Low Head Hydro-Electric Pipeline Replacement, Dolgarrog, Conwy

Archaeological Evaluation Trenching





Ymddiriedolaeth Archaeolegol Gwynedd Gwynedd Archaeological Trust

Low Head Hydro-Electric Pipeline Replacement, Dolgarrog, Conwy

Archaeological Evaluation Trenching

Project No. G2158

Report No. 1089

Prepared for: RWE Npower Renewables Ltd

Date: November 2012 (revised January 2013)

Written by: Ken Owen and Jane Kenney

Illustration by: Macsen Flook

Cyhoeddwyd gan Ymddiriedolaeth Achaeolegol Gwynedd Ymddiriedolaeth Archaeolegol Gwynedd Craig Beuno, Ffordd y Garth, Bangor, Gwynedd, LL57 2RT

Published by Gwynedd Archaeological Trust Gwynedd Archaeological Trust Craig Beuno, Garth Road, Bangor, Gwynedd, LL57 2RT

Copyright of this report is retained by RWE Innogy, permission for full usage has been granted to Gwynedd Archaeological Trust

Front cover: junction of pipes at "Marble Arch"

Cadeiryddes/Chair - Yr Athro/Professor Nancy Edwards, B.A., PhD, F.S.A. Prif Archaeolegydd/Chief Archaeologist - Andrew Davidson, B.A., M.I.F.A.

LOW HEAD HYDRO-ELECTRIC PIPELINE REPLACEMENT, DOLGARROG

ARCHAEOLOGICAL EVALUATION TRENCHING (G2158)

Prepared for RWE Npower Renewables Ltd (RWE NRL), November 2012 (revised January 2013)

Contents

1. INTRODUCTION	
2. SPECIFICATION AND PROJECT DESIGN	
3. ARCHAEOLOGICAL BACKGROUND	
4. METHODOLOGY	
5. RESULTS	
6. SUMMARY AND CONCLUSIONS	6
7. BIBLIOGRAPHY	7
Appendix 1. Details of evaluation trenches	
Appendix 2: Pottery from trench 6	
Figures	

Plates

Figures

- Figure 1: Location of evaluation trenching
- Figure 2: Location of trenches 1 to 5 overlaid on OS County Series 3rd Edition map, 1913 (test pits and boreholes as reported in Kenney 2011b)
- Figure 3: Location of trench 6 overlaid on OS County Series 3rd Edition map, 1913 (test pits and boreholes as reported in Kenney 2011b)
- Figure 4: Plan of trench 1
- Figure 5: North facing section through wall 0104
- Figure 6: Plan of trench 2
- Figure 7: Plan of trench 3
- Figure 8: Plan of trench 4
- Figure 9: NE facing section of wall or stone dump 0402
- Figure 10: Plan of trench 5
- Figure 11: NW facing section of wall 0503
- Figure 12: Plan of trench 6
- Figure 13: NW facing section across trench 6

Plates

- Plate 01: Post-ex view of Trench 1 from the eastern end, showing roadside wall (0104).
- Plate 02: Post-ex shot of western end of Trench 1, showing sheepfold (0105).
- Plate 03: Longitudinal shot of the stone field clearance in Trench 2 from the NE (0202).
- Plate 04: Post-ex shot of Trench 2 from the NW, showing field clearance stones (0202).
- Plate 05: General shot of Trench 3 from the NE.
- Plate 06: Close-up of the curved wall in Trench 3 (0303) from the SE.
- Plate 07: Possible entrance at the northern end of Trench 3 (0305), also showing a recent test pit (0306).
- Plate 08: General shot of Trench 3 from the SW, showing cobbled area (0304).
- Plate 09: Shot of terraced field boundary (0402) in Trench 4, from the NW.
- Plate 10: NE facing section through (0402) in Trench 4.
- Plate 11: Feature (0502) at the NE end of Trench 5, field boundary (0503) in the background.
- Plate 12: Field boundary (0503) in Trench 5 from the NE, with very large stones at the base.
- Plate 13: Longitudinal shot of field boundary (0503) in Trench 5 from the NW.
- Plate 14: Section shot of (0503) within Trench 5 from the NW.
- Plate 15: General shot of rubble (0603) and wall (0602) in Trench 6 from the SSE.
- Plate 16: General shot of rubble (0603) and wall (0602) in Trench 6 from the W, also showing possible wall (0609).
- Plate 17: Close-up of slabs/drain (0604) in Trench 6 from the SW.
- Plate 18: Sondage section through rubble (0603), in Trench 6, from the NW.

LOW HEAD HYDRO-ELECTRIC PIPELINE REPLACMENT, DOLGARROG

ARCHAEOLOGICAL EVALUATION TRENCHING (G2158)

Summary

Between 15th October and 1st November 2012 Gwynedd Archaeological Trust carried out archaeological evaluation trenching in advance of works to the pipelines which feed Dolgarrog Hydro-Electric Power Station, Conwy.

Six evaluation trenches were excavated using a 6.5 tonne rubber tracked excavator with a flat ditching bucket. Trenches 1 and 5 contained the remains of field boundaries of 18th and 19th century date with some possible associated features. Trench 4 also contained a possible field boundary but as this does not appear on the historic maps it may be of an earlier date. It is likely that stones found in trench 2 are field clearance over natural boulders.

Trench 3 contained a possible early structure, which require further investigation and Trench 6 contained a possible Roman period roundhouse containing stratified dating evidence, part of which is under an access track.

1. INTRODUCTION

Gwynedd Archaeological Trust (GAT) was asked by RWE Npower Renewables Ltd (RWE NRL) to carry out archaeological evaluation trenching in advance of works to the pipelines which feed Dolgarrog Hydro-Electric Power Station, Conwy (figure 1).

It is proposed to replace the upper part of the existing pipe from Coedty Reservoir to the valve house with a new pipe which is to be buried below ground along most of its route (SH7558 6673 to SH7656 6718).

This phase of the archaeological work was completed between the 15th October and 1st November 2012. The staffing levels were 1 machine operator and 2 archaeologists.

2. SPECIFICATION AND PROJECT DESIGN

Evaluation trenching is a form of archaeological field evaluation. The definition of archaeological field evaluation is "a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate" (reproduced from IFA 2008).

The purpose of field evaluation is to gain information about the archaeological resource within a given area or site (including its presence or absence, character, extent, date, integrity, state of preservation and quality), in order to make an assessment of its merit in the appropriate context, leading to one or more of the following:

- The formulation of a strategy to ensure the recording, preservation or management of the resource
- The formulation of a strategy to mitigate a threat to the archaeological resource
- The formulation of a proposal for further archaeological investigation within a programme of research

This document reports on the results of the archaeological evaluation trenching and should be used to develop a strategy for further mitigation works in conjunction with the RWE NRL and the Snowdonia National Park Authority Archaeologist.

The current work conforms to the guidelines specified in *Standard and Guidance for Archaeological Evaluation* (Institute for Archaeologists, 1994, rev. 2001, 2008).

3. ARCHAEOLOGICAL BACKGROUND

The pipe route runs through part of the valley of the Afon Porthllywd from the base of the Coedty dam to the valve house known as 'Marble Arch', at the top of Coed Dolgarrog and the steep escarpment forming the main valley side (SH7558 6673 to SH7656 6718).

Gwynedd Archaeological Trust completed an initial scoping assessment of the study area (Evans 2010, GAT Report 900), followed by a full assessment to take into account the revised project layout (Kenney 2011a, GAT report 928). This identified 105 sites within the study area, and included recommendations for further assessment and mitigation. Geotechnical test pits and boreholes were dug along the proposed route of the pipe and these were archaeologically monitored and recorded in GAT report 978 (Kenney 2011b).

The assessment identified a complex and well preserved landscape within the study area for which a significant amount of evidence survives in the form of farmsteads, structures and associated field systems. The earlier field systems consisted of irregular enclosures probably dating from the 15th to 18th centuries, generally around or close to the homesteads on mid- slope terraces, whilst a more regular field pattern was created as a result of 19th century enclosure, which extended into the more upland areas. Some of the settlement pattern identified may have had its origins in the later Middle Ages, but no definitely medieval features were recognised. Two cairns may be prehistoric and fragments of possibly prehistoric field systems were identified but prehistoric activity was poorly represented, despite the number of sites known in the wider vicinity.

The construction of a hydro-electricity generating station and associated aluminium works in the early years of the 20th century led to significant changes within the upland landscape involving construction of a series of dams and leats to provide a water catchment system for the new works. New roads and tramways were built to service the construction. The different phases of leats, the pipelines and the dam now form 'a remarkable industrial landscape' (Gwyn 2006, 126). The developments at Dolgarrog were part of the first phase of global innovation in hydro-electric power and as such 'the physical remains are a nationally, and possibly internationally, important survival' (Gwyn and Nevell 2006, 14).

4. METHODOLOGY

Six evaluation trenches were dug between 15th October and 1st November 2012 (see figures 2 and 3 for locations). The machining work was carried out by Alwyn Jones Ltd. Evaluation trenches were 2.0m wide and 10m long with the exception of Trench 5, which was 20m in length and 2.0m wide, and Trench 6 which measured 12m by 4m. The trenches were dug with a 6.5 tonne 360° rubber tracked excavator using a toothless 1.8m ditching bucket down to archaeological deposits, or natural glacial deposits if archaeology was not encountered. All deposits, including the topsoil, were removed in thin spits under the control of an archaeologist.

All archaeological features were hand-cleaned and investigated. A photographic record was maintained throughout using a digital SLR camera set to maximum resolution, as well as written records using GAT proforma recording sheets. Plans were compiled of each trench at a scale of 1:20; sections were drawn at scales of 1:10 or 1:20 as appropriate. After being recorded in plan the mechanical excavator was used to dig through the field boundaries in trenches 01, 04 and 05 enabling the sections of these to be recorded. In trench 6 a sondage was dug by hand across the trench to investigate the depth and complexity of the deposits.

Trench outlines and base lines for the drawings were surveyed in using a Trimble Global Positioning System (GPS), as well as the heights for temporary benchmarks (TBM) used to obtain altitudes above Ordnance Datum. Related earthwork or stone features extending beyond the trenches where also surveyed as far as could be seen considering the extensive vegetation cover at the time of the evaluation trenching.

Only a few finds were recovered during the evaluation phase of work. A sherd of pottery from the Roman period was found in Trench 6. This was sent to Dr Peter Webster, formerly of the National Museum of Wales, for dating and comment. During the current phase of work no deposits found were considered suitable for environmental sampling, so no samples were recovered.

The site archive is to be held by GAT until ready for permanent archiving, under project code G2158. Site drawings and written records have been scanned for security. The scanned field drawings have been used, in combination where necessary with the GPS survey, to produce the figures in this report.

5. RESULTS

Each evaluation trench is described briefly below, with detailed results presented in appendix 1. See figures 02 and 03 for the location of the evaluation trenches. Context numbers have been given to features and deposits to aid recording, these are shown below in brackets. The main features have already been given Primary Record Numbers (PRN) for the Gwynedd Historic Environment Record (HER) and these are given associated with the relevant trench. The exception is trench 6 where the evaluation revealed that the structure investigated was probably not part of the site previously identified. A new PRN has therefore been obtained for the possible roundhouse in trench 6.

Trench 1 (PRN 31957, 36556) Figures 04 and 05 Plates 01 and 02

This trench was located next to the access road to Coedty Dam to investigate the field boundary that ran parallel to the road. As well as the roadside wall (0104) the remains of a wall foundation (0105) were found running diagonally across the trench from NE to SW. The soils were deeper at the eastern end of the trench with the lower topsoil not really existing at the western end; the topsoil was also shallower at this end of the trench, with a maximum depth of only 0.2m.

The roadside wall (0104) was composed of large sub-angular stones up to 0.6m long. The wall was about 1.2m wide and survived to 0.8m high. The stones were quite haphazardly laid, but this may be due to it being the foundation level, very little of the above ground wall survived in this location. The field boundary seems to have been constructed directly on the natural, as no foundation cut could be positively identified.

The wall foundation (0105) was placed into a shallow, straight and neat cut and was composed of flat slabs, up to 0.4m long, with some smaller stones above in places. The wall was 0.7m wide but only 0.2m depth of the foundations survived. Its construction was neater than the roadside wall, and it seems to have been a later addition.

The roadside wall (0104) is shown on the 1st Edition OS Map 1889, and can be recognised on the late 18th century estate map of this area. Wall (0105) runs at the same angle as the wall of a sheepfold shown on the 3rd Edition OS Map of 1913, but not on earlier maps. The sheepfold is one of two in this corner of the field (see figure 2). Overlaying the trench plan on the historic map does not produce a perfect correspondence but the alignment is so similar to the northern wall of the southern sheepfold that it is concluded that wall (0105) is the sheepfold wall and the deviation is due to error in the mapping. The sheepfolds as seen in excavation have been allocated PRN 36556.

Trench 2 (PRN 31955) Figure 06 Plates 03 and 04

This trench was placed to investigate a large concentration of stones around low bedrock outcrops which may have formed a field boundary or small cairn. This trench, as well as trenches 03 to 05, is in areas heavily covered in bracken, which makes identification of adjoining features difficult.

Excavation showed that the stones were haphazard and did not appear to form an obvious structure. The stones ran across the full width of the trench and covered an area about 3m long. There were no defined edges to the feature nor any coherent alignment of the stones within it. Some of the lower stones were embedded in and sealed by glacial deposits. The stones were up to 1m in length, with smaller, generally sub-rounded stones around the larger sub-angular ones.

Many of the larger stones appeared to be natural boulders but the smaller stones had probably been dumped round the existing group of boulders most likely as the result of field clearance.

Trench 3 (PRN 31954) Figures 07 Plates 05-08

The trench was located to the SE of Trench 2 to investigate what was interpreted from surface evidence as a possible early field boundary running uphill in a NW-SE direction. At surface level a rough line of boulders and one very distinct upright stone hinted at an uneven wall that could possibly be traced for roughly 22m. The trench was positioned so that the upright stone was on the trench edge and the area adjacent to it was investigated.

A wall (0303) was exposed in the excavation and this seemed to have a slight curve with the upright stone on the outer face of the wall, as well as 3 or 4 other possible facing stones suggesting a curve. The width of the wall is 0.85m and it is composed of small boulder sized stone on the outer and inner sides, with cobble sized stones within the central core area.

At the north-eastern end of the trench a few cobble-sized stones alongside two boulder-sized stones possibly indicate the damaged remains of the return wall (0305). If so this indicates a small enclosure or building rather than a field wall but more of the feature would have to be exposed to demonstrate its form.

There was a small roughly laid area of cobble sized stone (0304) butting on to the south-western side of wall (0303). This area lies between two large natural boulders and measures 2.0m by 1.65m; although its function is unknown it may have acted to naturally drain water away from the possible structure or as a hard-standing area on the exterior of the wall.

One side of the backfilled geotechnical test pit 15could be seen at the NE end of the trench.

Trench 4 (PRN 31956) Figures 08 and 09 Plates 09 and 10

The trench was located at the south-western side of the overflow channel leading from the upper leat to Afon Porth Llwyd, and was primarily to investigate an 8m long scarp running SW-NE along the slope, which may represent a terrace or field boundary and was not recorded on the map of 1788.

Excavation showed there was a rough concentration of mainly medium- sized stones (0402) running across the trench. These were randomly placed and not tightly packed, with topsoil between the stones. There was also a larger stone measuring 0.65m in length. Some of the lower stones were firmly embedded in the natural glacial deposits (0404). The stones were located on top of a broad, shallow scarp c.2m wide and c.0.6m high, facing north-west.

This feature may represent the damaged remains of a field boundary, with the scarp perhaps partially produced by ploughing below it eroding the soil away. Whether the stones were just clearance stones concentrated on a field boundary or remains of a wall was not clear.

Trench 5 (PRN 31943) Figures 10 and 11 Plates 11-14

Trench located to the south of Trench 4 to investigate a large field boundary wall running downhill in a SE-NW direction. The boundary is not shown on the map of 1788, but is shown on the 1st Edition map of 1889; therefore a likely date for the construction will be during the 19th Century.

The wall within the trenched area was composed of large angular stones (up to 0.75m in length) at the base with smaller stones tightly packed over and to the south-western side of the larger stones (0503). The large stones were part of the wall face but they seemed very regular for the base of a field wall and might indicate that an earlier structure had been incorporated into the later wall, which was also wider here (at about 2.7m wide) than further to the south-east.

Towards the north-western end of the trench there was a concentration of fairly loose stone within a matrix of light reddish brown clayey silt (0502), which may be part of a demolished wall or a natural deposit.

Bracken clearance took place during the trenching and after the clearance a possible line of a wall was found at the north-western side of the trench, which may represent an associated structure (sheepfold?) to boundary wall (0503).

Trench 6 (PRN 36094) Figures 02, 08 and 09 Plates 15-18

This trench was located on a narrow and relatively flat strip of land between a gradual upward slope to the south and south-west, and a steep downward slope to the north and north-east. To the west of the trench there are possibly one or two building platforms and a sub-circular enclosure interpreted as a small medieval or early post-medieval farmstead (PRN 31969). The modern access track running through this area will have to be widened for the works and this would threaten what appeared before excavation to be the remains of a small structure adjacent to a field wall. The trench was located to investigate that potential structure, initially assumed to be related to the small farmstead.

After clearance of the overlying vegetation and topsoil it was clear the field wall (0602) was a later addition and had been placed over an earlier structure, and very likely had been constructed of stone re-used from it. At this stage it was also clear that there were structural elements below the very large volume of cobble-sized stone rubble (0603) overlying the site. Three possible walls were identified within the rubble area, all of which will require further work for a more positive interpretation. The first of these is outside the field wall (0602), at the NE corner of the trench, and is basically composed of only a few large stones (0607) running close to the escarpment of the eastern slope with possible cobbled area (0608) butting up to the wall, and possibly overlying the wall. The other two possible walls are to the north of the trench (0609), and at the south (0610), although these areas will need the stone rubble to be removed before further identification of the features.

A narrow sondage was dug across the trench, aligned NE-SW. In the sondage 3 flat slabs were found (0604), which may be part of a floor, or capstones for a drain. A stone set on edge seemed to form part of this feature. These did not continue over the full length of the sondage and where they were not present the sondage was dug down to the natural boulder clay and bedrock. Above the natural and extending below the slabs was a very dark grey, slightly gritty silt containing frequent stone (0605). A sherd of pottery of Roman pottery, dating to the second to fourth centuries AD, was found securely sealed within the layer. A tiny fragment of red pot was also found and this could be a much degraded piece of Roman samian ware (see appendix II for report on the pottery). Two heat-shattered stones were also recovered from this layer. These are rounded cobbles, and heat-shattered stones of this type are often called 'potboilers'.

The discovery of the Roman pottery led to a reassessment of the site and it is possible that all the fragments of walls visible under the rubble are part of a circular wall and that this is a stone-built roundhouse used into the Roman period. The structure is certainly much larger than thought before excavation, being possibly c.5m in diameter internally, and about 8m externally, and it extends under the current access track.

6. SUMMARY AND CONCLUSIONS

Trenches 1 and 5 contained the remains of field boundaries of 18^{th} and 19^{th} century date with some possible associated features. The scarp and collection of stones in trench 4 could also represent a field boundary but as this does not appear on the historic maps this may be of an earlier date. It is likely that some of the stones in trench 2 are the result of field clearance but many are of natural origin. The full nature of the field system in this area and the date of its origin have not yet been established. It is possible that there are other features present in this area that have not yet been identified. The nature of the wall in trench 5 with its large stones suggests the possible reuse of an earlier structure in the later wall. It is recommended that this area be stripped under full archaeological control allowing any features exposed to be fully excavated and recorded.

Trenches 3 and 6 may contain much earlier features. The structure in trench 3 would need to be fully exposed to determine its character and date, but the current evidence suggests a small building or enclosure rather than a field wall. If this proved to be a building it could be of considerable significance as its proposed form is suggestive of a prehistoric roundhouse. This feature can be included in the controlled stripping of this field but due to the potential importance of this feature it is recommended that it fully hand excavated and recorded in detail as soon as possible so that any extended excavation that might be required does not disrupt the construction programme.

The structure in trench 6 is clearly quite substantial and the Roman pot sherd can be taken as a reasonable estimation of its date. It was possibly an indigenous roundhouse of the Roman period, which had been re-used during intervening periods and finally totally dismantled during the construction phase of the 19th century field boundary wall. This structure is clearly more complex than initially interpreted and further work would be required (as well as a comprehensive GPS survey) to fully understand the sequence of events and provide further dating evidence. It is possible that some or all of the adjacent earthworks are part of a Roman period settlement rather than a later farmstead as initially assumed. A settlement of this date with well-preserved deposits and structures, as demonstrated both by the surface earthworks and by the layers revealed in trench 6, is of schedulable quality and national importance. Excavation of a substantial part of the site would clarify the date and nature of the site but would time consuming and expensive. It would also cause damage to the site and should be avoided if impact to the site can be mitigated in other ways. The simplest solution, which would prevent any disturbance to the archaeology, would be to divert the track and to prevent further use of this area by vehicles. This solution would have to be of a long term nature to prevent damage to the site in future.

Discussions with RWE NRL, the Snowdonia National Park Authority Archaeologist and GAPS will be held to establish an agreed methodology for reducing or entirely avoiding the impact on this site.

7. BIBLIOGRAPHY

- Evans, R., 2010. *Dolgarrog Hydro-Electric Works, Dolgarrog, Conwy: an archaeological assessment.* Unpublished GAT report no. 900 (November 2010)
- Gwyn, D., 2006. *Gwynedd, Inheriting a Revolution: the archaeology of industrialisation in North-West Wales,* Phillimore, Chichester.
- Gwyn, D. and Nevell, M., 2006. *Dolgarrog, Conwy, North Wales: an archaeological assessment and survey of an early 20th century hydro-electric water catchment system*, unpublished report by Govannon Consultancy and University of Manchester Archaeological Unit.

Institute for Archaeologists (IFA), 2008. Standards and Guidance for archaeological field evaluation

- Kenney, J., 2011a, *Dolgarrog Hydro-Electric Works, Dolgarrog, Conwy: an archaeological assessment.* Unpublished GAT report no. 928 (March 2011)
- Kenney, J., 2011b, *Dolgarrog Hydro-Electric Works, Dolgarrog, Conwy: report on an archaeological watching brief.* Unpublished GAT report no. 978 (May 2011)

Appendix 1. Details of evaluation trenches

Trench 01 PRN 31957 SH75846699

Trench size: 10.5m x 2.0mPhotos: 053-064Plans: Sheet 01 Drawing 01Max Depth: 0.8mOrientation: E-WSections: Sheet 01 Drawing 02Notes:Trench located at edge of road to the Coedty dam, south of the low head pipe. The trench revealed an
earthen core field boundary parallel to the minor road, and a possible sheepfold at the western side of the trench.

Layer	Depth below surface (m)	Description
0101	0m	Topsoil – Dark grey brown slightly gritty silt with a few stones and many bracken roots.
0102	0.25	Lower topsoil – Mid brown loam with occasional small and medium stones.
0103	0.5	Natural – Reddish brown silty loam with some gravel and occasional large stones (sub-angular).
0104	0-0.1	Roadside wall. Large sub-angular stones up to 0.6m long haphazardly placed in matrix similar to 0102.
0105	0.2	Wall foundation – Sheepfold. Neatly laid foundation of flat slabs up to 0.4m long. Generally survives to only 1 slab deep but with some smaller stones on top.
0106	0.4	Group of 3 sub-angular stones under wall (0104), possibly natural boulders rather than foundation stones.
0107	0.2	Cut for wall (0105). Slight trench or terrace no more than 0.2m deep.

Trench 02	PRN 31955	SH75816699	
Trench size:	9.0m x 1.9m	Photos: 065-076	Plans: Sheet 02 Drawing 03
Max Depth:	0.4m	Orientation: NW-SE	Sections: -
Notes: Tre excavated to and not struc	nch located to t investigate a po ctural.	he south of Trench 1 within an a ossible stone-built feature. The s	area heavily infested with bracken, the trench was stone seems to have been the result of field clearance
Layer	Depth below surface (m)	Description	
0201	0	Tomasil Middowl groupish	heaven alayers silt containing accessional small to

0201	0m	Topsoil – Mid dark greyish brown clayey silt containing occasional small to
		medium sub-rounded and sub-angular stone.
0202	above	Stone concentration – This concentration not structural, possibly the result of
		field clearance, visible above topsoil (0201).
0203	0.15	Natural - Light mid reddish brown clayey silt with occasional small and large
		sub-rounded stone inclusions.

Trench 03	PRN 31954	SH75826696					
Trench size:	10.0m x 2.0m	Photos:	052 and 077-086	5 I	Plans: Sheet 0.	3 Drawing 04	
Max Depth:	0.48m	Orientat	tion: NE-SW	Sect	tions: -		
Notes: This	s trench was lo	cated a few metr	res to the SE of Tr	ench 2, a	ind was to invest	stigate a possible	e ancient
field boundar	ry that was uns	een on the map r	regression, but the	e structure	e revealed may	be a small enclo	osure or
building not	a field wall.						

Layer	Depth below surface (m)	Description
0301	0m	Topsoil – Dark greyish brown gritty sandy silt with occasional sub-angular stones and many bracken roots.
0302	0.15	Subsoil – Mid brown sandy silt loam with a moderate amount of small sub- angular stone.
0303	0.10	Curved wall – Composed of small boulder sized stone and a few upright stones on the outer face, (0305) may be the return wall for this feature.
0304	0.20	Cobbled area – Small cobbled area or drain located at the southern end of the wall (0303), composed of small cobble sized stone and incorporated within two large natural boulders.
0305	0.10	Return wall – A few large stones which may form a return wall for the curved

		wall (0303).
0306	0.10	Re-deposited clay – Backfill from a recent geological test pit.
0307	0.25	Natural – Mid orangey brown clayey silt containing a moderate amount of
		pebble sized sub-angular stone.

Trench 04 PRN 31956 SH75776694

Trench size: 10.0m x 1.9mPhotos: 087-096Plans: Sheet 04 Drawing 05Max Depth: 0.5mOrientation: NW-SESections: Sheet 06 Drawing 07Notes:Trench was located to the south of a stream dividing the fields on slightly sloping ground, below densecovering of bracken. This trench was to investigate a short and shallow terrace running parallel to the naturalslope of the ground.

Layer	Depth below surface (m)	Description
0401	0	Topsoil – Dark grey brown clayey silt with large amounts of root disturbance, and occasional small and medium sized sub-angular stone.
0402	0	Possible terminus of field boundary – Linear concentration of stones, aligned NE-SW at the point where the ground appears to slope steeper to the NW. A large stone at the NE end may be a wall terminus, the smaller stones forming a rubble core to the field boundary.
0403	0.25	Subsoil – Reddish brown clayey silt.
0404	0.5	Natural – Light greyish brown clayey silt with patches of gravel and occasional small and medium sized sub-angular and sub-rounded stone.

Trench 05 PRN 31943 SH75776692

Trench size: 20.0m x 1.9mPhotos: 103-118Plans: Sheet 05 Drawing 06Max Depth: 0.6mOrientation: NE-SWSections: Sheet 06 Drawing 08Notes:This trench was located to the south of Trench 4 and was to investigate a large field boundary with aNW-SE orientation. As with all the other trenches this trench was heavily covered with bracken, and was placedparallel to the natural slope of the ground.

Layer	Depth below surface (m)	Description
0501	0	Topsoil – Dark greyish brown clayey silt with occasional small sub-angular and sub-rounded stones, and many bracken roots.
0502	0.3 - 0.05	Stone concentration – Possibly a natural concentration of stone, fairly loose within a matrix of a light reddish brown clayey silt.
0503	0	Field boundary – NW-SE aligned stone core large field boundary. Three very large stones at the base of the wall in this area with inner faces, overlain by smaller stones.
0504	0.25	Natural – Light reddish brown clayey silt containing a moderate amount of sub- angular and sub-rounded stone inclusions.
0505	0.15	Subsoil – Mid reddish brown clayey sandy silt with moderate stone inclusions of mainly sub-angular stone.

Trench 06 PRN 31969 SH76446723

Trench size: 12	2.0m x 5.0m	Photos: 123-163	Plans: Sheet 08 Drawing 10 + Sheet 09 Drawing 11
Max Depth: 0.:	5m	Orientation: N-S	Sections: Sheet 07 Drawing 09
Notes: This t	rench was locate	ed near the eastern periphery	of the proposed development, on fairly level ground
within a gentle	upward slope to	o the West and South-West an	nd a very steep slope to the East. Trench located to
investigate a fi	eld boundary wa	all and suspected yard area as	sociated with a possible medieval feature a few
metres to the w	vest. The structu	re revealed may be a stone-bu	uilt roundhouse.
Layer	Depth below	Description	
	surface (m)		
0601	0	Topsoil – Black slightly grit	ty silt with occasional stones and many bracken
		roots.	
0602	0	Field wall – Possibly dating	to the 18 th Century, a roughly made stone wall

		composed of irregularly placed stones of varying size and shape, and clearly built
0602	0.25	Over an existing demonstred stone wan/structure.
0005	0.23	Conapsed rubble – Probable rubble from a demonsted structure. The number of
		small stones may indicate that the larger stones had been removed and reused for
0.604	0.40	the later field wall and/or associated structures.
0604	0.40	Slabs – Slabs exposed in sondage across the trench, they may be part of a floor
		but there are no mints of other such stabs and therefore it is possible they form a
		drain. There is a vertical slab that may indicate the former existence of a box
		compartment or nearth although there is no indication of burning nor charcoal in
0.05	0.55	tnis area.
0605	0.55	Black layer – A very dark grey, slightly gritty slit with frequent stones up to
		0.15m in length. The dark colour and very occasional fragments of charcoal suggest this is an ecoupotion lever a shord of Domon pot was found ecoupoly.
		suggest this is an occupation rayer, a shere of Roman pot was found securely
		described as not boilers.
0606	0.55	Natural This denosit directly overlies the bedrock and a strong red brown in
0000	0.55	realour, and other parts were a pale red brown gritty silt. Contained frequent small
		angular stones
0607	0	Roundhouse wall $- A$ few large stones visible at the NE corner of the site with
0007	0	cobbles (0608) either butting up or overlying them at the outside of the later field
		wall (0602) This may be part of the original structure/roundhouse with further
		investigation necessary to establish the relationships.
0608	0.40	Cobbled area within roundhouse – At present very little can be seen of these
		cobbles, number was allocated for the feature but further work needs to be done
		prior to correct interpretation
0609	0.05	Wall at NW of site – Only 3 stones are visible of this possible wall, further work
		to establish as above context (0608).
0610	0.10	Outer wall of roundhouse at south of site – The same applies to this context as
		(0608) and (0609), it needs further work to establish if we truly have a wall or the
		stones are purely co-incidental.
		•

Appendix 2: Pottery from trench 6

Report by Dr Peter Webster

T6. Context 0605. SF.1

- Basal fragment of a jar in Black-burnished ware with what appear to be lime accretions internally. The more diagnostic elements such as the decoration or rim are missing making this difficult to date within the second to fourth century currency of the ware in North Wales. All that can be said is that this does not have the narrow base of many of the later types so that a second or third century date is more probable.
- A tiny fragment of redware abraded or broken so as to lack any of its original surfaces. The fabric includes some specks of ?lime and a much degraded piece of South Gaulish samian seems possible. A date in the range c.A.D.70-110 may be tentatively suggested.



SF1, black-burnished ware jar sherd

Figures and Plates

Figures

Figure 1: Location of evaluation trenching

- Figure 2: Location of trenches 1 to 5 overlaid on OS County Series 3rd Edition map, 1913 (test pits and boreholes as reported in Kenney 2011b)
- Figure 3: Location of trench 6 overlaid on OS County Series 3rd Edition map, 1913 (test pits and boreholes as reported in Kenney 2011b)
- Figure 4: Plan of trench 1
- Figure 5: North facing section through wall 0104
- Figure 6: Plan of trench 2
- Figure 7: Plan of trench 3
- Figure 8: Plan of trench 4
- Figure 9: NE facing section of wall or stone dump 0402

Figure 10: Plan of trench 5

- Figure 11: NW facing section of wall 0503
- Figure 12: Plan of trench 6
- Figure 13: NW facing section across trench 6

Plates

- Plate 01: Post-ex view of Trench 1 from the eastern end, showing roadside wall (0104).
- Plate 02: Post-ex shot of western end of Trench 1, showing sheepfold (0105).
- Plate 03: Longitudinal shot of the stone field clearance in Trench 2 from the NE (0202).
- Plate 04: Post-ex shot of Trench 2 from the NW, showing field clearance stones (0202).
- Plate 05: General shot of Trench 3 from the NE.

Plate 06: Close-up of the curved wall in Trench 3 (0303) from the SE.

- Plate 07: Possible entrance at the northern end of Trench 3 (0305), also showing a recent test pit (0306).
- Plate 08: General shot of Trench 3 from the SW, showing cobbled area (0304).
- Plate 09: Shot of terraced field boundary (0402) in Trench 4, from the NW.
- Plate 10: NE facing section through (0402) in Trench 4.
- Plate 11: Feature (0502) at the NE end of Trench 5, field boundary (0503) in the background.
- Plate 12: Field boundary (0503) in Trench 5 from the NE, with very large stones at the base.
- Plate 13: Longitudinal shot of field boundary (0503) in Trench 5 from the NW.
- Plate 14: Section shot of (0503) within Trench 5 from the NW.
- Plate 15: General shot of rubble (0603) and wall (0602) in Trench 6 from the SSE.
- Plate 16: General shot of rubble (0603) and wall (0602) in Trench 6 from the W, also showing possible wall (0609).
- Plate 17: Close-up of slabs/drain (0604) in Trench 6 from the SW.
- Plate 18: Sondage section through rubble (0603), in Trench 6, from the NW.





Figure 2. Location of trenches 1 to 5 overlaid on OS County Series 3rd Edition map, 1913 (test pits and boreholes as reported in Kenney 2011b)



Figure 3. Location of trench 6 overlaid on OS County Series 3rd Edition map, 1913 (test pits and boreholes as reported in Kenney 2011b)







Figure 6: Plan of trench 2



Figure 7: Plan of trench 3









Figure 13. NW facing section across trench 6







Plate 02: Post-ex shot of western end of Trench 1, showing sheepfold (0105).



Plate 03: Longitudinal shot of the stone field clearance in Trench 2 from the NE (0202).



Plate 04: Post-ex shot of Trench 2 from the NW, showing field clearance stones (0202).



Plate 05: General shot of Trench 3 from the NE



Plate 06: Close-up of the curved wall in Trench 3 (0303), from the SE



Plate 07: Possible entrance at the northern end of Trench 03 (0305), also showing a recent test pit (0306).



Plate 08: General shot of Trench 03 from the SW, showing cobbled area (0304).



Plate 09: Shot of terraced field boundary (0402) in Trench 04, from the NW.



Plate 10: NE facing section through (0402) in Trench 04.



Plate 11: Feature (0502) at the NE end of Trench 05, field boundary (0503) in the background.



Plate 12: Field boundary (0503) in Trench 05 from the NE, with very large stones at the base.



Plate 13: Longitudinal shot of field boundary (0503) in Trench 05, from the NW.



Plate 14: Section shot of field boundary (0503), within Trench 05, from the NW.



Plate 15: General shot of rubble (0603), and wall (0602) in Trench 06, from the SSE.



Plate 16: General shot of rubble (0603), and wall (0602) in Trench 06 from the W, also showing possible wall (0609) in left foreground.



Plate 17: Close-up of slabs/drain (0604) in Trench 06, from the SW.



Plate 18: Sondage section through rubble (0603) in Trench 06, from the NW.



Gwynedd Archaeological Trust Ymddiriedolaeth Archaeolegol Gwynedd



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