Results of Archaeological Works at

Turbine Base to the West of Nant Yard, Ynys Enlli (Bardsey Island)

(Watching Brief)

NGR SH 1195 2217



Project Number CR185-2019



CR ARCHAEOLOGY

Compiled by C. Rees & M. Jones On Behalf of Bardsey Island Trust

Summary

An archaeological watching brief was conducted on the excavations for the base of a wind turbine located immediately to the west of Nant Yard, a farmyard towards the northern end of Ynys Enlli (Bardsey Island). A small trench 2m x 1.5m in size was excavated to the level of the underlying bedrock. No artefacts or features were present within this trench.

Crynodeb

Roedd briff gnylio archeolegol yn arweiniedig ar safle cloddiad i dyrbin gwynt ei leoli yn uniongyrchol i orllewin o Nant Yard, buarth tuag at y pen gogledd o Ynys Enlli. Roedd ffos fach 2m x 1.5m o faint ei chloddio i'r lefel o'r creigwely gwaelodol. Nid oedd yna wrthrychau neu nodweddion yn bresennol yn ffos hwn.



Results of Archaeological Works at Turbine Base to the West of Nant Yard, Ynys Enlli (Bardsey Island)

Planning Reference Number: C17/0943/30/LL
National Grid Reference: SH 1195 2217
Client: Bardsey Island Trust

Report Authors: Bardsey Island Trust
Catherine Rees & Matthew Jones

Report Number: CR185-2019 **Date:** 03/09/2019

Contents

	Contents	
1.0	Introduction	
2.0	Project Aims	
3.0	Scheme of Works – Methodology	
3.1	Desk Based Research	
3.2	Archaeological Watching Brief	
3.2.1	Recording	
3.2.2	Additional Mitigation/Contingency Measures	
3.2.3	Recovery, Processing & Curation of Artefactual Material	
3.2.4	Archive Compilation	
3.3	Timetable for Proposed Works	
3.4	Staff	
3.5	Monitoring	
3.6	Health and Safety	
3.7	The Report	
3.7.1	Copyright	
4.0	Topography & Geology	
5.0	Historical Background	
6.0	Results of Archaeological Works	
7.0	Conclusion	
8.0	Bibliography	
Illustrations		
Figure 1. Site Location Map		
Figure 2. Trench Location Plan		
Appendices		
Appendix A. Specification for Archaeological Works		

1.0 Introduction

CR Archaeology were instructed by Bardsey Island Trust to conduct archaeological works at the above site in compliance with planning conditions placed on the development (Planning Reference: C17/0943/30/LL). The works undertaken were the excavation of the footprint of a domestic wind turbine. The cable trench associated with this development was previously excavated under the supervision of Dr. Jane Kenney.

A specification was written following a telephone/email conversation with Development Control Archaeologist Jenny Emmett of Gwynedd Archaeological Planning as a methodology for a programme of Archaeological Watching Brief of the development area (included as Appendix A). This is the second stage of works, and the results of the previous phase have been supplied by the previous excavator.

Ynys Enlli lies about 3km off the western end of the Llŷn Peninsula in Gwynedd. The island is about 2.7km long and about 1km wide at its widest point. Most of the island is fairly flat but the eastern half is dominated by the whale-back of Mynydd Enlli.

The island has several walled farmyards built in the 1870s and still used for accommodation and storage. The wind turbine is to be constructed immediately west of Nant Yard, a farmyard towards the northern end of the island. This is on a fairly level shelf at the foot of Mynydd Enlli but overlooking the low coastal plain on the western side of the island

A small trench 2m x 1.5m in size was excavated to the level of the underlying bedrock. No artefacts or features were present within this trench.

2.0 Project Aims

This scheme of works aimed to monitor groundworks at the site in order to assess the survival, character and date of any archaeological remains and to excavate/record any archaeological remains uncovered.

It aimed to fulfil the mitigation criteria for undertaking an Archaeological Watching Brief as specified in the CIfA Standard and Guidance document (2014).

3.0 Scheme of Works – Methodology

The methodologies employed conformed to The Charted Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (2014).

3.1 Desk Based Research

A history of the site was compiled by Dr. Jane Kenney as part of the previous works associated with the excavation of the cable trench. No further desk-based works were conducted due to the negative result of the works undertaken.

These works will be carried out in accordance with the CIfA Standards and Guidance for Historic Environment Desk Based Assessment (CIfA 2014).

3.2 Archaeological Watching Brief

A watching brief was undertaken which monitored all remaining groundworks undertaken at the site in association with the construction of a domestic wind turbine. This comprised the machine excavation of a single trench 2m by 1.5m which was monitored to a maximum depth of 0.80m.

A CR Archaeology staff member was present during the machine excavation. This work was undertaken using a mechanical excavator fitted with a toothless ditching bucket. No archaeological remains were encountered during the works.



Figure 1. Site Location Map (Source: OS Open Data Mapping. Contains Ordnance Survey data © Crown copyright and database right [2019]

CR Archaeology notified Gwynedd Archaeological Planning Services as to the date of the commencement of works.

Fieldwork was conducted and managed by Matthew Jones (MA) of CR Archaeology.

3.2.1 Recording

The record forms at CR Archaeology are based on the English Heritage system and full written, graphic and photographic records were made in accordance with the English Heritage *Field Recording Manual*. Sample forms can be provided on request. The written record comprises completed *pro-forma* record sheets.

A high-resolution 14.2mp (minimum) Sony Alpha digital camera was used to create a photographic record of the site. General photographs were taken due to the negative results of the works.

All photographic records will be indexed and cross-referenced to written site records. Details concerning subject and direction of view will be maintained in a photographic register, indexed by frame number. Images from photography will be stored in a loss-less digital format in this case "TIF".

3.2.2 Additional Mitigation/Contingency Measures

No additional mitigation/contingency measures were needed.

3.2.3 Recovery, Processing and Curation of Artefactual Material

No artefactual material was recovered during the site works.

3.2.4 Archive Compilation

All records created during the fieldwork will be checked for consistency and accuracy and will form the *Primary Site Archive (P1)* (EH 2006). The archive will contain all data collected. It will be ordered, indexed, adequately documented, internally consistent, secure, quantified, conforming to standards required by the archive repository and signposted appropriately to ensure future use in research, as detailed in the English Heritage *Management of Research Projects in the Historic Environment* (MoRPHE) methodology.

The archive will be assembled in accordance with the guidelines published in, *Standards in the museum care of archaeological collections* (Museums & Galleries Commission 1994), *Guidelines for the preparation of excavation archives for long-term storage* (United Kingdom Institute for Conservation, 1990) and *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (AAF 2007).

As no artefacts were recovered then the paper/digital archive will be deposited at the RCAHMW. Archive material will be deposited in accordance with the terms and conditions for archive deposition.

3.3 Timetable for Proposed Works

Groundworks were undertaken on 23rd September 2019. Gwynedd Archaeological Planning Services were informed of the exact site days to allow monitoring of works.

3.4 Staffing

The project as managed and site work conducted by Matthew Jones (BA (Archaeology), MA (Archaeology). All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

3.5 Monitoring

The project was subject to monitoring by Gwynedd Archaeological Planning Services. The monitor was given prior notice of the commencement of the fieldwork.

3.6 Health and Safety

A risk assessment was conducted prior to the commencement of works and site staff were familiarised with its contents. A first aid kit was taken to the site.

Staff will be issued with appropriate Personal Protective Equipment (PPE) for the site work. This is consisted of:

- Safety Helmets (EN397)
- Hi-visibility vests (EN471)
- Safety footwear steel toecap and mid-sole boots and Wellingtons (EN345-47)
- Sunscreen

All staff will have passed at least a CITB health and safety test at least operative level and will carry a CSCS card.

3.7 The Report

This report clearly and accurately incorporates information gained from the programme of archaeological works. It presents the documentary evidence gathered in such a way as to create a clear and coherent record. This report contains a site plan showing the locations of photographs taken.

The report includes:

- bilingual summary
- a copy of the design brief and agreed specification
- a location plan
- all identified features and significant finds plotted on an appropriately scaled site plan
- full dimensional and descriptive detail of all identified finds and features
- a full bibliography of sources consulted
- a digital copy of the report and an archive compact disc/USB file

Copies of the reports in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the report will be submitted as part of the formal submission. A digital Adobe PDF version and a bound paper copy of the final report and will be lodged with the Gwynedd Historic Environment Record within six months of completion of fieldwork. The new (2018) Guidance for the Submission of the Data to the Welsh Historic Environment Records document will be followed.

3.7.1 Copyright

CR Archaeology and sub-contractors shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides a licence to the client and the local authority for the use of the report by the client and the local authority in all matters directly relating to the project as described in the Project Specification.

4.0 Topography & Geology

4.1 Topography

Ynys Enlli is a small island located c. 3km off the western tip of the Llŷn Peninsula. It is divided into two clear zones – an upland area to the east dominated by Myndd Enlli which reaches a height of 167m OD, whist the remainder of the island is fairly flat and in agricultural use.

The island accommodation is predominantly in walled farmyards which were built by the Newborough Estate in the 1870s. The wind turbine is to be constructed immediately west of Nant Yard, a farmyard towards the northern end of the island. It is situated on a fairly level shelf at the foot of Mynydd Enlli, overlooking the low coastal plain on the western side of the island (Kenney 2018).

4.2 Geology

The geology of Ynys Enlli's geology is complex. The majority of the rocks belong to the Gwna Mélange - a jumbled formation of rocks formed by a huge underwater landslide caused by tectonic activity. The geology is further complicated by igneous intrusions of dolerite, one of which has eroded to form the harbour of Cafn Enlli. The drift geology consists of glacial till across the lowland areas (Howells 2007, 17-19).

5.0 Historical Background

The following research has been summarised from Kenney 2018. Due to the negative results of the watching brief no further research was conducted during this scheme of work.

5.1 Prehistoric Remains

Bardsey has been occupied from at least the Mesolithic period, and a large quantity of flint from this period has been excavated on the northern end of the island. Burnt mounds have been identified on the island, indicating that there may have activity in the Bronze Age. Features which have tentatively been identified as roundhouses have been noted on Mynydd Enlli, but although it is assumed that these features are of Iron Age or Romano-British date, none have been excavated to date. The question therefore remains as to whether they might instead be the remains of the cells of medieval monks (Kenney and Hopewell 2016).

5.2 Early Medieval/Medieval History

The foundation of the monastic community on Ynys Enlli has traditionally been attributed to St Cadfan, and is said to have been establish during the 5th or 6th century AD. The earliest reliable sources attest that there was a monastery by the 12th century, but we cannot be certain as to how long it had stood by this time

Tradition records that a monastery was established on the island by St Cadfan in the 5th or 6th century AD. The sources for this are not very reliable but there were monks here by the 12th century and probably earlier. The monastery was reformed as the Augustinian priory of St Mary in the 13th century, and the surviving tower (PRN 781) are the remains of this structure (Kenney and Hopewell 2016).

The island is an important pilgrimage destination, and local legend names it the "Island of Twenty Thousand Saints" due to the number of pilgrims who are reputed to have been buried there. Despite this, the only recorded human remains have been recorded around the abbey and it is clearly here that the medieval cemetery (PRN 16793) was located (Kenney 2018).

This cemetery extends beyond the current graveyard limits and disarticulated human remains have been found associated with Tŷ Newydd, Tŷ Bach and Tŷ Nesaf (PRN 59949, 59959 and 59960) and in Nant Yard. A long cist ((PRN 62364) is visible in the track adjacent to Nant Yard (Ibid).

Excavations were undertaken at Tŷ Newydd 1993-8 (Arnold 1998) which uncovered 25 graves including a communal grave containing five children. The other graves contained males, females and children, one with a 10th century Saxon silver penny in its mouth. Although the style of burial suggests a medieval date for these graves, and the coin a 10th century or later date for one grave, several were intercutting demonstrating a longevity to internment at the site. No radiocarbon dates have been obtained for the site (Ibid).

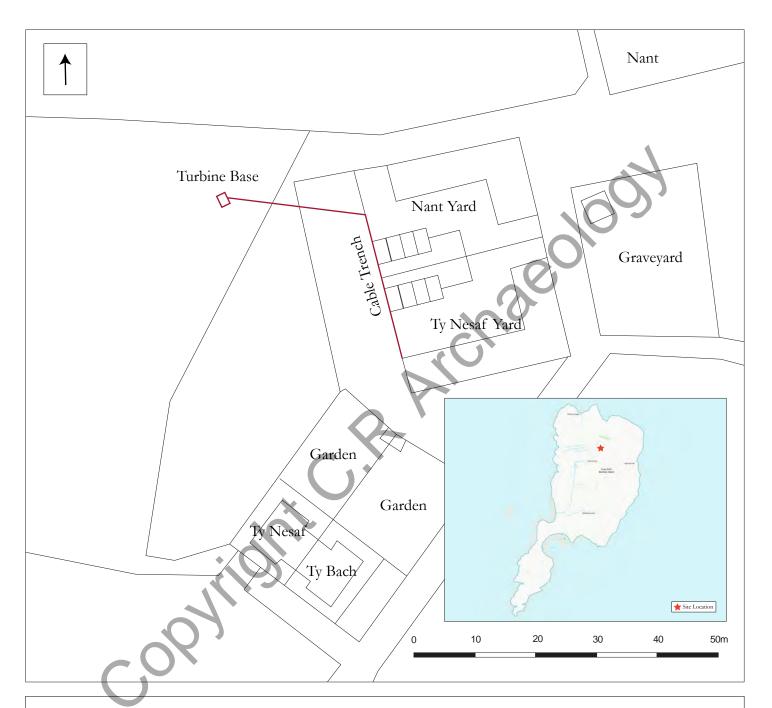


Figure 2. Trench Location Plan (Modified/Redrawn from Plan Produced by Kenney 2018) (Source: OS Open Data Mapping. Contains Ordnance Survey data © Crown copyright and database right [2019]

6.0 Results of Archaeological Works (Figure 2, Plates 1 – 4)

A single rectangular trench was machine excavated down to the level of the underlying natural. The machine was fitted with a toothless ditching bucket.

The trench measured 2m in length by 1.50m in width. It was orientated on a north-west – south-east axis. Two contexts were identified within this trench.

Context (01) was the upper deposit in the trench. It was a dark black sand silt/turf layer. Due to the hill slope, it was approximately 0.40m in depth on the south-western side and 0.30m on north-western side. The underlying bedrock (02) was schist. This material was removed to a maximum depth 0.80m to ensure that no material in the trench sections was disturbed.

No archaeological artefacts or features were identified within the trench.

7.0 Conclusion

No archaeological artefacts or features were identified during this phase of works.

8.0 Bibliography

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Plate 1. Pre-excavation Shot of Trench Area

Plate 2. Bedrock Within Trench



Plate 3. Post-excavation View of Trench (Section)



Plate 4. Post-excavation View of Trench (Plan)

United Kingdom Institute for Conservation (UKIC) Archaeology Section

Watkinson, D. & Neal, V. 2001. *First Aid for Finds.* London. United Kingdom Institute for Conservation of Historic & Artistic Works

Websites (All websites were consulted on 16/04/2019)

www.mapapps.bgs.ac.uk/geologyofbritain/home.html



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Specification for Archaeological Works at

Turbine Base to the West of Nant Yard, aeoloó) Ynys Enlli (Bardsey Island)

(Watching Brief)

NGR SH 1195 2217

Project Number CR185-2019



CR ARCHAEOLOGY

Compiled by C. Rees & M. Jones On Behalf of Bardsey Island Trust



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Planning Reference Number: C17/0943/30/LL
National Grid Reference: SH 1195 2217
Client: Bardsey Island Trust

Report Authors: Catherine Rees & Matthew Jones

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	Contents	
1.0	Introduction	
2.0	Project Aims	
3.0 3.1	Brief Historical Background Topography & Geology	
4.0 4.1 4.2 4.2.1 4.2.2 4.2.3 4.2.4 4.3 4.4 4.5 4.6 4.7	Scheme of Works – Methodology Desk Based Research Archaeological Watching Brief Recording Additional Mitigation/Contingency Measures Recovery, Processing & Curation of Artefactual Material Archive Compilation Timetable for Proposed Works Staff Monitoring Health and Safety The Report Copyright	
5.0	Bibliography	
Illustrations Figure 1. Site Location Map		
Apper	ndices ndix A. Proposed Works	

1.0 Introduction

CR Archaeology have been instructed by Bardsey Island Trust to conduct archaeological works at the above site in compliance with planning conditions placed on the development (Planning Reference: C17/0943/30/LL). Works to be undertaken are the excavation of the footprint of a domestic wind turbine. The cable trench associated with this development was previously excavated under the supervision of Dr. Jane Kenney.

This specification has been written with following a telephone/email conversation with Development Control Archaeologist Jenny Emmett of Gwynedd Archaeological Planning as a methodology for a programme of Archaeological Watching Brief of the development area. This is the second stage of works, and the results of the previous phase have been supplied by the previous excavator.

Ynys Enlli lies about 3km off the western end of the Llŷn Peninsula in Gwynedd. The island is about 2.7km long and about 1km wide at its widest point. Most of the island is fairly flat but the eastern half is dominated by the whale-back of Mynydd Enlli.

The island has several walled farmyards built in the 1870s and still used for accommodation and storage. The wind turbine is to be constructed immediately west of Nant Yard, a farmyard towards the northern end of the island. This is on a fairly level shelf at the foot of Mynydd Enlli but overlooking the low coastal plain on the western side of the island

This document details the methodology for an Archaeological Watching Brief to cover all groundworks at the site.

2.0 Project Aims

This scheme of works aims to monitor groundworks at the site in order to assess the survival, character and date of any archaeological remains and to excavate/record any archaeological remains uncovered.

It aims to fulfil the mitigation criteria for undertaking an Archaeological Watching Brief as specified in the CIfA Standard and Guidance document (2014).

3.0 Historical Background

The following section has been taken from Kenney 2018. "Bardsey has been occupied from the Mesolithic period as large quantities of flints from that period have been excavated on the northern end of the island. The presence of burnt mounds also suggests occupation in the Bronze Age and what appear to be roundhouses on Mynydd Enlli are assumed to be Iron Age or Romano-British in date, although none have been excavated and there has been a suggestion that these were cells of medieval monks (Kenney and Hopewell 2016).

Tradition records that a monastery was established on the island by St Cadfan in the 5th or 6th century AD. The sources for this are not very reliable but there were monks here by the 12th century and probably earlier. The location of the first monastery is not known but geophysical survey has located anomalies that might possibly be related to its remains to the west of Tŷ Capel (figure 2). In the 13th century the monastery was reformed as the Augustinian priory of St Mary, and the surviving tower (PRN 781) at the north end of the island and c. 65m east of the wind turbine site, is the only upstanding remains of this (Kenney and Hopewell 2016).

Bardsey was a pilgrimage destination, and the island is known as the "Island of Twenty Thousand Saints" due to the number of pilgrims who are supposed to be buried there. There is a tradition that burials have been found all over the island but the only recorded examples have been found around the abbey and it is clearly here that the medieval cemetery (PRN 16793) was located. Disarticulated human remains are found in the gardens of Tŷ Bach and Tŷ Nesaf (PRN 59959 and 59960) and have been found elsewhere in Nant Yard. A long cist is visible in the track adjacent to Nant Yard (PRN 62364). The best evidence came from an excavation in the floor of a now abandoned house called Tŷ Newydd (PRN 59949). The excavation took place in in 1993-8 (Arnold 1998) and a total of 25 graves were identified; one a communal grave containing five children. The other graves contained males, females and children. One body was buried with a 10th



century Saxon silver penny in its mouth. The style of burial suggests a medieval date for these graves and the coin demonstrates a 10th century date for at least one grave. However several of the graves were intercutting so the burials were interred over a period of time. As no radiocarbon dates have been carried out on the bones their date the full duration over which burials took place here is not yet known.

The limits of the cemetery are uncertain but most of the remains have been recovered to the west and south of the abbey tower (figure 2). The cemetery extended under Nant Yard. Much of the yard has been built-up so the original topography is hard to see but to the west of the yard is a fairly steep slope which could have defined the western limit of the cemetery. The wind turbine is to be built on the top of that slope and the cable trench runs along the flat area to the west of the yard, which may have been within the cemetery. However it is also possible that this area has been levelled when the yard was built and original deposits may have been lost?

3.1 Topography & Geology

The following section has been taken from Kenney 2018. "Ynys Enlli lies about 3km off the western end of the Llŷn Peninsula in Gwynedd. The island is about 2.7km long and about 1km wide at its widest point. Most of the island is fairly flat but the eastern half is dominated by the whale-back of Mynydd Enlli, which reaches 167m OD. Ynys Enlli's geology is complex as most of the rocks belong to the Gwna Mélange, a jumbled formation of rocks formed by a huge underwater landslide caused by tectonic activity. The geology is further complicated by igneous intrusions of dolerite, one of which has eroded to form the harbour of Cafn Enlli. The drift geology consists of glacial till across the lowland areas (Howells 2007, 17-19).

The island has several walled farmyards built in the 1870s and still used for accommodation and storage. The wind turbine is to be constructed immediately west of Nant Yard, a farmyard towards the northern end of the island. This is on a fairly level shelf at the foot of Mynydd Enlli but overlooking the low coastal plain on the western side of the island.

4.0 Scheme of Works – Methodology

The methodologies employed will conform to The Charted Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (2014).

4.1 Desk Based Research

A history of the site has been compiled by Dr. Jane Kenney as part of the previous works associated with the excavation of the cable trench. No further desk-based works will be conducted unless an archaeological discovery is made. In this instance additional research will be sufficient to place the discovery within its local and regional context.

These works will be carried out in accordance with the CIfA Standards and Guidance for Historic Environment Desk Based Assessment (CIfA 2014).

4.2 Archaeological Watching Brief

This watching brief will monitor all remaining groundworks undertaken on the site. This comprises the machine excavation of a single trench 0.75m by 0.75m which will be monitored to a depth of 0.80m/until the level of the underlying natural is reached.

A CR Archaeology staff member will be present during the machine excavation. This work will be undertaken using a mechanical excavator fitted with a toothless ditching bucket. If archaeological remains are encountered, then machine excavation will cease at this level until it is clear in plan that the full extent of any features have been uncovered within the development area.

CR Archaeology will notify Gwynedd Archaeological Planning Services as to the date of the commencement of works and if any significant archaeological features are uncovered. A site visit will be arranged if necessary to allow for the inspection of works.

Any archaeological features, structures or remains will be trowel cleaned by hand. Investigation of such features, structures or deposits will be sufficient to determine their character, date, significance and quality. If features yield suitable material for dating/environmental processing, then samples will be taken for processing off site. The size of these samples will depend on the size of the feature but for smaller features a sample of up to 95% will be taken. For larger features a sample of up to 40 litres will be taken. In the event of a significant discovery Gwynedd Archaeological Planning Services will be informed of the discovery and a mitigation strategy agreed before works will progress.

Fieldwork is to be conducted and managed by Matthew Jones (MA) of CR Archaeology. Additional staff can be brought in as required and all staff members will have experience equivalent to PCIfA level and cv's can be provided on request.

4.2.1 Recording

The record forms at CR Archaeology are based on the English Heritage system and full written, graphic and photographic records will be made in accordance with the English Heritage *Field Recording Manual*. Sample forms can be provided on request. The written record shall comprise completed *pro-forma* record sheets.

Plans, sections and elevations will be produced on gridded, archive standard stable polyester film at scales of 1:10, 1:20 or 1:50, as appropriate. Representative measured sections will be prepared as appropriate showing the sequence and depths of deposits. All drawings will be numbered and listed in a drawing register, these drawing numbers being cross-referenced to written site records. A 'harris matrix' diagram will be created.

A high-resolution 14.2mp (minimum) Sony Alpha digital camera will be used to create a photographic record of the site. This will be comprised of photographs of archaeological features and appropriate groups of features and structures. Included in each photograph will be an appropriate scale and north arrow. General photographs will also be taken in the event of a negative result.

All photographic records will be indexed and cross-referenced to written site records. Details concerning subject and direction of view will be maintained in a photographic register, indexed by frame number. Images from photography will be stored in a loss-less digital format in this case '*.TIF'.

4.2.2 Additional Mitigation/Contingency Measures

In the event of a significant archaeological discovery being made during the excavation, CR Archaeology will immediately inform both the client and the development control archaeologist. Consultation will take place between CR Archaeology, Gwynedd Archaeological Planning Services and the client with regards to the most suitable course of action.

It was highlighted in the previous phase of works that there is the possibility that human remains might be encountered. No human remains were however uncovered and during this phase of works and the previous excavator believes this excavation area to lie outside the limits of a previously identified cemetery. In the event that human remains are encountered site work will cease with immediate effect. The coroner, client and monitoring body will be informed immediately. The company will abide by the requirements of Section 25 of the Burial Act 1857. Any arrangements regarding the discovery of human remains will be at the discretion of HM Coroner whose instruction/permission will be sought. All human remains are to be preserved *in situ*, covered and protected. They will only be removed in exceptional circumstances and with the appropriate Ministry of Justice licence, environmental health regulations, Coroner's permission and, if appropriate, in compliance with the Disused Burial Grounds (Amendment) Act 1981 or other local Act, with adequate security provided in such cases.

Any artefacts recovered that fall within the scope of the Treasure Act 1996 will be reported to the landowner, GAPS and to HM Coroner.

Should substantial/significant remains be uncovered on the site, there will be the submission of an interim report followed by a Post Excavation Assessment before final reporting.

4.2.3 Recovery, Processing and Curation of Artefactual Material

All recovered artefactual material will be retained, cleaned, labelled and stored according to *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014) and *First Aid for Finds* (Watkinson & Neal 2001). The aim will be to create a stable, ordered, well-documented, accessible material archive forming a resource for current and future research (CIfA 2014).

All artefactual material will be bagged and labelled with the site code and context number prior to their removal from site. The archive reference number will be clearly marked on all finds.

Each assemblage will be examined according to typological or chronological criteria and conservation needs identified. An assessment report of all post-medieval material will be produced by Matthew Jones and further specialists will be appointed as required. A list of specialists will be prepared prior to the post-excavation phase of works.

Should substantial/significant remains be uncovered on the site, there will be the submission of an interim report followed by a Post Excavation Assessment before final reporting.

Any specialist conservation necessary will be undertaken by Cardiff Conservation Services, Cardiff University. This will be conducted in accordance with guidelines issued by the Institute for Conservation.

Following analysis all archaeological material recovered will be deposited with the Bardsey Island Trust and will be retained on the island. Processed assemblages will be boxed according to issued guidelines and a register of contents compiled prior to deposition. In the event that no artefactual material is recovered then the paper and digital archive will be deposited with the RCAHMW.

The works will be carried out in accordance with The Chartered Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (Revised 2014).

4.2.4 Archive Compilation

All records created during the fieldwork will be checked for consistency and accuracy and will form part of the *Primary Site Archive (P1)* (EH 2006). The archive will contain all data collected, including records and other specialist materials. It will be ordered, indexed, adequately documented, internally consistent, secure, quantified, conforming to standards required by the archive repository and signposted appropriately to ensure future use in research, as detailed in the English Heritage *Management of Research Projects in the Historic Environment* (MoRPHE) methodology.

The archive will be assembled in accordance with the guidelines published in, *Standards in the museum care of archaeological collections* (Museums & Galleries Commission 1994), *Guidelines for the preparation of excavation archives for long-term storage* (United Kingdom Institute for Conservation, 1990) and *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (AAF 2007).

All materials contained within the *Primary Site Archive (P1)* that are subsequently identified by the *Assessment Report (P2)* as appropriate for analysis will be processed by suitable specialists and the resultant *Research Archive (P3)* will be checked and ordered according to *MoRPHE* criteria.

Should archaeological material be recovered it is hoped any archive/artefactual material created/discovered during this archaeological project will be deposited with the Bardsey Island Trust. Should no artefacts be recovered then the paper/digital archive will be deposited at the RCAHMW. Archive material will be deposited in accordance with the terms and conditions for archive deposition.

4.3 Timetable for Proposed Works

It is envisaged that groundworks will commence in late August and 1-2 days have been allotted for site work. Additional time will be allotted as necessary for archive research, report compilation and site archiving. Gwynedd Archaeological Planning Services will be informed of the exact site days to allow monitoring of works.

4.4 Staffing

The project will be managed by Matthew Jones (BA (Archaeology), MA (Archaeology). All staff will have a skill set equivalent to the CIfA PCIfA level. C.Vs for all staff employed on the project can be provided on request. All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

4.5 Monitoring

The project will be subject to monitoring by Gwynedd Archaeological Planning Services. The monitor will be given prior notice of the commencement of the fieldwork. A projected time-scale and copy of the risk assessment can be provided on request to the monitoring body prior to the commencement of works.

They will be notified in writing (via email) of the commencement dates for archaeological site work and will be updated with the results of all works conducted as watching brief elements. This will be initially as a telephone call & email with attached JPEG photographs and if/when required further interim reports will be compiled.

4.6 Health and Safety

A risk assessment will be conducted prior to the commencement of works and site staff will be familiarised with its contents. A first aid kit will be located in the site vehicle.

All staff will be issued with appropriate Personal Protective Equipment (PPE) for the site work. Initially this is anticipated to consist of:

- Safety Helmets (EN397)
- Hi-visibility vests (EN471)
- Safety footwear steel toecap and mid-sole boots and Wellingtons (EN345-47)

Any further PPE required will be provided by CR Archaeology

All staff will have passed at least a CITB health and safety test at least operative level and will carry a CSCS card.

CR Archaeology staff are not the principle contractor on site and will also comply with any Health and Safety Policy or specific on-site instructions provided by the client or their appointed Principal contractor or H&S coordinator.

4.7 The Report

The report will clearly and accurately incorporate information gained from the programme of archaeological works. It will present the documentary evidence gathered in such a way as to create a clear and coherent record. The report will contain a site plan showing the locations of photographs taken.

As a minimum the report will include:

- bilingual summary
- a copy of the design brief and agreed specification
- a location plan
- all identified features and significant finds plotted on an appropriately scaled site plan

- full dimensional and descriptive detail of all identified finds and features
- a full bibliography of sources consulted
- a digital copy of the report and an archive compact disc/USB file

Copies of the reports in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the report will be submitted as part of the formal submission. A digital Adobe PDF version and a bound paper copy of the final report and will be lodged with the Gwynedd Historic Environment Record within six months of completion of fieldwork. The new (2018) Guidance for the Submission of the Data to the Welsh Historic Environment Records document will be followed.

In the event of a positive result of site works an article will be submitted to the Archaeology in Wales Journal and other publications as appropriate.

4.7.1 Copyright

CR Archaeology and sub-contractors shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides a licence to the client and the local authority for the use of the report by the client and the local authority in all matters directly relating to the project as described in the Project Specification.

5.0 Bibliography

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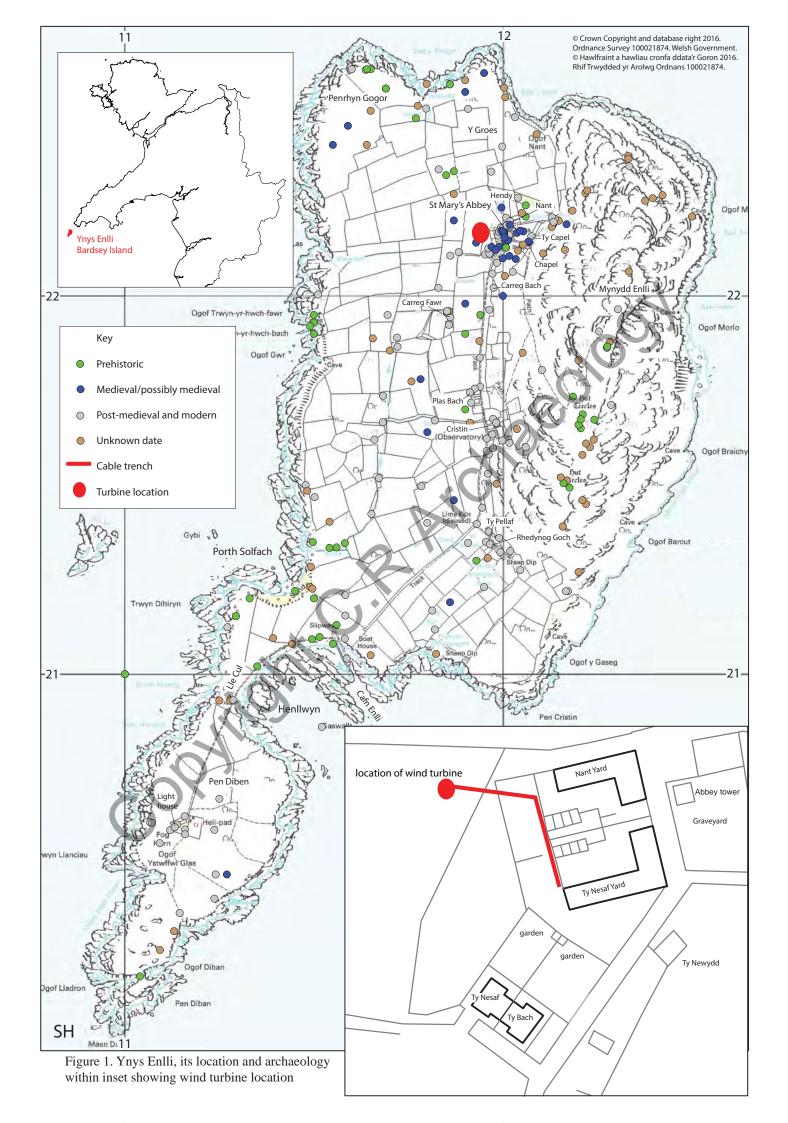
Websites (All websites were consulted on 16/04/2019) www.mapapps.bgs.ac.uk/geologyofbritain/home.html



Appendix A.

Proposed Development Plans with Locations of Known Archaeological Remains (Taken from Kenney 2018)





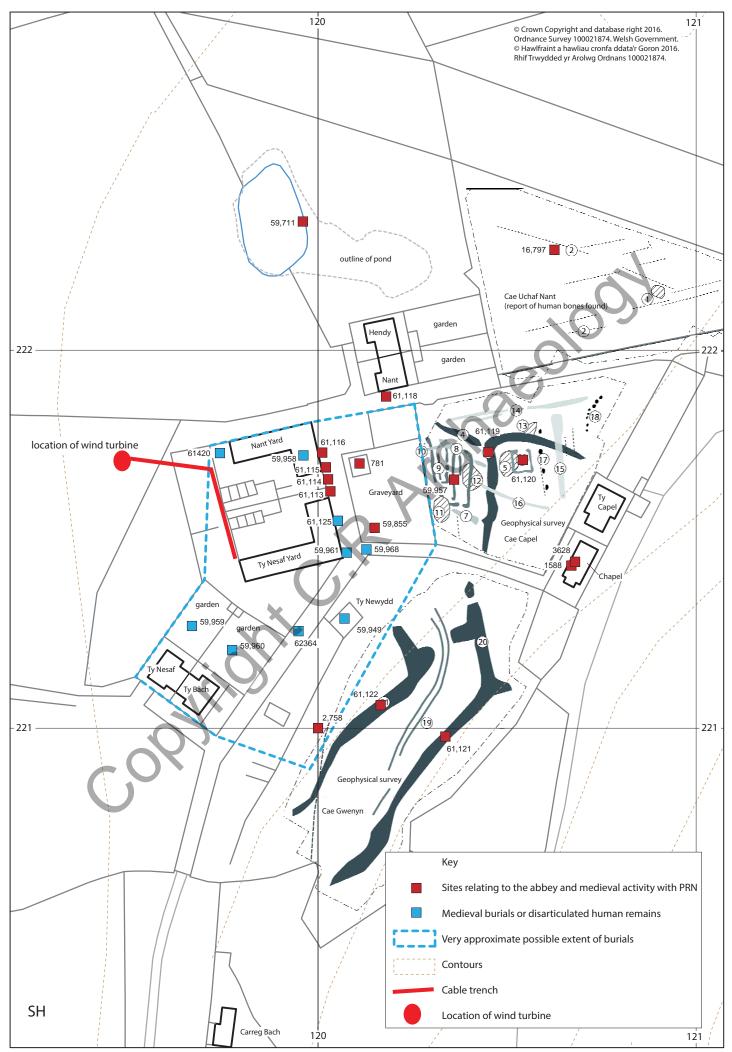
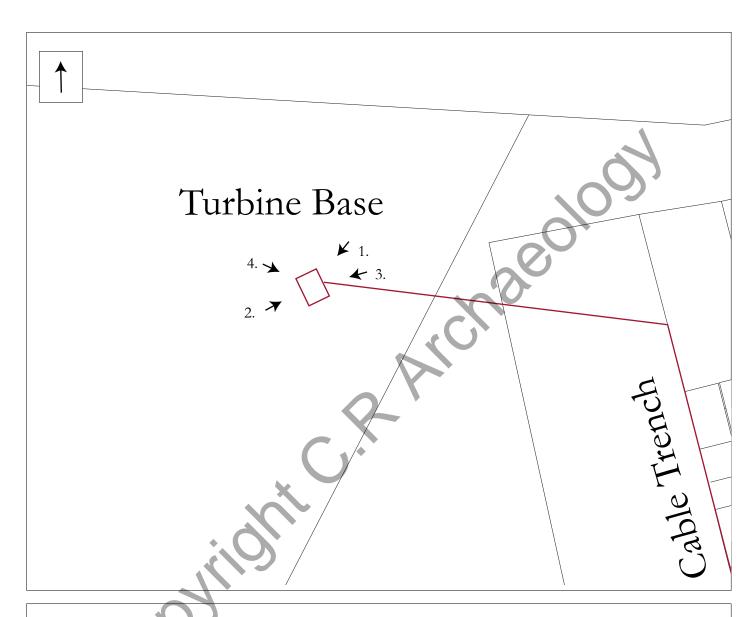


Figure 2. The abbey and medieval cemetery, with geophysical survey results





Appendix B. Location and Direction of Photographic Plates