

Ymddiriedolaeth Archaeolegol Gwynedd Gwynedd Archaeological Trust



Elent PRN 40462

# A55 Anglesey DBFO Scheme

# ARCHAEOLOGY

# **Post-Excavation Assessment and Research Design**

Prepared for

# Richards, Moorehouse and Laing

November 1999



Ymddiriedolaeth Archaeolegol Gwynedd Gwynedd Archaeological Trust

Contracts Section:

'Craig Beuno' Garth Road Bangor Gwynedd LL57 2RT Tel : 01248 352535 Fax: 01248 370925 email: gwyneddarchaeologicaltrust@btinternet.com

#### 1. INTRODUCTION

A series of archaeological excavations have been carried out by Gwynedd Archaeological Trust (GAT) on sites affected by the construction of the new A55 road across Anglesey. The work was commissioned by Richards Moorehead and Laing (RML) on behalf of UK Highways. The work was carried out between January and July 1999, on six individual sites. It conformed to an 'Outline Project Design' issued by the Welsh Office and a series of archaeological certificates prepared by RML.

This document provides a preliminary statement on the results of the archaeological excavations undertaken by GAT, and an assessment of the potential of the archive and finds, followed by an updated project design for the post excavation work up to publication stage. It conforms to the guidelines for the 'Management of Archaeological Projects (MAP 2) prepared by English Heritage (1991). The work has been commissioned by RML on behalf of UK Highways.

#### 2. SUMMARY OF EXCAVATION RESULTS

#### 2.1 Project location

The sites excavated by GAT all lie within the west section of the route, from Treban cross-roads (where the A4080 to Rhosneigr meets the A5), to Holyhead, a distance of some 14 Kilometres.

This is a low-lying area of Anglesey, generally less than 30m OD, characterised by smallish fields, of which the agriculture is mostly pastoral although with some arable. The underlying geology is of Ordovician sandstone in the east, changing to Precambrian lava's of the New Harbour Group west of Caergeiliog. There is an area of marine alluvium west of Valley. The rocks are covered by glacial drift, and the soils are fairly acid low base brown earths, with some wetter areas, and occasional rocky areas.

The road initially runs south of the present A5 and round the south side of the village of Bryngwran, before turning north to cross over the A5 east of Caergeiliog. Here the underlying rock is Ordovician sandstone which is overlain by glacial drift and soils of brown earth status. The topography is typified by low mounds up to 40m OD, which are drumlins compiled of glacial drift or, often, drift with a rock core. Many of these are occupied either by single farms or, as in the case of Bryngwran, a village, although the latter grew up around a farm following the construction of Telford's A5 road. It is the southern slopes of the Bryngwran hill which contain the Prehistoric settlement site C17. The route of the road initially runs parallel to the Afon Crugyll, but where the river turns south to run round the hill at Bryngwran, the road continues through the southern end of the hill, then meets the Crugyll again in a relatively low lying wetter area of land. The route then rises towards Cymunod, where it again cuts through soils of brown earth status, and continues to the lower northern slopes of the hill of Caer Elen. A settlement of Prehistoric/Romano-british date lies on the upper slopes of this hill.

The rock changes at this point to the Precambrian spillitic lavas of the New Harbour Group, again overlain by glacial drift, and varying quality soils of brown earth status. At Caer Elen the route runs north, over the southern end of the Penmynydd drumlin, where lies site D30, a prehistoric settlement. It then crosses a very rocky area before cutting through the southern end of the Ysbylldir drumlin. It then passes through a wetter, low lying area before turning south to pass back over the A5 at Pen-caledog, and onto another rocky area at Ty Mawr.

From Ty Mawr the route heads west to the crossing of the Cymyran Strait, passing through low lying ground, much of it of marine alluvium, and some of it reclaimed land. Despite the seemingly inhospitable topography and soils, prehistoric and Roman archaeology was discovered during evaluation work at Bryn Hyfryd and Cleifiog Uchaf. At the latter site there was evidence for a roman road, thought to lead to a crossing of the strait, and the fort at Holyhead.

After crossing to Holy Island, the route follows the line of the railway into Holyhead. The geology remains unchanged, until the west end by Holyhead where it changes to Holyhead Quartzite. The land is flatter, and the soils of occasional better quality, although some areas are dominated by outcropping rock. The cemetery site (E14) is situated at the west end of this section.

PRN 37226

#### 2.2 B8 Well At Holy Rood Church

A small stone well, noted during the initial phase of the archaeological assessment, was subsequently examined by trial excavation when a piece of medieval pottery was found associated with a cobbled surface. The location of the well adjacent to a medieval church (now derelict) raised its potential importance.



# Site B8 : WELL NEAR HOLYROOD (Parish Church of Ceirchiog) NGR SH 36077685



Plate 1. (above top) The well cistern (007) and retaining wall (023) Fig.1. Plate 2. (above bottom) The well and surrounding cobbled area (005) surfaces.

Plan of the main excavated are showing the well and cobbled

The well was situated in a slight depression on the east side of a low hill, above a small tributary of the Afon Caradog, at about 20m OD. The well consisted of a natural surface spring, over which had been built a low rectangular structure of four large stone slabs to form a chamber 1.2m by 0.6m. The front, east, slab had a notch cut into the top edge to control the flow of water out of the chamber. Roughly constructed dry stone revetment walling lay around the north, west and east sides. The chamber was surrounded by a cobbled area measuring approximately 10m by 6m. The area was not clearly defined, and little attempt had been made to construct a cobbled floor, but rather small stone had been laid onto the clay to act as a hard layer. A number of drains, of successive periods, ran down slope from the well towards the stream at the base of the slope. A small number of negative features were cut into the natural clay, but no substantial features were found to pre-date the chamber and cobbled area. Two sherds of probable medieval pottery were recovered from the cobbled surface, and two lead items were found which may also be of medieval date.

#### 2.3 C17 Settlement East Of Melin Y Plas

#### Summary of Excavation Results

This site was situated at the southern end of a long, glacial ridge of sand, gravel and clay, which overlay a brown sandstone outcrop. The settlement exploited this natural prominence and was built on an ancient river terrace bounded on three sides by the Afon Caradog, which flows around the base of the hill. It had strategic views to the south, east and west and was within sight of a contemporary settlement at Castellior.

Before excavation ridge and furrow could be seen on the surface of the field. This phase of agriculture is probably related to a number of relict post-medieval field boundaries which were recorded during the excavations. The site had been regularly ploughed in modern times, but the destructive effects of this had been partly ameliorated by the presence of stone rubble overlying part of the archaeology. The archaeology outside this spread was reduced to isolated and truncated features cut into the natural clays.

The surviving remains consisted of four or more round houses with associated pits and post hole structures. Two of the buildings had mortars left *in situ* and a fragment was found in the overall stone spread. Quern stones were strangely absent from the site which probably reflects the type and date of occupation. Flint, chert and stone tools occurred throughout the area and were not directly attributed to any area of activity.

Romano-british pottery was associated with the later phases of occupation and appears limited to the central area of the site and particularly to the later phase of house 2. Some of this pottery exhibits loss of cortex on the outside which may be an effect of specialized use, rather than soil acidity.

Where possible, structures and features are allocated to one of the phases indicated below. However a body of material including many postholes, pits and a remnant of capped drain cannot be assigned at the time of writing, and it will be necessary to await the outcome of further analysis before they can be allocated to an appropriate phase.

#### Phase 1

A spread of struck and worked flint and chert represents the earliest activity and is attributed to the late Neolithic or Early Bronze Age. Both tools and struck flints are present and, although not directly linked by stratigraphy it is possible that a line of small hearths may also date to this period.

#### Phase II

A large, well-defined remnant of a round house, referred to as 'house one,' occupied the north west quadrant of the site and was delineated by a circular slot with a diameter of approximately 12 m. Only the northern half of the circle remained. This feature was initially interpreted as a drip gully but, during excavation, was found to have been re-cut, and its new shape was retained in a manner which precluded an open feature but which was more indicative of a slot for timber. Inside the circle, and concentric with it, was a capped drain serving the interior of the building. A number of post holes exist inside the building but their relationship with the house structure has yet to be established, although one series does appear to form a ring roughly concentric with the outer gully.

House five appears to be of similar construction, with a re-cut slot around the outside which may represent part of the house wall. Internally, there is a 'Y' shaped drain and a number of related post holes. Although no stratigraphy survives to link the two buildings, houses one and five are devoid of finds and may be tentatively assigned to the same early period.

A number of rectangular pits are tentatively assigned to this phase. They are thought to have had an industrial function, and perhaps contained a wooden tank. A number lie south-west of house 1, and a particularly well preserved example lies west of house 5. This latter is cut by the slot which defines the outer edge of the house, and it would appear that the pit was deliberately

# Site C17 - MELIN-Y-PLAS - Romano-British Settlement



# Site C17 - MELIN-Y-PLAS - Romano British Settlement



Fig. 4. (left) & Plate 3 (right)

Plan of pit 315 shown cut by later pit 323. Pit 315 was originally timber lined and evidence for this can be seen in the form of the darker band of material around its periphery





Plate 5. (above) House 2 during excavation. Note the slab covered drains Plate 6. (right) A mortar shown *in-situ* within the floor of House 2, phase III.



Fig.5 (below) & Plate 4 (left)

Stone lined pit 389 after excavation. This feature was probably a domestic storage pit and is associated with House 5, Phase II.





back-filled prior to the construction of the slot. However, the slot which cuts the pit is not thought to represent the primary phase of the house.

Another pit, a round stone lined pit, lay inside the house. This is thought to be contemporary with the house, and to have been used for domestic and not industrial purposes.

#### Phase III

A deliberate terrace was cut across the slope of the hill, cutting away half of house one and truncating some of the pits. The subsequent leveled area was used for the construction of house two and associated surfaces. The archaeological evidence for this remained most clearly defined above, north of, house two but had eroded to some degree in the area to the west. A circular structure, defined primarily by capped drains and remnants of surfacing, house two preserved the best evidence for continuity of occupation of any of the structures. The remains of the first building were ephemeral and consisted of patches of small pebble surfacing between the later cuts of drains and post holes. This had then been buried by a five to ten cm thick layer of yellow clay, either as a base for a later floor surface or as the result of demolition of the original structure. Subsequent floor surfaces included areas of flags and cobbles and a succession of capped drains cut to take ground water, which seems to have been a major problem, away from the interior. A mortar and a worn, massive, flat topped stone were found *in situ* in the northern interior of the house and these seem to be related to the final phase of occupation. The outer wall slot of the building had only survived on the northern edge under the terrace, and even there it was too poorly defined for the interpretation of structural evidence. The size of the building, outlined by flooring, drains and external activity, is comparable to house one.

A pebble surface was associated with house two, forming a possible yard area adjacent to the building and extending into a pathway leading west. A part of the surface was worn into a hollow, which appeared to respect (go round) the west side of house 2.

A number of pits are stratigraphically associated with this phase, and many others may also belong to the same period of use. One large pit on the north-east perimeter of the hut dating from the last phase of activity is integrated into two successive drainage systems. The evidence suggests that water from this pit was fed into the drains which run through the house. Other pits appear to have performed a similar function, that is, they acted as stores for subsequent distribution rather than drainage sumps.

A spread of rubble defined the outer perimeter of house 2, and lay in pits, and on the cobbled yard, immediately outside the house. This spread was associated with burnt clay and is interpreted as a stone surround to a clay wall, a feature typical on round houses excavated on other sites. Romano-british pottery was found associated with this, and with other layers overlying the floor, indicating a late Iron age date for the end of this phase.

#### Phase IV

The phase III path and yard were deliberately leveled with rubble, which was subsequently cut by capped drains and slots indicative of the presence of at least one structure, and possibly two (houses 3 and 4). A mortar lay between houses 3 and 4, having been cut into the rubble spread. The evidence for structures was so badly damaged by later cultivation and difficult to determine within the rubble that only very truncated remnants were found. However sufficient evidence of activity remained to argue continued occupation beyond the end of phase three.

House three consisted of a curvilinear capped drain associated with a small spread of stone flags and, stratigraphicaly, with an external short straight length of stone wall. Two parallel slots to the north may also be associated with this phase and additional evidence in the form of late pits survived, which may be associated with these features. House four is a provisional interpretation of the northern remnants of a curving slot, which partly overlies house 2. Another curving slot, which may represent a house, lies to the south.

#### 2.4 D29 Ditches at Caer Elen

The site at Caer Elen was located during evaluation excavations. It consisted of a ditch measuring 2m wide at the top, and 0.65m deep. The function of the ditch was not known, but, because of its alignment, it did not appear to form part of the post-medieval field system, and its potential was raised by the location of an adjacent late-prehistoric settlement. Excavation revealed a greater length of the ditch (004), and also three more ditches which clearly belonged to the post-medieval field system (006, 008 and 010).

*Ditch 004.* This was the most substantial ditch on site, 0.66m deep and 1.86m wide at the top, with sides sloping at an angle of about 45 degrees, resulting in a wide "V" shaped profile. It contained two identifiable layers of sediment. The lower fill, a dark grey brown silt (005), occupied the majority of the ditch. The top part of this layer had stood open and waterlogged for a period of time, before the remainder of the ditch was filled in by natural silting and ploughing. No dating evidence was found, nor any reason for its presence, and it was therefore interpreted as an early field boundary of medieval or pre-18<sup>th</sup> century date.

Ditches (006) and (008) and (010). These lay either side former, now levelled, field banks, and originally formed part of the present field system.

#### 2.5 D30 Bronze Age Site at Penmynydd

#### Summary of Excavation Results

The site below the farm of Penmynydd was first noted during evaluation excavations. Trial excavations were undertaken to try and locate a building marked on 18<sup>th</sup> century estate maps, but not visible on the ground. No building remains were found during the evaluation excavations, although large quantities of post-medieval pottery were found associated with a ditch. Also noted, however, were a number of pits and/or post-holes cut into the natural clay, some of which contained charcoal, and one of which contained prehistoric pottery. A number of flint flakes were also found.

The site occupies a sheltered, south facing position at the foot of a low hill, one of a number of drumlins which typify this area of Anglesey, and around which settlements tend to cluster. A spring and a stream provided a plentiful supply of water for inhabitants.

Excavation commenced in early March, 1999. An area 90m by 35m was stripped by machine, during which features were noted and marked, and subsequently excavated by hand. Long term cultivation had truncated all the remains and obliterated any horizontal stratigraphy, but partial remains of structures and pits (some of the latter interpreted as ovens) survived together with finds of worked stone and pottery indicative of domestic occupation during the Neolithic period.

Two principal phases of occupation of the site were noted; prehistoric and post-medieval.

#### Phase 1: Neolithic

This phase is tentatively assigned to the late mesolithic and the neolithic period on the basis of the pottery and stone tools. Although it has not yet been possible to identify complete structures, there are a number of features which confirm their presence, particularly linear features which appeared in both the assessment trenches and in the main excavation. For example, context 028 consisted of two shallow linear depressions, running east to west, with a single trapezoid inclusion outlined in charcoal, which is typical of a large, split timber burnt *in situ*. Approximately 9 m. to the south a partial structure of stake and post construction, also oriented east to west, had been recorded in assessment trench 148, but it did not survive to be re-excavated. Both features were associated with a spread of very red silt and it is possible that they form part of the same straight sided building. Linear features 004 and the curvilinear arrangement of features 182 to 190 also represent the truncated remains of structures, with a number of round, flat based post holes.

Pits were scattered over the area of the excavation, some of which contained dateable evidence in the form of pottery, charcoal and worked stone. Several had burnt bases and are interpreted as having contained a fire. Three of these (151,110 and 100) have provisionally been interpreted as ovens, and the environmental data will be crucial to this identification. All three were ovoid, had a burnt earth base and had a clear, charcoal filled slot running into them which may have been a flue. Other pits were interpreted as being the base of trees which had been burnt *in situ*. In one case a tree hole was cut by prehistoric features, thus dating tree clearance to prehistoric times.

#### Phase two

Post medieval pottery and glass determined the features assigned to this phase. A large well defined ditch ran north to south across the site and spread into a pond at the southern end. In addition, several truncated pits contained modern finds. There was no direct evidence for a post-medieval building, but window glass and domestic pottery indicated domestic occupation nearby.

#### 2.6 D31 Ditch at Penmynydd

A possible ditch with charcoal deposits had been noted during the evaluation excavations. When examined in greater detail revealed the feature to be a natural break in the slope, with a charcoal layer in the upper levels of sediment. Although the origin of the charcoal was not recognised at the time, later discovery of a Bronze-age burnt mound higher up the slope is a possible source.

#### 2.7 E14 Ty Mawr Cemetery

Situated off the north west coast of Anglesey, Holy Island has an on going tradition of sea faring and trade predating Christianity. The name Holy Island, coupled with the density of early Christian sites, is indicative of the religious significance the island must have held in the medieval period and this, with the historical dependence on maritime trade, has influenced the material and social culture and is inevitably reflected in the archaeological record. Other sites with cist graves comparable to Ty

Site D30 - PENYMYNYDD - Late Prehistoric features



# Site D30 - PENYMYNYDD - Late Prehistoric pits



#### Plate 9.

Pit 110 showing the charcoal layer which sealed the base of the feature.



#### Plate 10.

Pit 110 after removal of fill 111. Burnt clay surface 118 is clearly visible as is stakehole 120.



Mawr, Kingsland can be found on Holy Island at Towyn y Capel, St Cybi and particularly at Porth Dafarch, where cist graves are cut into early Bronze age mounds. This new site, at Ty Mawr farm, spanned from the late Neolithic up to the present, with the most intense activity centered on the Bronze age and the early Medieval.

The cemetery was quite small, only 43 graves, and had both adult and juvenile burials in both cist (lintel) graves and dug graves with wood coffins. The graves, face east and are attributed to the Early Christian period. They are arranged in rows, although these become disturbed where they cross a Bronze age barrow at the south end of the cemetery. Although the time gap is too great to argue continuity, it would appear that the barrow was still visible when the cemetery was in use.

The evidence for the barrow, which sits on top of a very low rise, survived primarily as negative features with only ephemeral remains to identify an earth mound. Two phases were identified. The first was a single, flat based ring ditch with a mound on the inside. No burials were found, but these may have been within the body of the mound. The ditch was filled with eroded barrow material, but was then re-cut with a deeper ditch, and with a small, dry stone revetment was constructed around the mound. There is an inner ring of posts that is most likely associated with this second phase but the stratigraphy which would have demonstrated the relationship between the inner structure and the second ditch phase was no longer present. It is therefore possible that the inner features are of early Christian date.

The site may be divided into seven clear phases of activity with provisional interpretations.

#### Phase one

The late Neolithic is represented by a localized spread of worked stone and, as these consist of both the manufacturing waste and the finished tools, this is almost certainly an occupation site. A number of post-holes containing burnt posts may provide structural evidence for this period, but confirmation of this will have to await the results of radiocarbon dates.

#### Phase two

This phase sees the initial construction of the barrow. Evidence for pre-barrow preparation consisted of an early ground surface in which were tree root holes, suggesting scrub clearance. Over these, in patches, was a brown clay layer with charcoal, possibly initial levelling, or perhaps part of the body of the mound. The ditch was 12 m in diameter, 0.70-1.0m wide and 30cm deep, and the evidence suggests that the upcast was used to form part of the barrow, although the majority of this material had been lost prior to excavation. Only one of the internal structures can be associated with this phase with any confidence and this is a charcoal and ash filled pit in the eastern quadrant, which underlies the inner circle. A badly truncated pit containing a slab base and some stone lining in the western quadrant is associated either with this phase or with phase four. The pit is out of alignment with the later cemetery and too small even for an infant burial; it may therefore represent the base of a cremation burial, part of which would have lain within the fabric of the barrow.

#### Phase three

This phase represents the erosion of the barrow and the silting of the ring ditch with material from the mound. This would appear to have happened quite quickly; there is a very thin layer of silt at the base of the ditch, but otherwise the fill is fairly homogenous and such banding as occurs would indicate that the material came from inside the ring.

#### Phase four

The ditch is re-cut from a higher level, narrower than the first, and with a "v" shaped profile. A low revetment of dry stone rubble was built around the edge of the barrow, which later slipped back into the ditch. An inner ditch may also be contemporary with this phase, or possibly with phase six. The ditch is within, but not quite concentric with the outer, and was possibly never a complete circle. It contained at least three post-holes in its base, thus suggesting upright posts forming a timber wall or structure. An alternative interpretation of the structures present in this phase is that of a round house with the inner ring representing the building and the outer a drip gulley. This seems less likely as there is no domestic evidence.

#### Phase five

The outer ditch silts up, with an increase in large stones higher in the stratigraphy, which is compatible with a gradual decay and collapse of the revetment. The lack of stratigraphy makes it difficult to correlate the inner ring with the outer, but it is likely that the former also decays at this time.

#### Phase six

This phase sees the development of a small cemetery of 43 graves, most of which were lintel graves. They are arranged in six rows running roughly north to south, and partly overlie the barrow. The lintel graves were built so that the western end was slightly raised, the eastern end was often slightly narrower and this, coupled with the occasional teeth found at the west ends, indicates that the bodies were buried facing the east in Christian fashion. Other grave types included slab lined graves which may have had wooden caps and coffin burials in graves which had a rubble wall. Bone survival was very poor, and was only clearly seen in two adult graves, which contained body shadows associated with coffin burials. The enamel of teeth was also found to

## Site E14 - TY MAWR - General distribution of features & site phasing

#### Plate.11. (right)

The central part of the site viewed from the south during the excavation of the Bronze Age ring ditches and the Early Christian cemetery.





#### Plate.12. (below)

Recording the constructional details of the individual cists in the cemetery. Ty Mawr farm can be seen in the background.



**KEY TO PHASING** 

and cemetery.

- Phase I LATE NEOLITHIC / EBA (2500-1700BC) (lithic scatter, hearth and postholes)
- Phase II EARLY BRONZE AGE (1700-1400BC) (single ring ditch / barrow & associated pottery)

Phase III - erosion and silting of barrow

- Phase IV EARLY BRONZE AGE (1700-1400BC) (double ring ditch / barrow & associated pottery)
- Phase V erosion and silting of inner and outer ring ditches
- 100

Phase VI - EARLY CHRISTIAN (6th - 8th century AD) (inhumation cemetery)

Phase VII - POST MEDIEVAL (17th - 18th century AD)

# Site E14 - TY MAWR - The Ring Ditches







Fig.12. (below)

Plan of the ditches and associated features after excavation. The outer ditch is re-cut, the line of the Phase II ditch is shown in tone.



The plan shows a single flat bottomed ring ditch which encircled a low mound. Two small pits were associated with this phase, one of which (339) was filled with charcoal.

#### Plate 14. (left)

View of the west edge of the excavated outer ditch. The later cist graves can be seen cutting the edge of the feature.



#### Plate.13. (above)

North facing section through the post medieval ditch (020) which truncated the east side of the outer ring ditch and a number of the Early Christian graves, (see right of picture).



#### Plate 15. (right)

The south quadrant of the outer ring ditch during excavation. The original cut (037) and the stone fill within the re-cut (388) is evident in the remaining sections.





# Site E14 - TY MAWR - The Early Christian Cemetery

#### Plate 16. (right)

Excavated and partially excavated cist graves aligned on the north side of the earlier double ditch ring barrow. The two graves on the right of the picture are shown in greater detail below.



Below : key plan locating the area of the cemetery and distribution of the burials.



Fig.13 - Cemetery key plan

Plate 17. (above)



of grave types within the cemetery (Phase IV) .



#### **KEY TO CEMETERY PLAN**





The cist grave (034) in the centre foreground can be seen to cut into the stone packed ditch of the outer ring of the barrow.

# Site E14 - TY MAWR - Early Christian Cemetery



#### Plate.19. (below)

Grave 066 shown fully excavated with lintels removed. The cist was particularly well constructed and formed part of the main group of burials on the north side of the cemetery





#### Fig. 15. (left)

Plan of grave 304 showing drystone construction enclosing the remnants of a coffin.

Fragmentary traces of an adult skeleton were recovered from within the coffin.

#### Plate 18. (left)

Aligned east-west, grave 304 was located just offcentre within the inner ring ditch of the barrow. Shown part excavated, traces of a wooden coffin can be seen along the left side of the cist.

#### Plate 19. (below)

The lintels capping grave 066 as revealed during initial trial trenching.





Composite plans of grave 066 showing the extent of the cut, lintels, side slabs and floor.

survive in some of the lintel graves. Coffins survived as both stains and blackened fibre in five cases. Both adult and infant graves were found and there appears to be some grouping within the cemetery which is not wholly reflected in grave type but which is suggestive of family or seasonal plots. The rows of the cemetery are in disarray where they cross the barrow, and it would therefore appear to have been visible at that time. It is possible that the inner, structural ring, discussed in phase four, may be contemporary with this phase, and not with the barrow, but insufficient stratigraphy remains to prove this either way.

The cemetery is clearly defined on the north, south and west sides. No contemporary boundaries survive, but the location of the cemetery within the corner of two later ditches may suggest the presence of earlier boundaries, or that the later boundaries respected the cemetery boundaries

#### Phase seven

A number of field boundaries cross the site in the form of ditches. These are associated with post-medieval pottery, and are most likely of 17<sup>th</sup> or 18<sup>th</sup> century date, although, as suggested above, may reflect the line of earlier boundaries.

#### 3. ASSESSMENT RESULTS AND POTENTIAL

#### 3.1 Site B8 Holy Rood Church

#### Factual data

Site records

Context records	25	
Plan and section drawings	5	
Colour prints	50	
Colour slides	37	1

Finds and environmental samples

Prehistoric pottery	0
Romano-British pottery	0
Medieval pottery	2
Post-medieval pottery	5
Flint	10
Worked stone	0
Iron objects	3
Lead objects	4
Copper/bronze objects	0
Slag	0
Coins	1
Glass	1
Horn/bone objects	0
Animal bone	0
Soil sample	0
Charcoal sample	0
Burnt clay/daub	0

#### Stratigraphic and structural data

The structure of the chamber was well preserved, and similarly the cobbling around it. There was, however, very little stratigraphy on the site, nor suitable evidence to enable a firm dating of the structure or cobbling. The compilation of the archaeological summary for this report has made full use of the archaeological records, and it is unlikely that further work will provide a significant change or addition to the results. The remainder of the work for this site therefore involves the completion of final drawings, cataloguing and archiving.

Metalwork, glass and bone artefacts by Lynne Bevan

Glass - A small mid-blue glass bead, potentially of Roman date, was recovered (SF24), for which further research and cataloguing and illustration is required.

*Lead* - Lead finds comprised a circular perforated object (SF7) and sub-rectangular lump of scrap lead (SF8). Further research (possibly including illustration) is recommended for the perforated object and a summary listing only for the lead scrap.

Pottery - Four sherds of coarse pottery were recovered from two vessels. Two had retained traces of a greenish-brown glaze (SF15) and the other two sherds (SF18) were un-glazed and very abraded. The vessel types could not be determined, although one of the small glazed fragments (SF15) appears to have been part of a base. Despite the high degree of abrasion, a post-medieval date seems likely for all of the sherds. No further research is recommended.

#### 3.2 Site C17 Melin y Plas

#### Factual data

#### Site records

Context records	939
Plan and section drawings	331
Colour prints	936
Colour slides	930

#### Finds and environmental samples

Note that the number of items is equivalent to the number of entries in the small finds register. this is usually different to the actual number of objects

Item	Number		
Prehistoric pottery	0		
Romano-British pottery	25 (88 sherds)		
Medieval pottery	0		
Post-medieval pottery	0		
Flint and chert	52		
Worked stone	23		
Iron objects	13		
Lead objects	0		
Copper/bronze objects	5 (6 fragments)		
Slag	0		
Coins	0		
Glass	2		
Horn/bone objects	2		
Animal bone	0		
Soil sample	84		
Charcoal sample	80		
Burnt clay/daub	12 (1491 g)		

Note that the number of items is equivalent to the number of entries in the small finds register, this is usually different to the actual number of objects

#### Stratigraphic and structural data

This site exhibited excellent survival of both stratigraphic and structural information, and the results will form a valuable contribution to the study of late prehistoric and Romano-British settlements. The remains at Melin y Plas were situated upon sloping ground, thus giving variable degrees of survival. At the upper, north end of the slope, ploughing and soil movement down hill reduced the evidence to negative features such as the structural remains of House 1 and associated pits. Below House 1 the slope had been sharply revetted, and the archaeological remains at the foot of the revetment and beyond were well preserved, both by the break in slope and by a layer of stone rubble which overlay the principal archaeological layers. The structural remains and floor of house 2, and parts of houses 3 and 4 are very well preserved, particularly house 2 with its sequence of drains, *in situ* mortar, and associated pits and cobbled yard and these are important in a national context. House 5 was lower down the slope, below the area protected by the revetment, nonetheless a good sequence of structural remains and pits cut into the natural clay remained. The final phase of use of the site, Phase IV, although protected by a layer of rubble stonework, was truncated to a greater degree than Phase III, and more work is required using context records, plans and finds distribution to both interpret the

structural remains and elucidate the phases of occupation. This work is of primary importance for a full and coherent interpretation of the site.

A large number of pits were discovered on site, which when allocated to appropriate phases and catalogued according to type, will add considerable information concerning economic and technological practices associated with the settlement.

Romano-British pottery by Jeremy Evans

#### Summary of material

About 88 sherds of Roman pottery were recovered from this site. The vast majority of this was Black Burnished 1 (BB1) (95%) with only occasional other sherds. The BB1 dated from the Hadrianic period to the earlier 3rd century, suggesting the cessation of pottery use here before the later 3rd century. The absence of 1st century pottery certainly does not preclude occupation of the site at this time, few sites in Anglesey or north Wales show much pottery deposition in this period, and most of that is samian ware. The lack of late Roman pottery might imply an absence of occupation, as Roman ceramics were certainly used on many rural sites in the region in the later 3rd-earlier 4th centuries.

The quantity of material from the site is low, but what there is would seem consistent with the assemblage which might be expected from a basic level rural site in the region (eg only 17 of the BB1 sherds are from dishes and bowls, the remainder being from jars which clearly dominated the assemblage; also samian accounts for only 1.1% of the material).

#### Statement of potential

The national research framework for the study of Romano-British pottery identifies pottery from rural sites as being 'highly significant for our understanding of the Romano-British economy and 'Romanization" (Willis 1997, 15) and the northern regional research framework (Evans and Willis 1997, 22, 25) emphasises the particular need for data from rural sites in the northern region (including north Wales). These sites represent the living conditions of the vast majority of the Romano-British population, and their consumption patterns, and as such an adequate sample needs full examination and publication. The pottery from this site will be particularly useful as it can be compared with other recently excavated sites at Cefn Du, Cefn Cwmwd and Bryn Eryr in Anglesey and Bush Farm, Cefn Graeanog and Graeanog in Gwynedd.

#### Spot dates

Context 004 - post-mediaeval. Context 033 - mid 2nd century. Context 104 - Hadrianic-mid Antonine. Context 159 - mid 2nd century. Context 159/166 interface - Hadrianic-Antonine. Context 227 - AD 120-200. Context 227 - early 3rd century. Context 277 - early 3rd century. Context 292 - Hadrianic-Antonine. Context 378 - Hadrianic-early Antonine. Context 488 - Hadrianic-Antonine. Context 560 - mid Antonine (?). Context 637 - Hadrianic or later.

#### Fired clay/daub by A. Hancocks

#### Summary of material

A total of 1491g of fired daub was recovered from 15 contexts at C17 Melin y Plas. Interestingly some 827g (56%) of the material from Melin y Plas derived from a single context (527), presumably a large clay lined storage pit. The association of this material with other finds from the same context may be significant. Three fragments of briquetage were identified (SF75, SF176 and SF 177).

The material was rapidly scanned for evidence of diagnostic loomweights, wattle impressions, clay plate fragments. All of this material derived from stratified deposits associated with a small prehistoric pottery assemblage of regional significance. No seed or grain impressions were observed in the material deriving from the pit 527.

No fragments demonstrate evidence for finger marking or wiping, but all the fragments are in a coarse fabric, which is oxidised throughout, with inclusions of sparse, angular fragments of large quartz and rock.

#### Statement of potential

As there is no diagnostic fired clay/daub from this site, the material is of very limited potential to add information at both local and regional level to our understanding of this type of archaeological find. However, the absence of diagnostic loomweight fragments, wattle and daub impressions and finger squeezed material must help in our interpretation of the status and function of the settlement. It would be of interest to ascertain what finds if any, were associated with the pit 527.

#### Worked flint and chert by George Smith

#### Summary of material

There are 52 pieces of flint and chert of which 4 are retouched tools. The assemblage thus has a very high tool to waste ratio of about 1:4.

Table 5: C17 General summary of the assemblage

	Flake	Flake frag	Irreg frag	Core /frag	Burnt frag	Natural frag	Core reject	Utilised piece	Casually retouched piece	Retouched piece
Flint/ Chert	7	15	15	•	r	6	2	2	-	4

#### Table 6: C17 The retouched assemblage

Description	Quantity	Draw?
Awl	1	1
Spurred piece	1	1
Thumbnail scraper	2	2
Total	4	4

#### Statement of potential

This is a relatively small assemblage in national terms but the same considerations apply here as described for the Ty Mawr site, discussed above. The worked pieces are not clearly datable chronologically but are most likely to be of Early Bronze Age date. The rarity of complete waste pieces shows the damage resulting from subsequent long continuous occupation of the site. The wide scatter of the pieces may result partly from redeposition but their frequency of occurrence suggest that they are residual from an earlier phase of activity than that immediately recognised from the round houses identified. It is possible that the settlement may have originated in the second millennium BC rather than that the flint pieces occur here purely by chance because of the re-use of the same location. Further study of the distribution of material on the site may throw light on its origin and meaning.

#### Stone objects by George Smith

#### Summary of material

This is a very varied collection consisting of 23 pieces of 15 categories of artefact. The majority are purely domestic tools comprising querns, mortars and rubbers but there are others of a more craft industrial nature comprising a whetstone, perforated for suspension and two hammer stones. There are also two possible slingstones and two items of personal adornment: a ?flint bead and a lozenge-shaped perforated slate pendant. The material used for the objects probably derives from two sources: first, pebbles and cobbles of a variety of rock types from the fluvio-glacial till, and second, quarried stone imported from elsewhere on Anglesey.

#### Table 7: C17 Summary of assemblage

Description	Quantity	Draw?
Pebble burnisher	4	1
?Dressed stone frag.	1	-

Pot boiler frag.	1	-
?Slingstone	2	
Whetstone, perforated	1	1
Slate pendant, perforated	1	1
Bead	(Î.	1
Waisted pebble hammer stone	1	1
Pebble hammer stone	1	(÷.
Pebble ?rubber	t	-
Anvil, rubbing	3	-
Rubber	1	-
Quern, saddle, frag.	1	
Quern, rotary, frag.	1	1
Mortar, bowl	2	2
Total	23	8

#### Statement of potential

Most of this material probably belongs with the later phase of Late Prehistoric/Roman-British occupation rather than with the phase of activity represented by the flint and chert pieces and the two mortars were found still in situ inside round houses. It is a sizeable collection and provides valuable information about the types of domestic and craft/industrial activity being carried out in the settlement. This information is likely to be enhanced when related to a better understanding of the archaeological context, after analysis of the records and of other artefacts, particularly pottery. Petrological analysis should show where the quarried material originated. It may also be possible to carry out analyses of residues on the mortars etc to identify their function, which will significantly aid interpretation.

In terms of local and regional studies it is a valuable collection because of the way it will enhance the understanding of the site and because there are few published examples of stone objects of this period and area from well understood contexts. For instance there is a large collection of worked stone from Stanley's excavations on Holy Island in the 19<sup>th</sup> century and and their purpose has never been properly understood. This collection therefore deserves full consideration and publication although only a few of the items require illustration. However, all will need petrological identification, about half as macro samples, the rest by low power microscopy and a contingency should be made for possible analysis of residues. The objects are stable so will not need conservation or special storage but have not been marked or boxed for storage so this has been costed as a separate task.

#### Metalwork, glass and bone artefacts by Lynne Bevan

The few metalwork and glass finds from the settlement at Melin y Plas are mainly unidentifiable and un-datable. No further action beyond a summary listing by context is suggested.

*Glass* - One fragment of light green glass with a curved 'molten' edge resulting from burning was recovered (SF37). It is uncertain whether this partially-burnt fragment is Roman in date and whether it is debris from glass manufacture or was burnt for some other reason and, as such, no further action is recommended.

*Copper Alloy* - The six fragments of copper alloy recovered were in a poor, powdery condition and no objects could be identified. The collection comprised: a rectangular-sectioned fragment (SF28), a curved object (SF29), three heavily-leaded fragments of possible metalworking debris - a rectangular piece (SF33), two small amorphous fragments (SF71, SF97) - and two small unidentifiable lumps.

Iron - The iron objects were also in a poor condition. The collection comprised: a broken piece of chain-link (SF140), a fragment of strip (SF241), seven nails and three unidentified lumps (SF13, SF76, SF182).

Charred plant remains by Wendy Smith

Summary of material

A total of 84 bulk soil samples for the recovery of charred plant remains were collected from Melin y Plas (C17). These were of varying size (see Table IA-C). Generally, it is recommended that such soil samples should be at least 20 litres. However, the excavators explained that this was not always possible due to the small size of many of the contexts. Forty six of the samples from Melin y Plas were processed and assessed.

The samples were processed using water flotation. The flots (the material which floats on the water's surface) were sieved to 500  $\mu$ m and the heavy residues (the material which does not float) were wet sieved to 1mm. Both were air dried at room temperature and bagged when fully dry. Those flots that were not dry in time for the assessment were dried in an oven at 40°C. The heavy residues have not been examined for this assessment and, therefore, the results presented here are solely based on the flots.

A low-powered binocular microscope at magnifications between x6 and x25 was used to scan the flots. The assessment was done through rapid scanning of samples and, therefore, the results presented below should be treated as provisional. Preliminary identifications were made without consulting the reference collection and the speed of assessment may mean that some seeds, especially smaller sized seeds, may have been overlooked.

#### Results

Table 1A-C presents the results of assessment for the 46 samples examined. Nomenclature for indigenous taxa follows Stace (1997). Nomenclature for the cereals follows the traditional binomial system presented in Zohary and Hopf (1994: Table 3 p24 and Table 5 p58). The identification of hand-picked material from Penmynydd are presented in Table 2.

Only two of the samples from Melin y Plas contained sufficient quantities of charred plant remains to merit further analytical work.

The samples from Melin y Plas that have been highlighted for further work (sample numbers 250 and 261) contained cereal remains, including barley (*Hordeum* sp.), wheat (emmer/spelt type - *Triticum dicoccum* Schübl. / *Triticum spelta* L.), and cultivated and/or wild oat (*Avena* sp.). Some cereal chaff, particularly indeterminate wheat (*Triticum* sp.) and spelt (*Triticum spelta* L.) glume bases have also been identified along with charred weed/wild seeds which may provide some indication of the growing conditions of the crops recovered.

#### Potential

Only limited archaeobotanical evidence from the Romano-British period, especially at the 'Iron Age/ Romano-British boundary' exists in Wales (Castledine 1990: 74-77, 92) and, therefore, the results from Melin y Plas, while disappointing, are of potential regional importance. In addition, the 38 samples that remain to be processed from Melin y Plas are generally of a larger volume than the samples already assessed and consequently are more likely to contain sufficient quantities of charred plant remains. Therefore, it is recommended that these remaining samples are processed and any charred plant remains are fully analysed along with the material from the two samples already highlighted.

#### The wood charcoal by Wendy Smith

#### Summary of material

Hand picked charcoal samples were collected from Melin y Plas, Penmynydd and Ty Mawr with the intention of selecting material for radiocarbon dates. A total of 80 samples were collected from Melin y Plas, 11 from Penmynydd and 32 from Ty Mawr. These were wrapped in tin foil in the field. In addition, 13 mixed charcoal and soil samples were collected from Melin y Plas and 4 from Ty Mawr.

The charcoal from the hand picked samples was weighed to determine whether or not sufficient material (15 grams or more) was present for obtaining a conventional radiocarbon date. The threshold of 15 grams was based on the recommendations supplied by the Beta Analytic Radiocarbon dating laboratory in Miami, Florida (Beta Analytic 1999). It should be possible to obtain AMS dates for the remaining samples. It should also be pointed out that sufficient charcoal for AMS dating is present in the majority of the samples processed for charred plant remains. These are indicated in Tables 1A-C.

In total, 22 of the samples from Melin y Plas were potentially suitable for obtaining conventional dates.

#### 3.3 Site D30 Penmynydd

#### Factual data

D30 Site records

Context records	192
Plan and section drawings	49
Colour prints	225
Colour slides	220

Table 12: D30 Finds and environmental samples

Prehistoric pottery	11 (27 sherds)
Romano-British pottery	0
Medieval pottery	0
Post-medieval pottery	15
Flint and chert	24
Worked stone	4
Iron objects	0
Lead objects	0
Copper/bronze objects	0
Slag	1
Coins	0
Glass	0
Horn/bone objects	0
Animal bone	0
Soil sample	26
Charcoal sample	11
Burnt clay/daub	4

#### Stratigraphic and structural data

The scarcity of settlement sites of comparable date to the remains at Penmynydd mean that the structural remains are of national importance. Very little stratified archaeology remained because of the depth of ploughing which had removed all remains above the glacial till. The majority of the features were therefore stratigraphically isolated from one another, and an understanding of their relationship relies upon interpreting spatial distribution, morphology and chronological relations. Preliminary work has been carried out, but there is still considerable potential for gaining a better understanding of the nature of the site by allocating features to more clearly defined chronological phases, and by identifying individual structures and working areas. This information will provide considerable enhancement to our existing knowledge of settlements of late Neolithic and Early Bronze age date.

#### Prehistoric Pottery by Ann Woodward

#### Summary of material

A total of 27 sherds, weighing 168g, were examined macroscopically. The average sherd weight is 6g but there were three contexts producing large sherds of average sherd weight of 14g or more.

#### Middle Neolithic

Three contexts (057, 059 and 009) contained a total of seven abraded sherds of Peterborough Ware. There was one decorated rim sherd (SF20) and one decorated wall fragment (SF17), both from context 059. The fabric of all these sherds was similar (sparse large quartz and rock: angular and ill-sorted), and the possibility that they all derive from a single vessel needs to be considered. The fabric also appears similar to that of two sherds found during the evaluation; these were plain but were tentatively identified as Peterborough Ware (Gibson 1999).

#### Early Bronze Age

Context 119: two non-joining plain wall sherds (SF9 and 10) from a single vessel, in a fabric with grog and small to medium shiny inclusions. Urn.

Context 127: three scraps in fabric similar to the above; probably Early Bronze Age.

Context 134: 12 wall sherds from at least two vessels. A total of 8 sherds are in a fabric containing a moderate density of middle to large black, glittering and platy rock inclusions, including one piece decorated with a worn twisted cord pendant triangle motif. Probably Collared Urn.

One other large sherd in this context is in a different fabric, with medium to large white calcareous inclusions, and the remaining sherds are very small.

#### Indeterminate style and date

Context 138: two scraps of very thin-walled pottery in a ?sandy fabric.

#### Statement of potential

In the author's opinion, the Neolithic sherds are of national (Welsh) importance and the Early Bronze Age items may be taken to be of regional importance.

Fired clay/daub by A. Hancocks

#### Summary of material

A total of 1491g of fired daub was recovered from 15 contexts at C17 Melin y Plas and from four contexts at D30 Penmynydd (006, 022, 045 and 054).

The material was rapidly scanned for evidence of diagnostic loomweights, wattle impressions, clay plate fragments. All of this material derived from stratified deposits associated with a small prehistoric pottery assemblage of regional significance. No seed or grain impressions were observed in the material deriving from the pit 527.

No fragments demonstrate evidence for finger marking or wiping, but all the fragments are in a coarse fabric, which is oxidised throughout, with inclusions of sparse, angular fragments of large quartz and rock.

#### Statement of potential

As there is no diagnostic fired clay/daub from this site, the material is of very limited potential to add information at both local and regional level to our understanding of this type of archaeological find.

#### Charred plant remains by Wendy Smith

#### Summary of material

A total of 26 bulk soil samples for the recovery of charred plant remains were collected from Penmynydd (D30) of varying size (see Table 1A-C). Generally, it is recommended that such soil samples should be at least 20 litres. However, the excavators explained that this was not always possible due to the small size of many of the contexts. All the samples from Penmynydd were processed and assessed.

The samples were processed using water flotation. The flots (the material which floats on the water's surface) were sieved to 500  $\mu$ m and the heavy residues (the material which does not float) were wet sieved to 1mm. Both were air dried at room temperature and bagged when fully dry. Those flots that were not dry in time for the assessment were dried in an oven at 40°C. The heavy residues have not been examined for this assessment and, therefore, the results presented here are solely based on the flots.

A low-powered binocular microscope at magnifications between x6 and x25 was used to scan the flots. The assessment was done through rapid scanning of samples and, therefore, the results presented below should be treated as provisional. Preliminary identifications were made without consulting the reference collection and the speed of assessment may mean that some seeds, especially smaller sized seeds, may have been overlooked.

#### Results

Table 1A-C presents the results of assessment Nomenclature for indigenous taxa follows Stace (1997). Nomenclature for the cereals follows the traditional binomial system presented in Zohary and Hopf (1994: Table 3 p24 and Table 5 p58). The identification of hand-picked material from Penmynydd are presented in Table 2.

No charred plant remains were identified in any of the samples assessed from this site. This is partly explained by the small size of the samples collected. No further work is required.

#### The wood charcoal by Wendy Smith

#### Summary of material

A total of 11 hand picked charcoal samples were collected from Penmynydd. These were wrapped in tin foil in the field.

The charcoal from the hand picked samples was weighed to determine whether or not sufficient material (15 grams or more) was present for obtaining a conventional radiocarbon date. The threshold of 15 grams was based on the recommendations supplied by the Beta Analytic Radiocarbon dating laboratory in Miami, Florida (Beta Analytic 1999). It should be possible to obtain AMS dates for the remaining samples. It should also be pointed out that sufficient charcoal for AMS dating is present in the majority of the samples processed for charred plant remains. These are indicated in Tables 1A-C.

Six of the Penmynedd were potentially suitable for obtaining conventional dates (see Table 3A-C).

#### 3.4 Site E14 Ty Mawr

#### Factual data

Site E14 Site records

Context records	413
Plan and section drawings	201
Colour prints	550
Colour slides	500

Site D30 Finds and environmental samples

Prehistoric pottery	16 (21 sherds)
Romano-British pottery	0
Medieval pottery	0
Post-medieval pottery	0
Worked flint	61 (76 pieces)
Worked stone	26
Iron objects	19
Lead objects	0
Copper/bronze objects	3
Slag	0
Coins	0
Glass	5 (6 fragments)
Horn/bone objects	I
Animal bone	11
Soil sample	13
Charcoal sample	32
Burnt clay/daub	0

#### Stratigraphic and structural data

Stratigraphic survival within the immediate vicinity of the ring cairn was good, allowing a relationship to be recorded between different phases of the cairn, and between the cairn and the cemetery. The potential for additional work is also good, particularly when combined with dating evidence and further analysis of contexts. In other areas of the site stratigraphic relations exist between dug features, and additional work on these contextual relationships will add considerably to the understanding of the development of the site.

The structural survival is excellent for both the remaining elements of the cairn, and for the cemetery. This is the first cist cemetery on Anglesey, and one of very few in Wales, to be dug in its entirety, and the surviving evidence from cist types, allied to a spatial and chronological sequence, will provide major new evidence for the use and development of cist cemeteries from the early years of Christianity. Similarly, the structural remains of the cairn provide an excellent opportunity to recover the chronological development of the site through at least two major phases of use.

It has long been recognised that there is a correlation between the location of Bronze age sites burial sites and Early Christian burial sites. The stratigraphic and structural evidence from this site will allow a much better appreciation of the relationship

between the two phases of the site, and therefore a clearer understanding of why one should be so attractive to the other, despite a time gap of nearly 2000 years.

#### Prehistoric Pottery by Ann Woodward

#### Summary of material

A total of 21 sherds, weighing 68g, were examined macroscopically. They derived from seven contexts. The average sherd weight is 3g, but varied between 1g and 9g amongst the various contexts. More than half of the sherds came from a single context (0077).

#### Middle Neolithic

Context 0077. Three pieces (SF74), one a very worn neck fragment with traces of abraded linear ?cord impressions. Opaque white rock inclusions. Probably Peterborough Ware.

Context 0107. Plain shoulder fragment (SF107). Sparse large, angular rock inclusions. Possibly Peterborough Ware.

Context 0223. Very worn broken rim fragment (SF113) with abraded linear decoration in ?cord technique. Sparse large rock inclusions. Probably Peterborough Ware.

1 Sanda

#### Neolithic or Bronze Age

Context 0077. A plain fragment (SF77) with grog inclusions. Context 0208. Three plain fragments (SF108) with grog inclusions.

#### Early Bronze Age

Unstratified. Three plain fragments with interior surface missing; no visible inclusions. Probably urn.

#### Probably Bronze Age

Context 0077. A collection of six plain sherds (SF70, 71, 73, 75, 76, 159). Four contain no visible inclusions, one is sandy and one contains occasional fragments of rock.

#### Indeterminate style and date

Context 0161 (Grave 070). Small scrap (SF96) with interior surface missing, grog fabric. Context 0077. Small scrap (SF112) with no visible inclusions.

#### Statement of potential

This small assemblage appears to be of regional importance. It needs to be discussed in relation to its contexts within and/or around the ring cairn, and in relation to other assemblages of these dates from Anglesey and north Wales.

#### Introduction and method

The material was all studied briefly for the assessment. The preliminary identifications may be altered or extended after further study. The analysis will provide a written report, catalogues of all flint and chert similar to the attached examples and individually itemised catalogues of the objects of other stone, as well as copies of photographs of the objects taken during the course of study. Illustrations will be completed to full publication standard.

#### Worked flint and chert by George Smith

#### Summary of material

This assemblage comes from the area of a Bronze Age barrow associated with pottery of Neolithic and Bronze age date. An inhumation cemetery of 42 graves of probably Early Christian date, was also found grouped around the barrow. The raw material includes both flint and chert. The assemblage consists of 76 pieces (Table 1) of which there are 11 retouched tools (Table 2), the rest being mainly of waste pieces. There is a high tool to waste flake ratio of about 1:5.

	Flake	Flake frag	Irreg frag	Core /frag	Burnt frag	Natural frag	Split pebble frag	Bipolar piece	Utilised piece	Casually retouched piece	Retouched piece
Flint	19	9	1	1	1	1	1	1		1	3
Chert	12	13	3	~	-	2	14	-	1	1	6
Total	31	22	4	1	1	3	1	1	T	2	9

#### Table 16 E14 General summary of the assemblage

#### Table 17 E14 The retouched assemblage

Description	Quantity	Draw?
Casually retouched	2	-
Spurred piece	2	1
Nosed piece	2	1
Thumbnail scraper	2	1
Denticulate	1	1
Serrated piece	1	1
Arrowhead frag., leaf-shaped	1	1
Total	11	6

#### Statement of potential

Flint and chert was not readily available as a raw material for prehistoric populations in Anglesey. It was derived only as transported and redeposited pieces in the fluvio-glacial drift. Such raw material would have been found only as scattered pieces in cliff edge exposures or from derived material amongst beach pebbles. The raw material consisted of a wide variety of types of flint and chert which may have been transported long distances in the ice sheet or in outwash material. Most of the raw material available, to judge by those observed at the present day were of relatively small size pebbles and of poor quality due to frost and mechanical damage.

The poor availability of raw material is reflected in the small size of the lithic assemblages found in Anglesey compared to what might be found on sites of similar periods in southern England, for instance. This does not mean that the settlements themselves were any less important. Likewise the small lithic assemblages are no less significant for research than larger assemblages elsewhere and are in fact more significant, piece for piece.

Small assemblages in areas of scarce raw material are characterised by high curation, that is the material is used sparingly. This may explain the high ratio of tools to waste pieces here, although this can also be result of initial working of the material elsewhere. The small size and poor quality of the raw material is demonstrated by the almost complete absence of cores and by the generally small size of the waste flakes.

The tool types represented in the assemblage suggest that this is mainly of one period which would fit with the period of Early Bronze Age activity represented by the barrow, but suggesting that there may also have been some domestic activity, perhaps prior to the construction of the funerary monument. The one exception is a fragment of leaf-shaped arrowhead which is of Neolithic type, although its occurrence in an Early Bronze Age context would not be unknown. The flint of which it is made is rather different to all the rest of the objects which supports the possibility of it being unrelated to the rest, as does the fact that arrowheads, as hunting equipment, are often found as isolated finds.

The assemblage is of significance to the interpretation of the site since it comprises the majority of the evidence for the prehistoric phase. It is also of significance to research in the region since there are very few properly excavated and dated domestic lithic assemblages of this period.

#### Metalwork, glass and bone artefacts by Lynne Bevan

A preliminary inspection suggests that the majority of the items are post-medieval or modern in date. The exceptions are three fragments of glass and a fragment from a bone comb which may be of earlier date. It is suggested that further work should be limited to the compilation of a summary catalogue. Further research and illustration is only necessary for the bone comb fragment. The unidentified iron fragments could undergo preliminary cleaning followed by X-ray examination.

*Glass* - Six fragments of glass were recovered. These included two fragments of window glass (SF22, SF55) and a small fragment from a cobalt blue vessel (SF94), of uncertain date. The other fragments, all of which were of post-medieval date, were from a brown beer bottle (SF12), a green wine bottle (SF88) and a ?19th/20th century vessel with an applied leaf motif (SF16). No further action is required beyond a summary listing by context.

Bone - A fragile fragment from a possible composite bone comb of uncertain date was recovered (SF4), with unusually long and fine teeth. Further research (including illustration) is recommended for this item.

*Copper Alloy* - With four exceptions, a decorative buckle (SF2), a George III shilling dated to 1816 (SF11), a nail (SF10) and a fragment of strip (SF4), most copper alloy finds were recovered with a metal detector. Identifiable objects included two thimbles, seven studs (two of which were decorated), a small ring handle (possibly from a casket or drawer), three nails, a knob handle and three fragments of plate (one of which is perforated). Another coin, possibly Spanish and dated 1892, and two other possible coins or tokens, both with completely worn surfaces, were recovered, one of which was fragmentary.

*Lead* - Lead finds, again recovered with a metal detector, comprise four fragments of strip and two 'molten' amorphous lumps from the manufacturing process.

*Iron* - A total of 27 iron objects were recovered, the identification of which was impeded by a high incidence of corrosion and adhering soil. A total of 16 nails were identified. Other items comprised: two collar-shaped objects, possibly fittings (SF38, SF84), a possible tool (SF88) and eight unidentifiable lumps (SF5, SF9, SF13, SF35, SF53 x 2, SF88 x 2), for which careful brushing to remove surface debris followed by X-ray examination is recommended.

#### Charred plant remains by Wendy Smith

#### Summary of material

A total of 2 bulk soil samples for the recovery of charred plant remains were collected from Ty Mawr (E14). These were of varying size (see Table 1A-C). Generally, it is recommended that such soil samples should be at least 20 litres. However, the excavators explained that this was not always possible due to the small size of many of the contexts.

The samples were processed using water flotation. The flots (the material which floats on the water's surface) were sieved to 500  $\mu$ m and the heavy residues (the material which does not float) were wet sieved to 1mm. Both were air dried at room temperature and bagged when fully dry. Those flots that were not dry in time for the assessment were dried in an oven at 40°C. The heavy residues have not been examined for this assessment and, therefore, the results presented here are solely based on the flots.

A low-powered binocular microscope at magnifications between x6 and x25 was used to scan the flots. The assessment was done through rapid scanning of samples and, therefore, the results presented below should be treated as provisional. Preliminary identifications were made without consulting the reference collection and the speed of assessment may mean that some seeds, especially smaller sized seeds, may have been overlooked.

#### Results

Table 1A-C presents the results of assessment for the 74 samples examined. Nomenclature for indigenous taxa follows Stace (1997). Nomenclature for the cereals follows the traditional binomial system presented in Zohary and Hopf (1994: Table 3 p24 and Table 5 p58). The identification of hand-picked material from Penmynydd are presented in Table 2.

No charred plant remains were identified in the two samples. This is partly explained by the small size of the samples collected,

#### The wood charcoal by Wendy Smith

#### Summary of material

Hand picked charcoal samples were collected from Melin y Plas, Penmynydd and Ty Mawr with the intention of selecting material for radiocarbon dates. A total of 32 samples were collected from Ty Mawr. These were wrapped in tin foil in the field. In addition, 13 mixed charcoal and soil samples were collected from Melin y Plas and 4 from Ty Mawr.

The charcoal from the hand picked samples was weighed to determine whether or not sufficient material (15 grams or more) was present for obtaining a conventional radiocarbon date. The threshold of 15 grams was based on the recommendations supplied by the Beta Analytic Radiocarbon dating laboratory in Miami, Florida (Beta Analytic 1999). It should be possible to obtain AMS dates for the remaining samples. It should also be pointed out that sufficient charcoal for AMS dating is present in the majority of the samples processed for charred plant remains. These are indicated in Tables 1A-C.

In total, 22 of the samples from Melin y Plas were potentially suitable for obtaining conventional dates along with 6 of the Penmynedd samples and 9 of the Ty Mawr samples (see Table 3A-C).

#### 4. UPDATED PROJECT DESIGN

#### Introduction

Two primary aims of the mitigation strategy for the archaeology of the A55 Anglesey DBFO scheme are the publication of the results of the excavations and recording work in a form appropriate to their academic value, and the production of a research archive. The assessment of the results above provides the basis of the updated project design presented below.

#### Aims and objectives

The original objectives as summarised by RML (1999) were:

- To undertake an appropriate level of archaeological recording and sampling in areas to be affected by road construction
- To ensure the long term curation of the recovered data, and its dissemination in a form to its academic value in line with nationally defined guidelines.

This document contains a summary of the field work, and a design for fulfilling the second objective for those sites excavated by GAT.

#### **Research** objectives

#### Late Neolithic/Early Bronze Age Settlement

Settlement sites of this period are rare, not only on Anglesey, but throughout the United Kingdom. Only four such sites are currently known from Anglesey, so the addition of two more is of particular importance. The results from Ty Mawr and Penmynydd will shed new light upon a period of Prehistory crucial to our understanding of the development of agricultural communities in the period immediately preceding the introduction of metal working, a period noted for the introduction of new ritual structures, but for which little evidence has been forthcoming for the everyday lifestyle of its inhabitants. The site at Penmynydd contains a number of features of interest, including post-holes, stake holes, pits, a possible oven, and a possible palisade trench. The features and finds will provide information on building techniques, stone technology, pottery manufacture and the source of raw materials. The location of the settlement at the foot of a glacial drumlin is of interest, and a re-examination of topographical locations of sites of this date could prove fruitful. The remains at Ty Mawr, although slightly less substantial, are of interest because of the development of the site into one involving burial and ritual. The establishment of a chronological development between the apparently domestic occupation and the ritual one is of importance. The re-use of the site as a cemetery in post-Roman times is also of particular interest, and an examination of the location of the site in relation to sites of the same age will allow a clearer understanding of landscape development in the area.

#### Late Prehistoric and Romano-British Settlement

The excavation of three major settlements of this date (Cefn Du and Cefn Cwmwd by BUFAU, and Melin y Plas by GAT) has added substantially to our sum of knowledge concerning settlements within this period. The research design presented by BUFAU for Cefn Du and Cefn Cwmwd, is equally relevant to Melin y Plas, including their research criteria for chronology, settlement status and economy. Establishing a firm chronology is of great importance. Despite a high number of settlements of this date on Anglesey (nearly 100), only two have been excavated in modern times, Bryn Eryr (Longley 1998) and Ty Mawr (Smith 1985, 1986 and 1987). There is, therefore, much to understand about the development, function and hierarchical status of these sites. Melin y Plas is of particular interest because the excavations appear to have included the full extent of a small rural settlement, which developed through several changes of layout and exhibits different building technologies. It is important to establish the chronological sequence for these changes, and also for the introduction of pottery onto the site, which appears to coincide with the last phase of use. The comparison of the pottery at this site with other assemblages will aid interpretation of status, as well as the source and transport of raw materials, and trading patterns.

A large range of pits have been revealed, many of which require further research to elucidate function and date. The results of such work will help interpretation of the economic and technological status of the site. The large and shallow rectangular pits are particularly relevant to this. The small stone lined pit was probably used for storage of agricultural produce. The analysis of charred plant remains allied to a firm chronological sequence will enable changes in agricultural practices to be examined, and comparison with the results from other sites will result in a much greater understanding of arable farming on a wider geographical scale.

The internal layout of the site, and the way it changed over time, will reveal much about the way the site was used and developed. This also applies to the drain sequence, which remained one of the best preserved archaeological features of the site. Much work remains to unravel the sequence of drains, and indeed their use. The initial work carried out for this assessment has revealed that water stored within a pit may have been deliberately taken through one of the round huts *via* one of the drains. It is therefore possible that the drains are water channels for distributing stored water, rather than simply being designed to remove surplus water from the interior to the exterior of the buildings.

#### The multi-period cemetery at Ty Mawr

The site at Ty Mawr contains important ritual and burial remains from both the Bronze age and Early Medieval period, as well as possible earlier domestic remains. In an important recent study of research directions for church archaeology the need was stressed for research into a wide number of themes in order to obtain a clearer understanding of the development of cemeteries, both within the landscape, and within the organisation of the church. The themes included the link between Christian cemeteries and earlier prehistoric sites, the date of abandonment of undeveloped cemeteries, the date and development of cist graves, and the need for extensive, rather than small scale, excavations (Edwards 1996, 58). The site at Ty Mawr is able to contribute to many of these topics, and an analysis of the following are seen as the principal means by which the evidence from Ty Mawr can be used to add to research themes of national importance.

- · The chronological development of the cemetery
- · The nature of the structure of the graves, combined with an analysis of location and chronology
- The links between the cemetery and the prehistoric features, in particular an analysis of the way the cemetery respects the
  prehistoric remains
- · An analysis of the location of the site within the wider landscape, and its position in relation to sites of comparable age

The nature and location of the prehistoric remains is of importance, as is a firm understanding of the structural development of the cairn, and the relative dating of the changes. A summary of the work on Bronze age remains on Anglesey has been compiled by Francis Lynch (1991), and the findings at Ty Mawr will form a valuable contribution to the known information. This applies particularly to the structural development of the site, which is an aspect of Bronze age mortuary archaeology that is currently little understood. The following aspects of this site are of particular relevance for their contribution to Prehistoric archaeology.

- · The nature of the structural remains and the structural development of the cairn in phases II to V
- · The chronology of the structural changes, in particular the dating of the inner ring of the caim
- · An analysis of the location of the site within the wider landscape, and its position in relation to sites of comparable age
- An analysis and comparative study of the pottery from the site.

#### Proposed methodology for finds and environmental evidence

This section provides a method statement for the combined finds and environmental data from the five sites excavated by GAT. The reports are intended, together with more detailed stratigraphic analysis, to augment and facilitate the dating and interpretation of the sites and to place them in a wider, historic and geographical context.

#### Pottery

#### Prehistoric

Within the limits of the assemblage, the neolithic and bronze age pottery collected at E14 and D30 will be identified by an appropriate specialist (Dr Alex Gibson) and comparisons drawn with other collections on both a local and a regional basis, with attention to possible links to Ireland. The results will be published in full, and the more diagnostic pieces will be illustrated. Petrological analysis will be undertaken on relevant sherds.

#### Roman/ Romano- British

The pottery will be recorded by sherd count, weight, minimum numbers of rims, and rim estimated vessel equivalent (RE). The material will be catalogued by context and arranged into phase order for the publication report. The publication catalogue will consist of rim-sherds and samian ware and chronologically diagnostic material, with a tabulation of full fabric occurrence from the site. Relevant pieces will be drawn. The results will be used to aid chronological understanding of the site; to examine the nature of the supply of Roman pottery to the site; and to aid understanding of the social and economic networks of the inhabitants of the site.

#### Fired clay/daub

No further analysis of the fired clay/daub is recommended. However, the three fragments of briquetage will be examined by an appropriate specialist (Elaine Morris) and one of these fragments will be submitted for petrological analysis.

#### Storage and curation

One small box of fired clay/daub forms the archive. This material is stable and does not pose any long term storage problems.

#### Lithics

The lithic assemblages will be fully examined and a report issued which discusses production, use and date. Comparisons will be drawn with local and national collections. The small size of the assemblage means that relatively little can be gained by detailed analysis of the waste material so the publication need be relatively brief. A full catalogue will be prepared for use in an appendix or retention in the archive. The retouched pieces need proper consideration and publication with illustrations required for 6 objects.

#### Storage and curation

The material is stable and individually bagged so will not need any special storage. The items need to be marked and boxed.

#### Metalwork, glass and bone artefacts

Site C17 Melin y Plas The finds will be listed by context

#### Site E14 Ty Mawr

The finds will be listed by context. The bone comb will be examined by a relevant expert. The iron fragments will be cleaned, and examined by X-ray where relevant.

#### Site B8 Holy Rood Well

The small glass bead and the perforated lead object from this site will be examined by relevant specialists, and illustrated.

#### Charred plant remains

The remaining samples will be processed, and any charred plant remains will be fully analysed along with the material from the two samples already highlighted.

Full analysis of this assemblage can address central questions about the agricultural economy of Anglesey in the Romano-British period. Of particular value will be a comparison of the results from Melin y Plas with the two sites excavated by BUFAU (Cefn Cwmwd and Cefn Du). The combined information from the three sites will contribute to several research questions:

- 1. It is believed that spelt replaces emmer in the Roman period. Is spelt the dominant cereal recovered from the sites?
- 2. What is the evidence for local cereal production (cf Castledine 1990, 92)?
- How do the three sites compare and are they producing similar or different results? For example, are the apparent differences in status suggested by the artefacts recovered from the sites reflected in the character of the plant remains.
- 4. How do the sites compare to other sites in Anglesey and elsewhere in northern and southern Wales?

The interpretation of bio-archaeological data will be integral to the assessment of the environment and economy of the settlements and a report will be produced on the results of the environmental study, which will be summarised in the final publication.

Selected samples will be submitted for dating by accelorator mass spectrometry and the results will directly affect the interpretation of the sites.

#### Charcoal

The charcoal will be submitted for wood identification by an appropriate specialist before being submitted to a dating laboratory. This will allow the selection of suitable material from short lived species and/or the younger sapwood from longer lived species. A more general identification of the charcoal will also contribute to an understanding of prevailing environmental conditions and utilisation of timber resources at the site.

It is also suggested that the samples that comprise mixed soil and charcoal are dry sieved using a 2mm mesh. The charcoal collected in the sieve can then weighed and assessed for dating purposes.

#### Coffin material from Ty Mawr

Soil samples from the graves will be sieved to retrieve fibre primarily for C14 dating but, should the material survive in viable form, it may be submitted for identification.

#### **Body remains**

The body remains were very fragile and were immediately submitted for study. The resulting report will be incorporated in the final publication.

#### Examination of the stratigraphic and structural sequence

Some preliminary stratigraphic analysis has already been carried out in order to produce the site summaries given above. However detailed further work is required, particularly for Ty Mawr and Melin y Plas. This will involve the following stages:

- Enter all context information on to a relational database to facilitate analysis and stratigraphic relationships;
- Cross reference features and contexts with plans and section drawings;
- Produce composite site drawings from single context plans;
- Analyse context relationships;
- Produce a site matrix.

#### Site archive

The production of a catalogued and indexed site archive of all finds and records is of paramount importance. This need is stressed in MAP 2 (p 11) which states 'the site archive is a primary resource and must be properly curated and stored so that it can be consulted in the future'.

The following stages are involved with the production of a site archive

- A full cross-referenced index of the following
  - All context records.
  - All drawn plans and sections
  - All photographs
  - all survey books and site notebooks
  - all primary digital files from CAD or database
  - all finds
  - all samples
  - any other primary information
- An objective statement of the nature and quantity of all the data collected
- A site matrix
- · Summary accounts of the context, finds and environmental records
- Details of all specialist reports and radiocarbon dates.

#### **Publication Synopsis**

It is intended that the publication of the results will be a combined effort between the organisations responsible for the fieldwork, and that it will take the form of a single monograph containing all the archaeological results of the scheme. The final format of the report will be decided jointly between BUFAU, GAT and the clients, but the following is an outline of its principal elements.

Excavations on Anglesey 1999: the A55 Anglesey DBFO scheme

Edited by Gwilym Hughes and Andrew Davidson

#### Summary

Acknowledgements

#### Introduction

A background to the excavations, objectives and methodology. Principal authors Gwilym Hughes and Andrew Davidson

#### Results

This will be a series of distinct chapters covering each of the major excavations. Each will be accompanied by a series of specialist reports on the artefactual and environmental data collected.

Penmynydd – principal author Karina Kucharski and Andrew Davidson
The burnt mounds – principal author David Maynard
Cefn Cwmwd – principal author Howell Roberts
Cefn Du – principal author Richard Cutler
Melin y Plas – principal author Karina Kucharski and Andrew Davidson
Ty Mawr – principal author Karina Kucharski and Andrew Davidson
Well at Ty Newydd – principal author Andrew Davidson
Nant Turnpike – principal authors Howell Roberts and Stephanie Ratkai

References

# Task list

# B8 Well west of Holy Rood church

Task	Team member	No days
Specialist reports		
Co-ordination of specialists	Andrew Davidson	0.5
Examination of glass bead and lead object	L. Bevan	0.5
Illustration of glass bead and lead object	M Breedon	0.5
Preparation of first draft of report		
Site analysis and background research	Andrew Davidson	1
Preparation of plans and section drawings for final illustration	Karina Kucharski	0.5
Preparation of first draft of text	Andrew Davidson	1
Final site illustrations	L A Dutton	1
Publication and archive deposition		
Proof reading, copy editing and	Andrew Davidson	0.5
publication	Margaret Mason	0.5
Preparation of research archive	Karina Kucharski	0.5
Arrangements for copying and deposition of archive	Karina Kucharski	0.5
Preparation of camera ready copy for publication	L A Dutton Andrew Davidson	1 0.5

# C17 Settlement east of Melin y Plas

Task	Team member	No days
Contextual analysis		
Enhancement of excavation archive	Karina Kucharski	5
Entry of context data onto database	Assistant	10
Analysis of contextual information	Karina Kucharski	5
Stratigraphic analysis and preparation of	Karina Kucharski	5
Harris matrix		2
Updating site interpretation	Karina Kucharski	5
Updating site database	Karina Kucharski	1
	Assistant	2
Finds distribution plot generation	Karina Kucharski	2
	Assistant	2
General project co-ordination and team	Andrew Davidson	5
meetings		
Specialist reports		
Co-ordination of specialists	Karina Kucharski	2
	Andrew Davidson	j.
Prehistoric pottery	A Gibson	2
Prehistoric pottery illustrations 8 items	L A Dutton	2
Lithic assemblage: recording, database	G Smith	2
and catalogue		
Lithic assemblage: analysis and report	G Smith	2.5
Lithic assemblage: Illustration	L A Dutton	2
Small finds	L Bevan	0.5
X-ray Fe objects		N/A
Illustration of small finds	M Brendan	1
Radiocarbon dates: selection and	Karina Kucharski	2
packaging of samples		
Radiocarbon dates: wood identification		2
Radiocarbon dates & dates 12	Beta Analytic, Miami	
Preparation of first draft of report		
Site analysis and background research	Karina Kucharski	3
	Andrew Davidson	5
Preparation of plans and section	Karina Kucharski	3
drawings for final illustration	Assistant	3
Preparation of first draft of text	Karina Kucharski	5
	Andrew Davidson	5
Final site illustrations	L A Dutton	15
Editing first draft of report	Andrew Davidson	3
Amendments to first draft	Karina Kucharski	3
General project co-ordination and team	Andrew Davidson	3
meetings		
Publication and archive deposition	in the second	
Proof reading, copy editing and	Andrew Davidson	3
publication	Margaret Mason	2
Preparation of research archive	Karina Kucharski	1
Arrangements for copying and deposition	Karina Kucharski	1
of archive	A fire to dealer and the	
Preparation of camera ready copy for	L A Dutton	3
publication	Andrew Davidson	3

# D30 Penmynydd

Task	Team member	No days
Contextual analysis		
Enhancement of excavation archive	Karina Kucharski	2
Analysis of contextual information	Karina Kucharski	2
Updating site interpretation	Karina Kucharski	0.5
Updating site database	Karina Kucharski	0.5
Finds distribution plot generation	Karina Kucharski	1
General project co-ordination and team meetings	Andrew Davidson	1
Specialist reports		
Co-ordination of specialists	Karina Kucharski	1
Prehistoric pottery	A Gibson	1
Prehistoric pottery illustrations 8 items	L A Dutton	1.5
Lithic assemblage: recording, database and catalogue	G Smith	2
Lithic assemblage: analysis and report	G Smith	1
Lithic assemblage: Illustration	L A Dutton	1
Radiocarbon dates: selection and packaging of samples	Karina Kucharski	1
Radiocarbon dates: wood identification		2
Radiocarbon dates 6 dates	Beta Analytic, Miami	
Preparation of first draft of report		
Site analysis and background research	Karina Kucharski	1
Preparation of plans and section drawings for final illustration	Karina Kucharski	1
Preparation of first draft of text	Karina Kucharski Andrew Davidson	2
Final site illustrations	L A Dutton	3
Editing first draft of report	Andrew Davidson	0.5
Amendments to first draft	Karina Kucharski	0.5
General project co-ordination and team meetings	Andrew Davidson	l
Publication and archive deposition		
Proof reading, copy editing and publication	Andrew Davidson Margaret Mason	0.5 1
Preparation of research archive	Karina Kucharski	0.5
Arrangements for copying and deposition of archive	Karina Kucharski	0.5
Preparation of camera ready copy for publication	L A Dutton Andrew Davidson	1

# E14 Ty Mawr

Task	Team member	Days
Contextual analysis		
Enhancement of excavation archive	Karina Kucharski	5
Data entry of contexts to database	Assistant	5
Analysis of contextual information	Karina Kucharski	5
Stratigraphic analysis and preparation of Harris	Karina Kucharski	5
matrix		
Updating site interpretation	Karina Kucharski	5
Updating site database	Karina Kucharski	1
	Assistant	2
Finds distribution plot generation	Karina Kucharski	1
	Assistant	2
General project co-ordination and team meetings	Andrew Davidson	5
Specialist reports		
Co-ordination of specialists	Karina Kucharski	2
	Andrew Davidson	1
Romano-British pottery	JEvans	2
Romano-British pottery illustrations 7 items	M Breedon	2
Lithic assemblage: recording, database and catalogue	G Smith	2
Lithic assemblage: analysis and report	G Smith	1.5
Lithic assemblage: Illustration	L A Dutton	2
Worked stone: recording, database and catalogue	G Smith	2.5
Worked stone: analysis and report	G Smith	2
Worked stone: petrological analysis	D Jenkins	2
Worked stone: Illustration	L A Dutton	3
Small finds	L Bevan	0.5
Radiocarbon dates: selection and packaging of	Karina Kucharski	2
samples		
Radiocarbon dates: wood identification	1 mil 1 1 1 1 1 1 1	2
Radiocarbon dates No dates 6 standard 2 Aris	Beta Analytic, Miami	
Preparation of first draft of report		
Site analysis and background research	Karina Kucharski	3
	Andrew Davidson	2
Preparation of plans and section drawings for final	Karina Kucharski	2
illustration	Assistant	2
Preparation of first draft of text	Karina Kucharski	5
PC 1 5 70 - 7	Andrew Davidson	3
Final site illustrations	L A Dutton	15
Editing first draft of report	Andrew Davidson	2
Amendments to first draft	Karina Kucharski	3
General project co-ordination and team meetings	Andrew Davidson	3
Publication and archive denosition		
Proof reading converting and publication	Androw Davidson	12
Proof reading, copy editing and publication	Margaret Mason	2
Proportion of records archive	Varias Kusharshi	2
rreparation of research archive	Karina Kucharski	1
Arrangements for copying and deposition of archive	Karina Kucharski	1
Preparation of camera ready copy for publication	L A Dutton	3
	Andrew Davidson	2

## Introduction and discussion to final report

n member No days
ew Davidson 3
ew Davidson 5
Dutton 5
ew Davidson 2
Dutton 2
ew Davidson 10

#### References

Castledine, A. 1990 Environmental Archaeology in Wales, Lampeter, Archaeology Department, St. David's University College, Lampeter.

Edwards N 1996 Identifying the archaeology of the early church in Wales and Cornwall in Church Archaeology: Research directions for the future edited by John Blair and Carol Pyrah CBA Research Report 104

Evans, J. and Willis, S.H. 1997 'Research framework for the study of Roman pottery in the north of Britain', in Willis, S.H., (ed) Research frameworks for the study of Roman pottery, 22-29.

Longley D 1998 Bryn Eryr: an enclosed settlement of the Iron Age on Anglesey, Proc. Prehist. Soc. 64, 225-273

Lynch F 1991 Prehistoric Anglesey 2nd edition The Anglesey Antiquarian Society

Stace, C. 1997 (second edition) New Flora of the British Isles, Cambridge, Cambridge University Press.

Willis, S.H. 1997 'The national research framework', in Willis, S.H., (ed), Research frameworks for the study of Roman pottery, 6-21.

Zohary, D. and Hopf, M. 1994 (second edition) Domestication of Plants in the Old World: The Origin and Spread of Cultivated Plants in West Asia, Europe, and the Nile Valley, Oxford, Clarendon Press.

## APPENDIX 1 Charred plant remains and charcoal assessment results

Table 1A. Results of assessment for charred plant remains from site C17 (Melin y Plas).

SITE	SAMPL E NUMBE R	CONTE XT	DESCRIPTION	SAMPLE VOLUME	FLOT VOLUME	COMMENTS	CONVE -TIONA
C17	125	317	n/a	0.5 L	1 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
C17	128	319	n/a	1L	10 ml	Mainly modern root. No charred seeds observed. Assessed as POOR.	
C17	144	397	n/a	0.25 L	2 ml	Charcoal +. No charred seeds observed. Assessed as POOR.	
C17	147	404	n/a	2 L	3 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
C17	170	423w	n/a	1L	3 ml	Modern root. Charcoal +. Large grass, possibly oat (cf. Avena sp. type). Assessed as POOR.	
C17	171	423 E	n/a	ΠL	3 ml	Modern root. Charcoal +, Wheat (Triticum sp.) glume base and indeterminate cereal grain.	
C17	172	423	n/a	0.25 L	2 ml	Modern root, Charcoal +. No charred seed observed. Assessed as POOR.	
C17	173	322	n/a	0.5 L	2 ml	Modern root. Charcoal +. No charred seed observed. Assessed as POOR.	
C17	179	493	n/a	ΤL.	3 ml	Modern root, Charcoal +, Wheat (Triticum sp.) grain, Assessed as POOR.	1
C17	180	500	n/a	0.5 L	3 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
C17	181	508	n/a	0.25 L	2 ml	Modern root, Charcoal +. No charred seeds observed. Assessed as POOR.	
C17	183	494	n/a	0.5 L	1 ml	Charcoal +. No charred seeds observed. Assessed as POOR.	-
C17	197	540	n/a	1 L	3 ml	Modern root. Charcoal +. Barley grain and oat (Avena sp.). Assessed as POOR.	
C17	199	527	n/a	4 L.	3 ml	Modern root. Charcoal +. Possible hairy tare (cf. Vicia hirsuta L.). Assessed as POOR.	
C17	214	569	n/a	4 L	15 ml	Modern root. Charcoal +. Spelt ( <i>Triticum</i> spelta L.) glume base, barley grain, wheat ( <i>Triticum</i> sp.) grain, and small legume ( <i>Vicia</i> type). Assessed as POOR.	
C17	215	866	n/a	51.	2 ml	Modern root. Charcoal +. Hazelnut shell and possible oat (cf. Avena sp.). Assessed as POOR.	1
C17	215?	866	n/a	n/a	10 ml	Modern root. Charcoal +. Wheat (Triticum sp.) glume base. Assessed as POOR.	
C17	221	579	n/a	2 L	3 ml	Modern root. Charcoal +. No charred seed observed. Assessed as POOR.	
C17	222	866 on bag (072 on sheet)	n/a	41_	20 ml	Modern root. Charcoal +. Wheat ( <i>Triticum</i> sp.) grain, barley grain (appears germinated). Assessed as POOR.	
C17	227	074	n/a	2 L.	3 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	

Key: Charcoal + = < 10 ml of charcoal, Charcoal ++ = between 10 to 100 ml of charcoal, Charcoal +++ = > 100 ml of charcoal

ruble int. Results of assessment for charted plant remains from site of ( (Rething) rub) continued.	Table 1A.	Results of assessment	for charred plan	t remains from	site C17 (Melin	y Plas) continued
---	-----------	-----------------------	------------------	----------------	-----------------	-------------------

SITE	SAMPLE NUMBER	CONTEXT	DESCRIPTION	SAMPLE VOLUME	FLOT VOLUME	COMMENTS	CONVE -TIONA
C17	233	866 on bag (072 on sheet)	n/a	21.	3 ml	Modern root, Charcoal +. No charred seed observed. Assessed as POOR.	
C17	235	569	n/a	6 L	15 ml	Modern root. Charcoal +. Indeterminate wheat ( <i>Triticum</i> sp.) grain and glume base, barley grain, sedge ( <i>Carex</i> sp.) and possible blackberry ( <i>Rubus</i> sp.). Assessed as POOR.	
C17	249	639	n/a	20 L	10 ml	Modern root. Charcoal +. No charred seed observed. Assessed as POOR.	
C17	250	334	n/a	15 L.	25 ml	Modern root. Charcoal +. Spelt ( <i>Triticum</i> spelta L.) glume and glume base, wheat ( <i>Triticum</i> sp.) glume base, sedge ( <i>Carex</i> sp.), possible wheat (cf. <i>Triticum</i> sp.) grain (appears to be germinated), small vetch ( <i>Vicia</i> sp./ <i>Lathyrus</i> sp.), culm base, and knotgrass ( <i>Polygonum</i> sp.). Assessed as GOOD.	
C17	257	649	n/a	14 L	40 ml	Modern root. Charcoal +. Spelt ( <i>Triticum</i> spelta L.) glume base, indeterminate wheat ( <i>Triticum</i> sp.) glume base and grain. Assessed as POOR to GOOD.	
C17	261	654	n/a	4 L	100 ml	Modern root. Charcoal ++. Oat (Avena sp.), wheat (Triticum sp.) grain, barley grain, knotgrass (Polygonum sp.), and hazelnut shell. Assessed as GOOD.	
C17	262	655	n/a	2 L	3 ml	Modern root. Barley grain. Charcoal +. Assessed as POOR.	1
C17	268	372	n/a	9 L	10 ml	Modern root. Charcoal +. Indeterminate cereal grain. Assessed as POOR.	
C17	272	617	n/a	1 L.	10 ml	Modern root. Charcoal +. Wheat ( <i>Triticum</i> sp.) glume base and grain, and barley grain. Assessed as POOR.	
C17	279	745	n/a	2 L	20 ml	Modern root. Charcoal +. Possible free threshing wheat ( <i>Triticum turgidum</i> L. / <i>T.</i> <i>durum</i> Desf. type).	
C17	284	752	n/a	2 L	10 ml	Modern root. Charcoal +. No charred seed observed. Assessed as POOR.	
C17	285	777	n/a	21_	l ml	Modern root. No charred seed observed. Assessed as POOR.	
C17	294	701	n/a	0.5 L	3 ml	Modern root. Charcoal +. Spelt ( <i>Triticum</i> spelta L.) glume base, wheat ( <i>Triticum</i> sp.) glume base, possible oat (cf. Avena sp. type), small, unidentified grass. Assessed as POOR.	
C17	298	796	n/a	3 L	3 ml	Modern root. Charcoal +. Barley grain, spelt ( <i>Triticum spelta</i> L.) glume base, and indeterminate cereal rachis. Assessed as POOR.	

Key: Charcoal + = < 10 ml of charcoal, Charcoal ++ = between 10 to 100 ml of charcoal, Charcoal +++ = > 100 ml of charcoal

SITE	SAMPLE NUMBER	CONTEXT	DESCRIPTION	SAMPLE VOLUME	FLOT VOLUME	COMMENTS	CONVE -TIONA
C17	295	819	n/a	6 L.	15 ml	Mainly modern root. Charcoal + Indeterminate cereal grain, spelt ( <i>Triticum</i> spelta L.) glume base, indeterminate wheat ( <i>Triticum</i> sp.) glume base, and large grass ( <i>Avena</i> sp. / <i>Bromus</i> sp. type). Assessed as POOR.	
C17	309	821	n/a	6 L	3 ml	Modern root. Charcoal +. No charred seed observed. Assessed as POOR.	
C17	311	827	n/a	0.25 L	2 ml	Modern root. Charcoal +. Possible free threshing wheat ( <i>Triticum turgidum</i> L. / <i>Triticum durum</i> Desf. type), large, unidentified wild grass. Assessed as POOR.	
C17	313	832	n/a	10 L	15 ml	Modern root. Charcoal +. No charred seed observed. Assessed as POOR.	
C17	314	842	n/a	1L.	5 ml	Modern root. Charcoal +. Wheat (Triticum sp.) glume base. Assessed as POOR.	
C17	315	840	n/a	0.5 L	3 ml	Modern root. Charcoal +. Spelt ( <i>Triticum</i> spelta L.) glume base, wheat ( <i>Triticum</i> sp.) glume base, small legume ( <i>Vicia</i> sp. type). Assessed as POOR.	
C17	316	711 on bag (712 on sheet)	n/a	1.1.	1 ml	Modern root, Charcoal +. Wheat ( <i>Triticum</i> sp.) grain and glume base. Assessed as POOR.	_
C17	339	899 on bag (889 on sheet)	n/a	11.	2 ml	Modern root. Charcoal +. No charred seed observed. Assessed as POOR.	
C17	340	902	n/a	1 L	3 ml	Modern root. Charcoal +, Wild legume (cf. Genista sp. type), small, unidentified grass. Assessed as POOR.	
C17	351	928	n/a	1.F	2 ml	Modern root. Charcoal +. No charred seed observed. Assessed as POOR.	
C17	360	402	n/a	2 L	15 ml	Modern root. Charcoal +, Oat (Avena sp.) Assessed as POOR.	
C17	362	609	n/a	n/a	1 ml	Charcoal +, No charred seeds observed. Assessed as POOR.	

Table 1A. Results of assessment for charred plant remains from site C17 (Melin y Plas) continued...

Key: Charcoal + = < 10 ml of charcoal. Charcoal ++ = between 10 to 100 ml of charcoal, Charcaol +++ = > 100 ml of charcoal

SITE	SAMPLE NUMBER	CONTEXT	DESCRIPTION	SAMPLE VOLUME	FLOT VOLUME	COMMENTS	CONVE -TIONA
D30	4	111	n/a	n/a	50 ml	Modern root. Charcoal +, Oat (Avena sp.) and unidentified grass seed. Assessed as POOR.	
D30	5	109	n/a	21	50 ml	Modern root. Charcoal ++. No charred seeds observed. Assessed as POOR.	
D30	6	061	n/a	4 L.	.2 ml	Modern root. Indeterminate Caryophyllaceae (Pink family). Charcoal +. Assessed as POOR.	
D30	10	103	n/a	1L	8 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
D30	11	059	n/a	Ĩ L	10 ml	Hazelnut shell. Modern root. Charcoal +. Assessed as POOR.	
D30	12	057	n/a	21.	7 ml	Modern root. Charcoal +. Hazelnut shell. Assessed as POOR.	
D30	18	023	n/a.	2 L	-	Sample heavily encrusted. Sample should be re-washed over 500µm mesh sieve. NOT ASSESSED.	
D30	?29	041	n/a	2 L	10 m1	Modern root Charcoal +. Indeterminate cereal grain. Assessed as POOR.	
D30	31	134	n/a	8 L.	50 ml	Modern root. Charcoal ++. Barley and wheat (Triticum sp.) grain.	
D30	32	005	n/a	2 L	1 ml	Modern root. Charcoal +. No charred seed observed. Assessed as POOR.	
D30	33	138	n/a	11	7 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
D30	34	139	n/a	TL	2 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
D30	35	130	n/a	2 L	7 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	-
D30	37	065	n/a	1L	5 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
D30	39	157	n/a	11	2 ml	Modern root. Charcoal +, Oat (Avena sp.). Assessed as POOR.	
D30	42	153	n/a	3 L	20 ml	Modern root. Charcoal ++. No charred seed observed. Assessed as POOR.	
D30	-48	163	n/a	0.5 L	2 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
D30	52	141	n/a	2 L	20 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
D30	57	031	n/a	2 L	40 ml	Modern root. Charcoal ++. No charred seed observed. Assessed as POOR.	
D30	.58	176	n/a	1 L	5 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
D30	59	162	n/a	1 L	10 ml	Modern root, Charcoal +, No charred seeds observed. Assessed as POOR.	1

Table 1B. Results of assessment for charred plant remains from site D30 (Penmynedd).

Key: Charcoal + = < 10 ml of charcoal, Charcoal ++ = between 10 to 100 ml of charcoal, Charcaol +++ => 100 ml of charcoal

Table 1B. Results of assessment for charred plant remains from site D30 (Penmynedd) continued...

SITE	SAMPLE NUMBER	CONTEXT	DESCRIPTION	SAMPLE VOLUME	FLOT VOLUME	COMMENTS	CONVE -TIONA
D30	60	166	n/a	21	5 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	11.
D30	61	168	n/a	0.5 L	5 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
D30	62	179	n/a	2 L	2 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	_
D30	63	183 on bag (153 on sheet)	n/a	1 L	5 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	
D30	64	184	.n/a	0.5 L	2 ml	Modern root. Charcoal +. No charred seeds observed. Assessed as POOR.	

Table IC. Results of assessment for charred plant remains from site E14 (Ty Mawr).

SITE	SAMPLE NUMBER	CONTEXT	DESCRIPTION	SAMPLE VOLUME	FLOT VOLUME	COMMENTS	CONVE -TIONA
E14	125	281	n/a	IL	7 ml	Charcoal +. No charred seeds observed. Assessed as POOR.	
E14	184	397	n/a	0.25 L	3 ml	Charcoal +. No charred seed observed. Assessed as POOR.	-

Key: Charcoal + = < 10 ml of charcoal, Charcoal ++ = between 10 to 100 ml of charcoal, Charcoal +++ = > 100 ml of charcoal

Table 2. Hand-picked items from site D30 (Penmynedd)

Site	Sample Number	Context	Description	Comment	
D30	5	013	n/a	Hazelnut shell	
D30	16	057	n/a	Hazelnut shell	
D30	18	059	n/a	Hazelnut shell	-

SITE	SAMPLE	CONTEXT	WEIGHT	CONVENTIONAL C <sup>14</sup>	AMS
C17	051	098	26.03g	1	
C17	067	163	12.92g		1
C17	078	033	4.89g		~
C17	080	072	4.74g		~
C17	081	110	4.12g		1
C17	108	287	1.12g		~
C17	109	273	1.51g		~
C17	110	004	0.68g		~
C17	118	299	1.43g		1
C17	121	306	4.43g		1
C17	124	160	4.32g		~
C17	130	078/079	13.74g		~
C17	132	184	42.34g	1	
C17	134	181	3.57g		~
C17	135	076	10.94g		1
C17	139	318	2.98g		1
C17	146	385	7.19g		1
C17	157	379	0.28g		1
C17	158	324	3.67g		1
C17	158	323	0.56g		~
C17	159	279	10.92g		~
C17	160	462	22.98g	1	
C17	161	465	22.23g	1	
C17	163	471	9.64g		1
C17	167	468	2.12g		1
C17	184	063	96.179	1	
C17	185	46	9.770		~
C17	189	351	15 490	1	
C17	190	507	8 820		1
C17	191	530	9.150		1
C17	193	488	43.410	1	
C17	194	540	7 690		1
C17	196	535	17.940	~	· · · ·
C17	204	281	1 749		1
C17	213	866	3.749		1
C17	225	866	8.920		1
C17	226	574	0.32g		1
C17	230	580	24.689	1	
C17	234	569	1.530		1
C17	236	072	4 27g		1
C17	237	590	4.27g		
C17	230	072	2.270		1
C17	242	617	0.820		./
C17	242	621	0.02g		·
C17	244	621	bag omnty		v
C17	244	600	0.62a		1
017	240	645	0.03g		v
017	251	224	2.01g		
217	250	554	2.2/g	,	V
017	260	569	27.32g	v	
017	263	054	13.26g		~

Table 3A. Hand-picked charcoal from Melyn y Plas (C17)

SITE	SAMPLE	CONTEXT	WEIGHT	CONVENTIONAL C <sup>14</sup>	AMS
C17	264	663	5.13g		~
C17	266	658	117.77g	1	
C17	267	676	2.93g		V.
C17	269	072	2.25g	1	~
C17	273	667	7.75g		1
C17	274	730	1.02g		1
C17	275	743	0.57g	1	- 1
C17	276	069	17.52g	1	
C17	278	378	2.83g		1
C17	281	647	0.97g		~
C17	283	752	1.65g		1
C17	286	562	4.51g		1
C17	287	072	0.38g	· · · · · · · · · · · · · · · · · · ·	1
C17	288	075	0.61g		1
C17	290	793	43.11g	1	
C17	291	636	2.09g		1
C17	292	695	0.89g		1
C17	297	593	7.03g		~
C17	299	820	3.13g		1
C17	306	826	102.24g	1	
C17	308	796	5.67g	) (	~
C17	312	838	46.21g	1	
C17	324	696	13.43g		1
C17	333	868	32.05g	1	100
C17	337	118	30.52g	<ul> <li>Image: A start of the start of</li></ul>	
C17	338	885	39,86g	1	
C17	345	919	15.74g	<ul> <li>Image: A start of the start of</li></ul>	
C17	356	030	286.14g	1	
C17	357		40.64g	×	
C17	no other data		42.65g	<ul> <li>✓</li> </ul>	

Table 3A. Hand-picked charcoal from Melin y Plas (C17) continued...

Table 3B. Hand-picked charcoal from D30 (Penmynedd)

SITE	SAMPLE	CONTEXT	WEIGHT	CONVENTIONAL C <sup>14</sup>	AMS
D30		132	6.33g		~
D30		059	5.52g		~
D30	04 (sample 1)	109	21,01g	1	
D30	07 (sample 2)	013	1.73g		~
D30	08 (sample 3)	111	268.15g	1	
D30	09	103	37.12g	1	
D30	36	162	43.56g	1	
D30	37	138	5.29g		~
D30	44	159	25.19g	1	
D30	55	151	1.46g	in	~
D30	56	157	21.92g	1	1

SITE	SAMPLE	CONTEXT	WEIGHT	CONVENTIONAL C <sup>11</sup>	AMS
E14		216	8.16g		1
E14		216	19.56g	1	1
E14	103A	168	16.47g		~
E14	103B	168	2.37g		1
E14	103C	168	2.55g		~
E14	109	092	42.44g	1	
E14	118	228	bag empty		
E14	119	236	12.93g		~
E14	133	74	11.89g		~
E14	134	321	7.75g		~
E14	140	038	1.34g		1
E14	150	345	13.09g		1
E14	151	346	2.86g		~
E14	153	352	1.92g		~
E14	175	381	2.95g		1
E14	176	381	5.08g		~
E14	179	053	2.93g		~
E14	180	053	2.02g		~
E14	182	401	35.72g	1	
E14	183	397	4.14g		~
E14	185	004	20.53g	1	
E14	186	004	34.29g	V	
E14	187	004	25.69g	1	
E14	188	395	1.54g	A.T	1
E14	191	n/a	9.22g		1
E14	194	222	24.22g	1	
E14	195	280	37.15g	1	
E14	196	409	46.40g	1	1.
E14	81	080	0.32g		~
E14	95	122	6.92g		1
E14	charcoal	from outer ring	8.74g		1
E14	charcoal from	edge of outer ring	11.85g		1

Table 3C. Hand-picked charcoal from E14 (Ty Mawr)

Table 3D. Unprocessed hand-picked charcoal (Samples are primarily soil (ca. 1-2 L) - suggest material is dry sieved to 2mm before weighing).

SITE	SAMPLE	CONTEXT
C17	111	043
C17	111	043 #2
C17	111	043 #3
C17	113	041
C17	113	041
C17	148	163
C17	192	551
C17	202	083
C17	212	570

SITE	SAMPLE	CONTEXT
C17	229	038
C17	231	041
C17	232	043
C17	359	249
SITE	SAMPLE	CONTEXT
F14	150	220
L14	152	339
E14	152	339
E14 E14	152 154 178	339 339 383
E14 E14 E14 E14	152 154 178 189	339 339 383 405

Π Π Π Π 1 7 7 1 1 ] ] ] J J ] ] 1