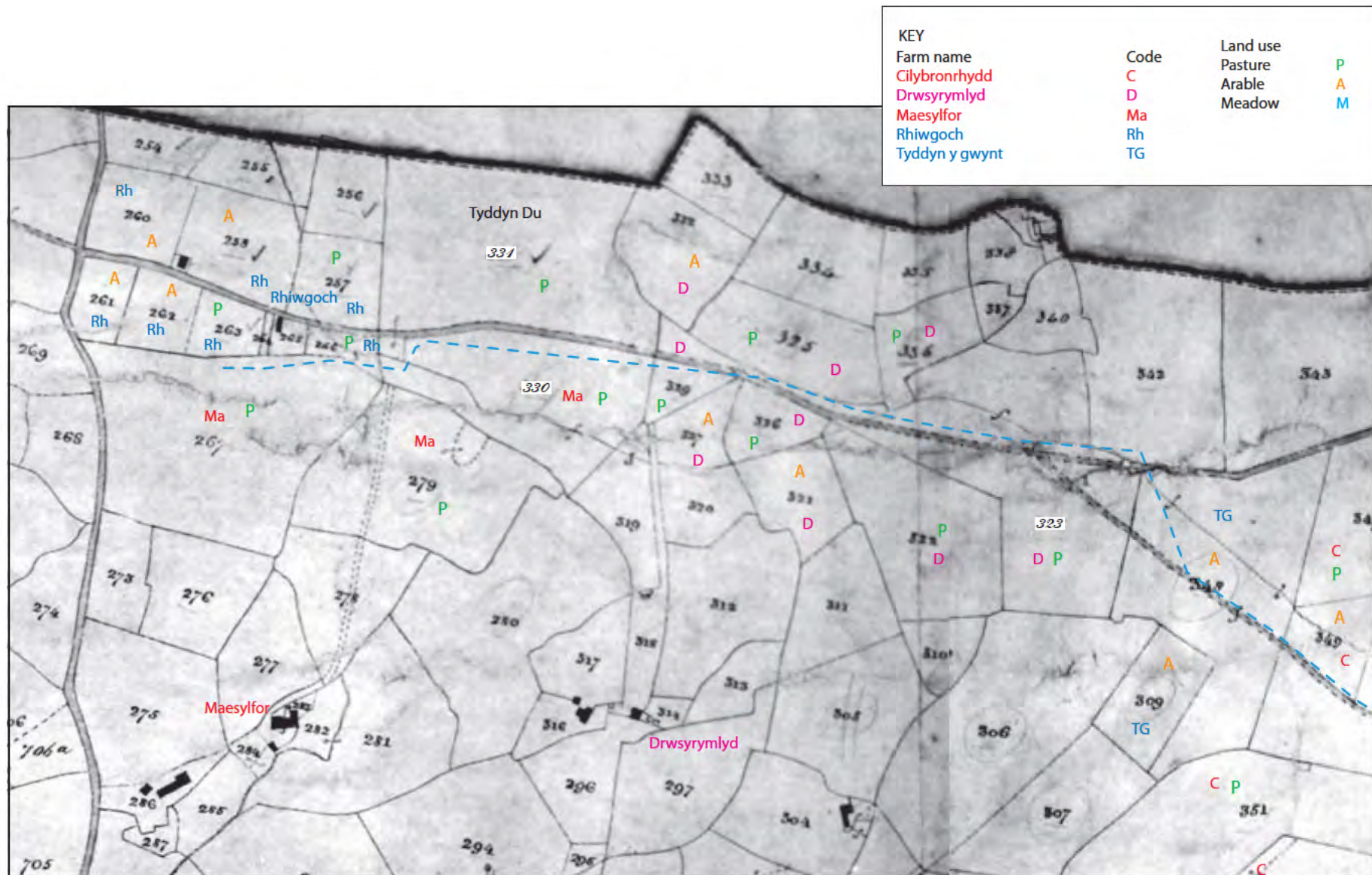


Figure 3. Part of the tithe map of Llanfair Parish with farm ownership and landuse indicated for fields along the route of the pipe line (blue dashed line)





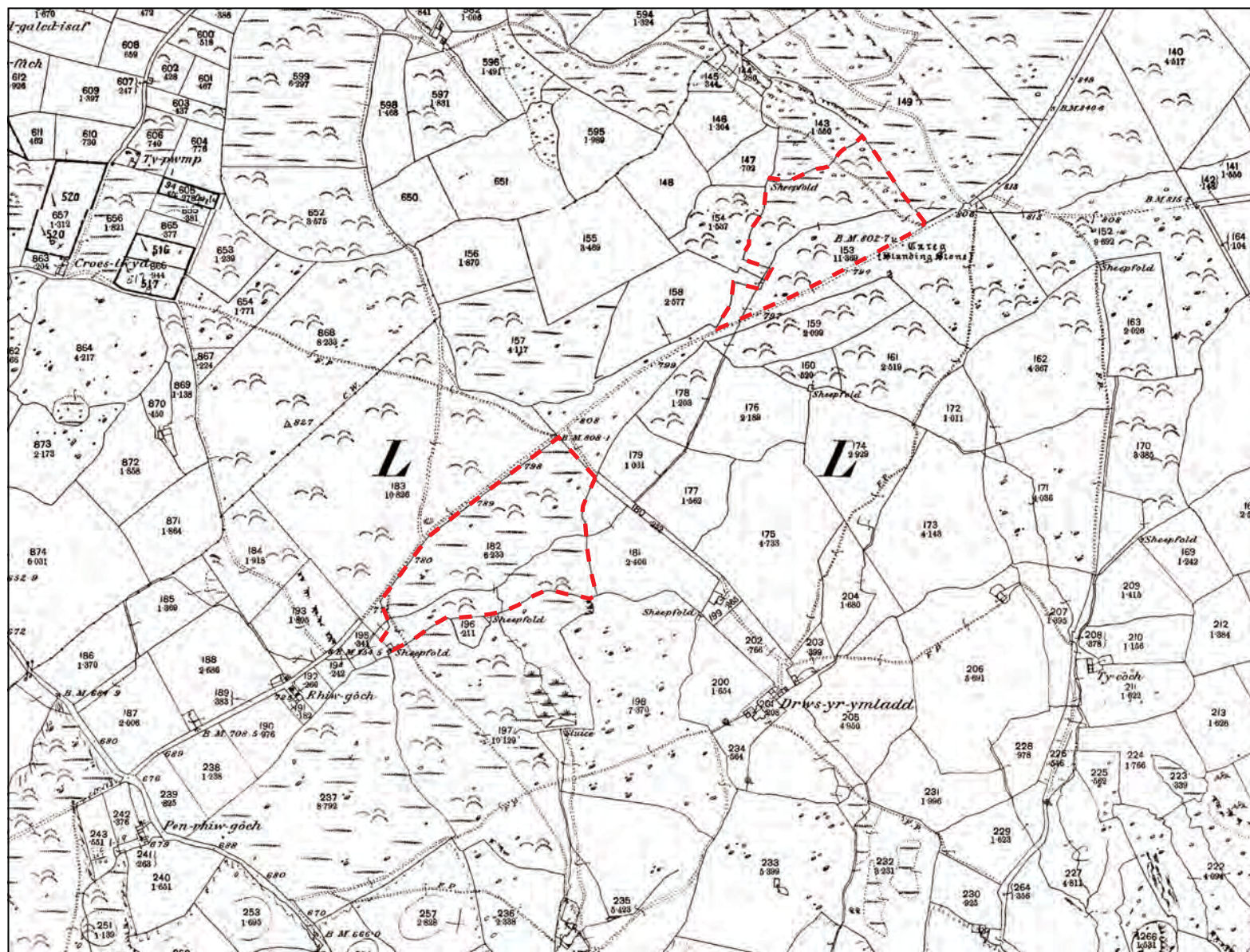


Figure 4. Parts of Ordnance Survey 25 inch First Edition maps Merionethshire sheets XXVI.1 and IXX.13 (1889) with the fields marked in red dashed lines







Plate 1. Part of an aerial photograph showing field 4766 and adjacent fields  
(OS 71-234, date 21st May 1971, frame 180: Air Photographic Unit, Cardiff)







Plate 2. View of field 4766 looking from SW

Plate 3. View of field 4766 showing erratic boulder from NE



Plate 4. View of field 8100 showing proximity of standing stone PRN 1049, from NE

Plate 5. Canalised stream in field 8100, from E



Plate 6. Clearance cairn PRN 30435, from N





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