

Results of Archaeological Works

Amgueddfa Forwrol Llŷn, St Mary's Church, Nefyn (Further Works)



NGR SH30870 40646

Report Number CR160-2018



C.R Archaeology

Compiled by Catherine Rees

on Behalf of Amgueddfa Forwrol Llŷn

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Results of Archaeological Works at Amgueddfa Forwrol Llŷn, St Mary's Church, Nefyn

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1.0 Introduction

C.R Archaeology were instructed by Amgueddfa Forwrol Llŷn to conduct further archaeological works at St Mary's Church, Nefyn.

St Mary's Church, Stryd Y Llan, Nefyn (figure 1) is a Grade II Listed Building (Cadw ID: 4371) within the ancient community of Nefyn on the north-western coast of the Llŷn Peninsula. Previous works have previously been undertaken at the site to rectify structural problems with the church, provide drainage, erect a new storage shed with solar panels, create pathways and a play area and to rectify a structural problem with the churchyard boundary wall.

The new works at the site were: the excavation for 2 pad foundations within the existing building to support a new mezzanine floor, the extension of the existing external store to twice the current size, the forming of a concrete base to support an original quarry wagon and the forming of 2 bases for new signage. A specification for archaeological works was agreed with Jenny Emmett of GAPS and is included as Appendix A. Further details of the works carried out are provided in Appendix B.

The site is in the ownership of the Church in Wales but is no longer in use for active worship and as such is no longer subject to Ecclesiastical Exemption. The Church was consulted prior to the production of the archaeological specification. Prior to the commencement of works The Ministry of Justice were contacted and an application approved for an "Authority to Excavate Human Remains for Archaeological Purposes".

The building is rented by Amgueddfa Forwrol Llŷn and is in use as a museum and café.

The current church building was erected in 1825-7 on the site of a much earlier building. Little is known of the architecture of the previous building, although it is known to have important historical associations. The earliest surviving records date from the mid-12th Century and detail how Cadwaladr, son of Gruffudd ap Cynan and brother of Owain Gwynedd, granted Nefyn Church, its appurtenances and the associated land to the Augustinian Abbey of Haughmond. In 1535 the church had the status of vicarage of the Abbey. St Mary's Nefyn survived the reformation and became a parochial church.

During a previous phase of works a 1m wide section of what was believed to be a Medieval wall was uncovered in the church yard. This structure was further exposed by the current works which disproved this theory and allowed for its correct identification as a stone built family tomb of Post Medieval date. Also uncovered during the current works was a second Post Medieval stone built grave and a slate headstone.

2.0 Project Aims & Objectives

The aims of this programme of works were to monitor all ground works associated with the proposed works and to record any archaeological remains (including articulated and disarticulated human remains) uncovered during the works.

The objective of the archaeological programme was to establish and make available information about the archaeological resource existing on the site.

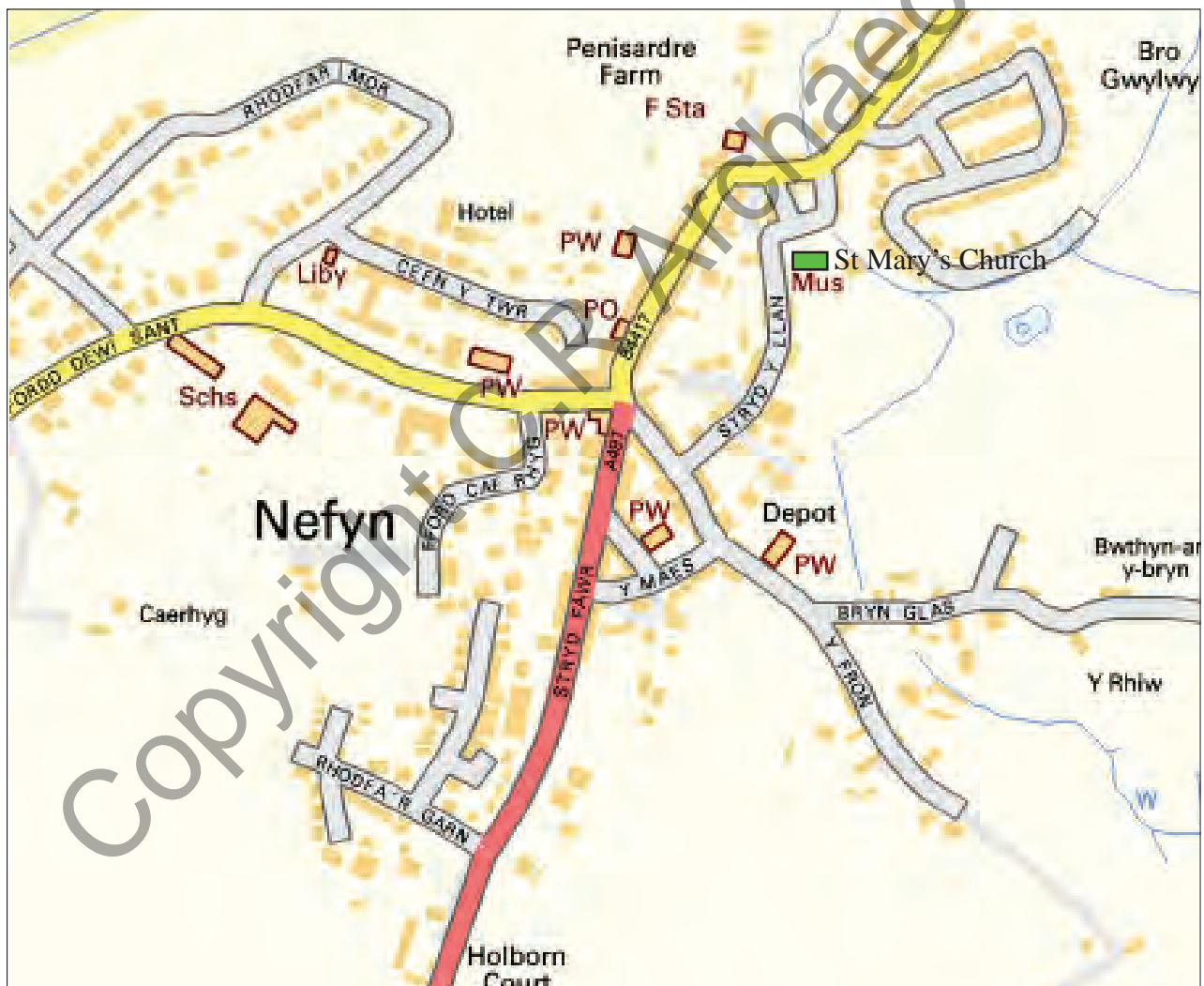
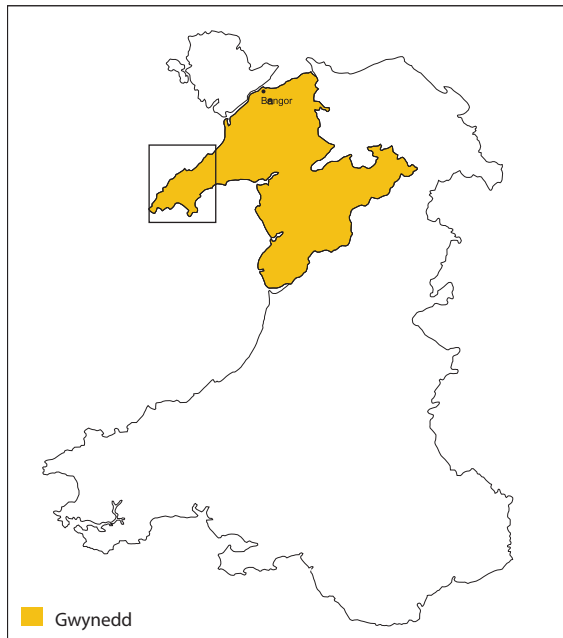


Figure 1. St Mary's Church Location Map
 (Source: OS Open Data Mapping Contains Ordnance Survey data
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3.0 Scheme of Works – Methodology

3.1 Desk Based Research

A history of the site was compiled during the previous phases of work (see documents CR56-2015 and CR108-2016) and no further works were required to aid in the interpretation of the results of this phase of works.

The works were carried out accordance with the CIfA Standards and Guidance (2014).

3.2 Photographic Survey

Works to the interior of the church were very limited and there were no archaeological implications for the works. These works were not therefore monitored and were undertaken prior to C.R Archaeology arriving at the site. A photographic record of the church interior was therefore not undertaken.

No grave stones were affected by the works in the churchyard so a photographic survey was not required.

3.3 Methodology for Archaeological Watching Brief

All intrusive exterior ground works at the site were monitored by an archaeologist from C.R Archaeology. The topsoil was removed using a mechanical excavator with toothless bucket. Following the removal of the topsoil the location of any grave cuts was recorded photographically and drawn in plan. From this point onwards, excavation was undertaken by hand.

Within the church interior no further excavation was required following the removal of the current flooring. The monitoring of the modern flooring was not undertaken.

Archaeological features, structures and articulated human remains identified in the course of the excavation were trowel cleaned by hand. Investigation of such features, structures or deposits was sufficient to determine their character, date, significance and quality.

No features yielded suitable material for dating/environmental processing.

Structural remains were encountered which were preserved in situ.

3.3.1 The Recovery and Recording of Human Remains

During the previous phases of works human remains were encountered and it was considered almost certain that further remains would be uncovered during these works. Different methodologies were therefore devised depending on the nature and position of the remains encountered.

3.3.1.1 Disarticulated Human Remains Recovered During Excavation

No disarticulated human remains were encountered during this phase of site works.

3.3.1.2 Articulated Remains Uncovered During Excavation

Articulated remains were only encountered within a stone-built tomb which was encountered at a depth which allowed for preservation in situ. The remains were therefore not disturbed.

3.3.1.3 Excavation Methodology for Medieval and Earlier Burials

No Medieval or earlier were encountered during this phase of site works.

3.4 Recording

The record forms at C.R Archaeology are based on the English Heritage (now Historic England) system and full written, graphic and photographic records were made in accordance with the English Heritage *Field Recording Manual*. The written record comprises completed *pro-forma* record sheets.

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

A high-resolution 14.2mp Sony Alpha digital camera was used to create a photographic record of the site. This was comprised of photographs of archaeological features and appropriate groups of features and structures. All photographic records were indexed and cross-referenced to written site records. Details concerning subject and direction of view were 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'.

A 'harris matrix' diagram will be constructed for the excavated area.

3.5 Additional Mitigation/Contingency Measures

A Ministry of Justice license for the "Authority to Excavate Human Remains for Archaeological Purposes" was secured prior to the commencement of works.

No additional mitigation/contingency measures were required.

3.6 Recovery, Processing and Curation of Artefactual Material

All artefactual material was 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 was examined according to typological or chronological criteria and conservation needs identified. An assessment report of all post-medieval material was produced by Matthew Jones.

Following analysis all archaeological material recovered will be retained by the Maritime Museum provided that there is suitable provision made for conservation and storage/display space. Processed assemblages will be boxed according to issued guidelines and a register of contents compiled prior to deposition.

The works were carried out in accordance with The Chartered Institute for Archaeologists: Standard and Guidance for Archaeological Excavation (Revised 2014).

3.7 Archive Compilation

All records created during the fieldwork will be checked for consistency and accuracy and will form part of the *Primary Site Archive (PI)* (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.

Archive material will be deposited at the RCAHMW in accordance with the organisations terms and conditions for archive deposition.

3.8 Timetable for Proposed Works

Works at St Mary's Church commenced on the 15th January and the archaeological works were completed in 1 day. Gwynedd Archaeological Planning Services and The Church in Wales were informed of the exact site days to allow monitoring of works.

3.9 Staffing

The project was managed by Catherine Rees (MICfA, MA – Archaeology, BA – Archaeology, PgDip – Historic Environment Conservation). Site work was conducted by Matthew Jones (BA - Archaeology, MA - Archaeological Practise) and Chris Lane.

All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

3.10 Monitoring

The project was subject to monitoring by Gwynedd Archaeological Planning Services and The Church in Wales archaeological consultant Frances Lynch. The monitors will be given prior notice of the commencement of the fieldwork.

3.11 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 located in the site vehicle.

All staff were issued with appropriate Personal Protective Equipment (PPE) for the site work. This consisted of:

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

All staff have passed a CITB health and safety test at operative level.

The principle contractor was responsible for the overall H&S on site and for the implementation, erection and maintenance of safety equipment such as shoring, acrows or scaffolding. C.R Archaeology staff complied with all Health and Safety Policy and specific on-site instructions provided by the client or their appointed Principal contractor or H&S coordinator.

Due to the antiquity of the skeletal material it was felt unlikely that any pathogens or fungal spores had survived in the burial environment. However, as an additional precaution disposable gloves were worn during excavation.

3.12 The Report

The results of the works have been presented in such a way as to create a clear and coherent record. The report contains a site plan showing the locations of photographs taken.

The report includes:

- A copy of the agreed specification
- A location plan
- Drawings detailing the locations of all excavated areas
- All identified features plotted on an appropriately scaled plan of the development site
- Appropriately scaled plans and sections showing identified features and significant finds
- Full dimensional and descriptive detail of all identified features
- A plan illustrating the location and direction of any photographs or drawings
- All specialist reports in full
- A full bibliography of sources consulted
- An archive compact disc

A copy of the report 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 the completion of post excavation work. At present the time scale for report production following the completion of fieldwork is unknown. This is due to the variable nature and duration of post excavation works.

3.12.1 Public Engagement

Due to the sensitive nature of the works to be undertaken and in order to comply with burial legislation the site was hidden from public view and there was no unauthorised access to the site

3.12.2 Copyright

C.R 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 Geographical and Geological Context

4.1 Topography

The site is located within the ancient town of Nefyn and is the original Parish Church.

Nefyn is a small town on the north-western coast of the Llŷn Peninsular.

4.2 Geology

The superficial geology of the site is described as “glacial sand and gravel”. The deposit is described as “sand and gravel with rare clay interbeds; often cross-bedded; of glacial origin.” The bedrock is recorded as “Llanvirn Rocks (Undifferentiated)” and no further detail is given (www.bgs.ac.uk).

5.0 Historical Background

As an element of previous works at the site a history of the church at Nefyn was compiled (see document CR56-2015). This is included (without figures) below.

Prehistoric

Mesolithic

There were no Mesolithic remains within the 500m search radius. Roland Bond (Bond 2008: 12) discusses finds of flint and stone tools found within the Nefyn parish area although none were listed in the Royal Commission or HER search areas.

Neolithic

There were no Neolithic remains within the 500m search radius. Roland Bond (Bond 2008: 12) discusses finds of flint and stone tools found within the Nefyn parish area although none were listed in the Royal Commission or HER search areas.

Bronze Age

There were no Bronze Age remains within the 500m search radius. Roland Bond (Bond 2008: 12) discusses finds of urns and tools within the Nefyn parish and he lists a number of standing stones although none were listed in the Royal Commission or HER search areas.

General Prehistoric

Three stone artefacts (a single large grey flint secondary flake, a possible saddle quern and a grinding stone) were recovered from the topsoil during the excavations associated with the rebuilding of the church boundary wall. It was not possible to refine the dating of the artefacts beyond a broad prehistoric attribution.

Iron age/ Romano-British

There were no Iron Age remains within the 500m search radius. There is a large promontory fort - Trwyn Porth (NPRN 302273) located to the west of the study area and the 1936 RCAHMS Inventory includes a possible hut circle settlement to the east of the church (RCAHMS 1936: 85).

Early Medieval

A stone with an inscribed cross (NPRN 275727) was discovered at Ty'n-y-Cae farm and is now used as a lintel for a barn/cow shed. The stone has been dated to the 7th century (Bond 2008: 12). The stone was originally placed on top of a mound facing towards the sea. The mound has since been destroyed but it was noted that it was located in a field called Cae Pen-y-maen and was found to have contained human bones (Owen 1896: 170-171).

The field where the cross was found was locally known as an area which had produced small copper coins (Owen 1896: 170-171).

It has been suggested that the church of St Mary's (PRN 4316) which was completely rebuilt in 1825 has an Early Medieval foundation date. The church is located on the Pilgrimage Route to Bardsey Island.

Medieval

The earliest documentary reference to Nefyn is as a landing place for Gruffudd Ap Cynan in the mid 11th century (Evans 1990) although it is unclear as to the precise nature of the settlement there at this time.

Further information can be found in grants of land in Nefyn which were granted by Cadwaladr ap Owain to the Augustinians of Haughmond in Shropshire in documents dated 1155-6 and 1161-2 (Bond 2008: 17).

In his tour of 1188 Gerald of Wales stayed at Nefyn of the 9th of April and it is thought that Nefyn held an important place as part of the pilgrimage route with a religious house (priory) with boarding which catered for pilgrims on their way to Bardsey Island (Thorpe 2004: 183).

Turvey records that Nefyn was established as a borough some time before AD 1200 but notes that it does not seem to have been fortified and may have been centred around the mote (Turvey 2007: 6). There are also suggestions that there may have been a Princely Llys (PRN 6622) within the area although no evidence of this has been found.

Nefyn Priory (PRN4317) is mentioned in the records of Caernarvon dated to 1252. The site of the priory is suggested to have been sited to the south-east of St Mary's Church. This location is attributed to a title deed of 1585 discussing land called Tir y Manach (Monks land) and title map field name evidence naming Bryn Mynach and Cae Mynach (Hill and Monks Field) (Bond 2008: 16).

Later grants of land in Nefyn were recorded to the Haugmond Abbey by Dafydd ab Owain in 1177 and 1190 and later by Llywelyn ap Iorwerth in 1230. During the same period there is evidence for the town of Nefyn expanding as a trading centre and records show the a grant of bondsman was witnessed by two burgessess of the town (Carr 1995:70).

The town was served by a mill with two other mills listed as operating within the associated manor (Bond 2008: 20). In 1252 William, Prior of Nefyn was a witness concerning an agreement about tenurial arrangements in Aberdaron (GAT Report PRN 33497).

There are the remains of a motte (NPRN 308100, PRN 1535) to the east of the site. The area is surrounded by the remnants of a Medieval farming landscape which was identified through a Gwynedd Archaeological Trust landscape project (PRN 3408). This system includes strip field systems (PRN 13936,13937,13934,13935), field banks (PRN 17197,17199) and lynchets (PRN 17198).

Nefyn came under the control of the English Crown following the collapse of the House of Gwynedd with the death of Llywelyn ap Gruffudd. In 1284 Edward I held an elaborate tournament at the town to celebrate his victory and his choice of site would suggest that Nefyn (PRN 6529) held a elevated position within Welsh society. Nefyn expanded greatly at this time and its expansion in trade and social position meant that, like many Medieval towns, Nefyn was severely affected by the Black death in the mid 1300's (Bond 2008: 20).

Tokens made from tin-plate which appear to copy a design of Charles VI of France which were struck in 1389 and thought to come from the low countries or German (PRN 5554) have been discovered with 500m of the development site.

The revolt of Owain Glyndwr in 1400 focused on the town as it had expanded and flourished under English rule and his attack on Nefyn was so systemic and the damage so great that it was reduced to the status of a village (Hodges 1995: 169).

In 1535 on the eve of the Dissolution of the Monasteries the church had the status of vicarage of the Abbey (PRN 33497).

Post-Medieval/ Modern

The town of Nefyn developed throughout this later period and become well known for herring fishers, agriculture and boat building. The development of quarries to the east of the town in the 1800's was also undertaken.

A watch tower (NPRN 34168, PRN 12718) was built on the remains of the motte in the early 19th century and is associated with the protection of the large herring fishing fleet.

In this period the town developed and expanded this can be seen by the large number of buildings constructed during the 1800's. The Royal commission lists sixteen important buildings dating from this period.

The current church of St Mary's was constructed in 1825-1827 (NPRN 43787, PRN 4316).

6.0 Results of Archaeological Works

Excavations were conducted within two areas of the graveyard and each is detailed individually below.

6.1 Mine Cart Platform Trench (Plate 1)

An area next to the church building measuring approximately 1m x 2m (see figure 2) was de-turfed to a depth 0.20m. No archaeological features or artefacts were identified in this area.

6.2 Shed Extension Trench (Plates 2 – 8, Figures 2 – 4)

An area measuring 3.70m by 3.50m was excavated adjacent to the storage shed erected in early 2014 (see report CR56-2015). The top soil (01) was removed which varied in depth between 0.11m and 0.20 m.

The top soil overlaid context (02), a yellow-orange silt clay mixed subsoil with frequent round pebbles and gravel. Two upstanding snapped slate slabs were noted protruding from this level and two exploratory excavations were conducted to establish whether these stones represented grave markers (see figure 3). This failed to reveal any evidence of a cut or soil colour change. A single clay pipe stem was recorded beneath one of the slabs (see 6.2.2.1). There was no engraving or inscription on either stone.

A previous excavation at the site carried out in 2013 in advance of first shed identified what was at the time interpreted as a wall with plaster. It was described as *“0.90m in width and would have been part of a large structure, presumably an element of the pre-reformation suite of buildings at Nefyn”*. (Rees & Jones 2015). This has however been shown to be erroneous by the results of a small investigation trench (measuring approximately 1.60m by 1.20m and excavated to a depth of 0.80m) which was excavated in line with the location of the “wall” structure in an attempt to better understand the form and function of this enigmatic feature (see figure 4).

The current excavation revealed that rather than being a solid wall the feature was in fact a stone-built tomb of similar form to nineteenth century examples previously identified at the site. The exterior of the tomb was roughly faced using a mix of stone and slate and bonded with lime mortar. The eastern end of the tomb was contained within the trench and a single loose stone was removed from the eastern end to investigate the interior.

The interior was approximately 0.50m wide and 1.50m deep, the sides were smooth and plastered. The grave contained two adult skeletons and one possible juvenile all laid on top of each other. Coffin remnants were visible within the grave. As this grave was below the development depth, and the question as to the form and function of what had previously been believed to be a Medieval wall had been answered, this grave was not disturbed and was not investigated further.

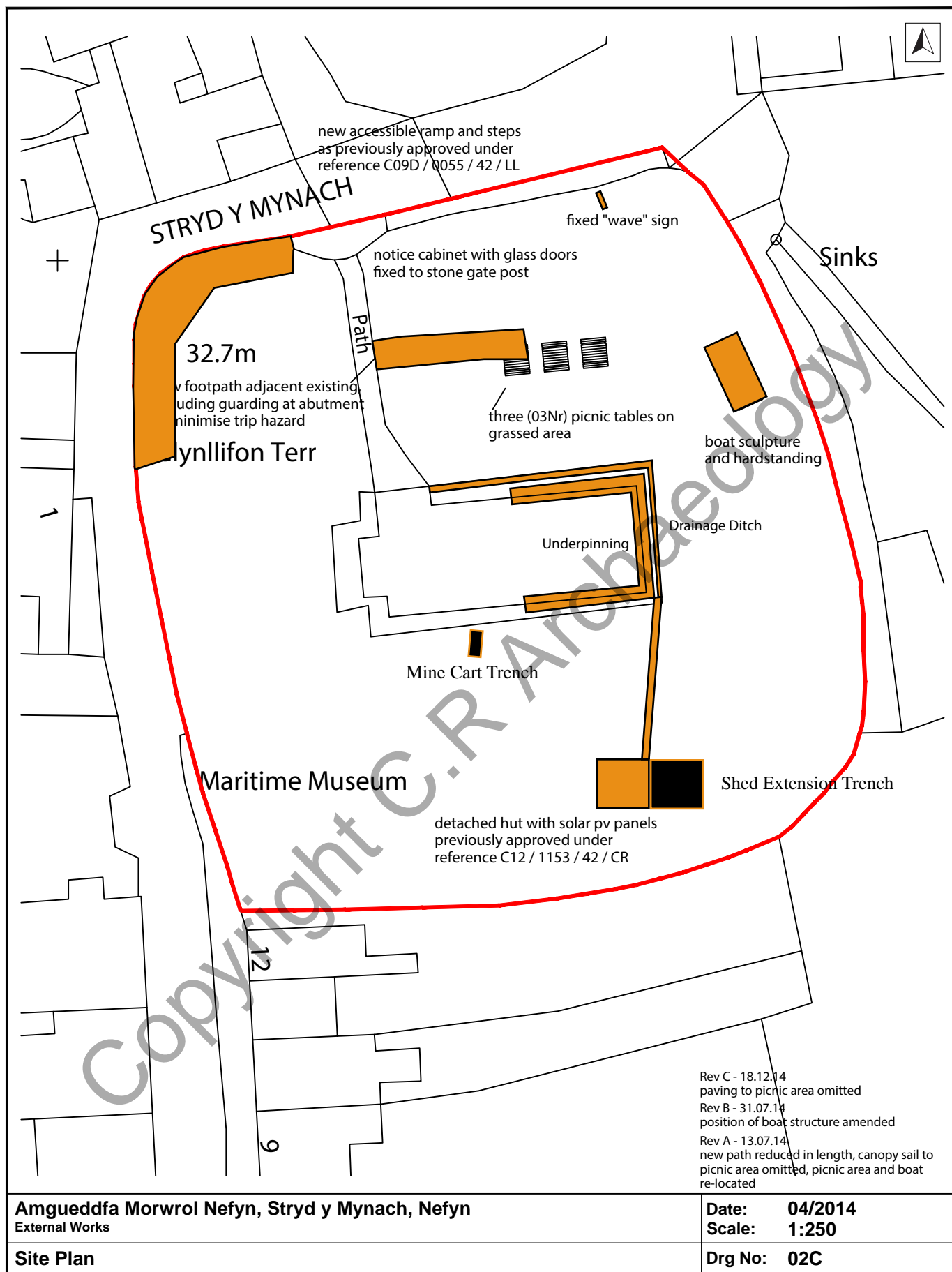


Figure 2. Works Undertaken at Amgueddfa Morwrol Nefyn -
Works from This Phase are Marked in Black and Previous Works are Marked in Orange

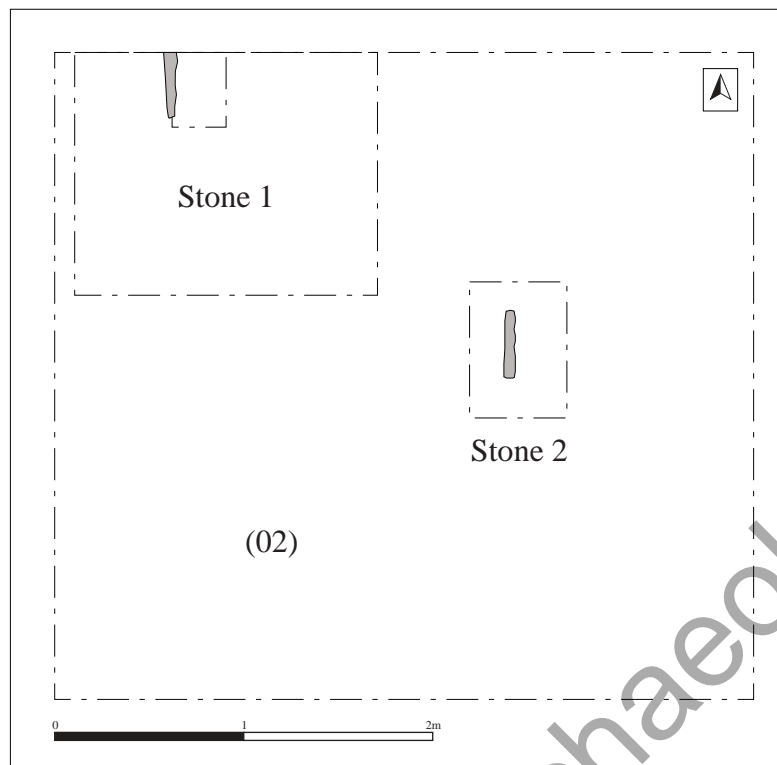


Figure 3. Shed Extension Trench Showing Locations of Upright Broken Slates

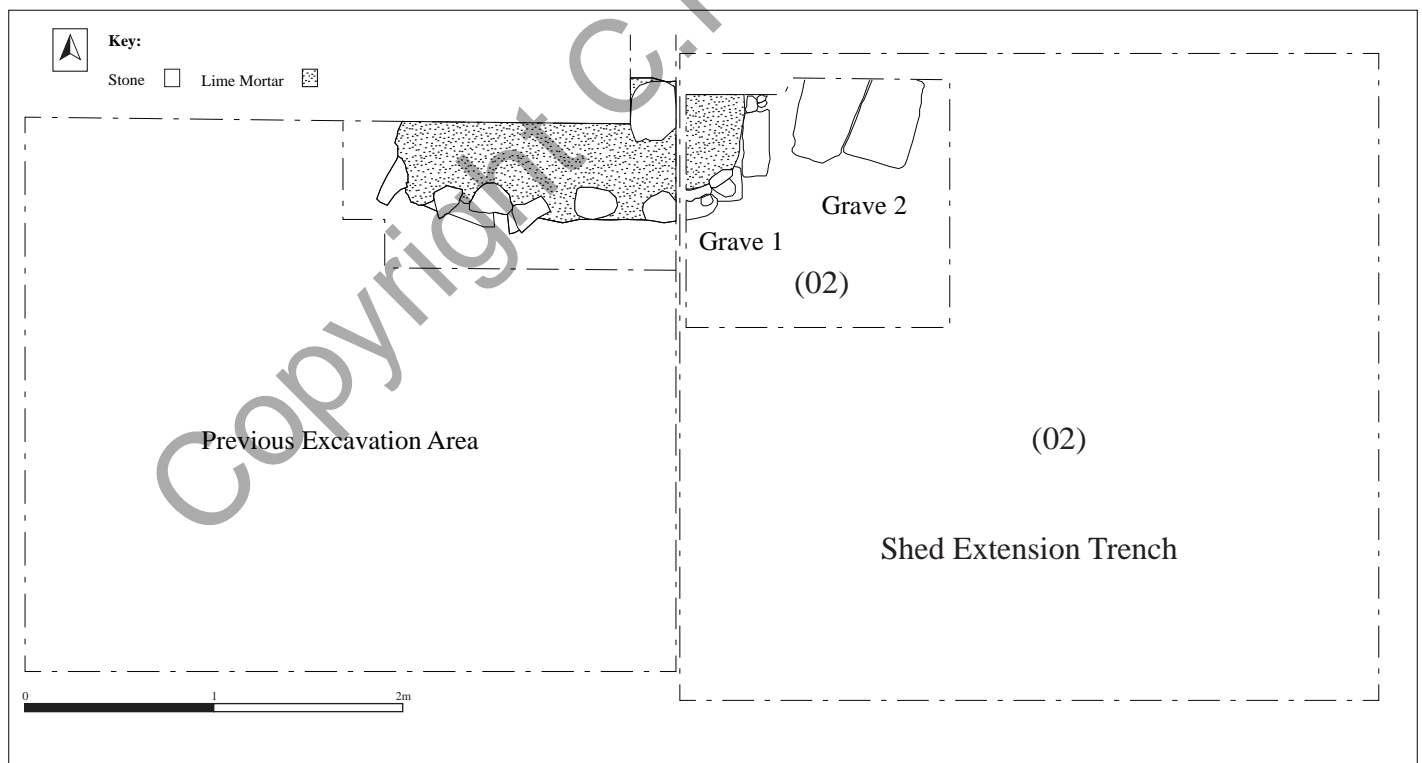


Figure 4. Shed Extension Trench and Previous Excavation Area Showing Full Extent of Grave 1



Plate 1. Post Excavation Shot of Mine Cart Platform Trench



Plate 2. Shed Extension Trench Following Topsoil Stripping
Note Two Upstanding Broken Slate Slabs



Plate 3. Post Excavation Shot Of Exploratory Trench Around Upstanding Stone Slab



Plate 4. Two Stone-Built Graves Uncovered in Exploration Excavation in Shed Extension Trench to Examine Feature Previously Believed to be Medieval Wall.



Plate 5. Human Remains and Interior Plastering of Grave 1



Plate 6. Slate Gravestone - Possible Apprentice Piece

A second grave, Grave 2 was represented by two large stone slabs identified at the base of the trench. There was a small gap between these slabs and a visual inspection through this revealed the remains of at least one skeleton and a decorated tin plate coffin fitting with a flower design. This grave was not disturbed in any way.

The two graves were protected with terram, and the area backfilled to level by hand to provide the base for the new shed. A steel mesh was placed in the trench below the poured concrete raft to help distribute the weight of the shed and further protect the graves.

6.2.1 Discussion

The excavation clearly showed that the feature previously interpreted as a Medieval wall was in fact the remains of a family tomb – almost certainly of late eighteen or nineteenth century date. Similar plaster lined, stone-built graves were identified in previous excavations at the site (see reports CR56-2015 & CR116-2016). Unlike the graves identified in the previous excavations Grave 1 did not appear to have a slab covering but rather appears to have a roughly built stone and plaster capping which led to it having originally been interpreted as a wall.

The second grave, Grave 2, did have the more recognisable stone slabs as a covering and the surviving tin plate fittings would date the burial to the 19th century.

6.2.2 Artefacts

6.2.2.1 Clay Tobacco

A single clay tobacco pipe stem with a partial foot was recovered from context (02). The stem was 4cm long with a diameter of approximately 1cm and a bore diameter of 0.3cm. The foot appears to have an incised line boarder which creates a square corner shape. There is a single dot on the inside of this corner. This decoration form does not appear in the studies carried out by Davey (Davey 1980 and 2001) but the design characteristics are indicative of a relatively early, possibly 18th century, date.

6.2.2.2 Grave stone

A single grave stone was recovered from below the turf and within the top soil/subsoil interface. It was a small rectangular slab of slate engraved with two guide lines. Between these guide lines is the inscription “J.R +A M.R”. The carving could be a practice piece carried out by an apprentice but as there is no date to accompany the inscription it is rather difficult to determine the age of the piece beyond a broad probable eighteenth-nineteenth century range.

7.0 Conclusion

This phase of works at St. Mary’s Church, Nefyn uncovered two further stone-built, internally lime plastered grave structures containing multiple interments. Similar structures were identified during previous excavations at the site and were dated to the late eighteenth and nineteenth centuries based on the surviving coffin fittings.

The works also disproved the interpretation of an earlier phase of works in which a stone and lime mortar feature had been interpreted as a wall – quite likely of Medieval date, which was associated with the pre-reformation suite of buildings at the site. This investigation has conclusively shown that the feature was a stone-build family grave, which unlike the other examples found onsite, had not been sealed with flat stone slabs but rather had been closed using smaller stones which gave the appearance of being a wall when only a very small amount was uncovered.

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Appendix A.

Specification for Archaeological Works

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Specification for Archaeological Works

**Amgueddfa Forwrol Llŷn,
St Mary's Church, Nefyn
(Further Works)**

NGR SH30870 40646

Report Number CR160-2018



C.R Archaeology

Compiled by Catherine Rees

on Behalf of Amgueddfa Forwrol Llŷn

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Specification for Archaeological Works at Amgueddfa Forwrol Llŷn, St Mary's Church, Nefyn

Planning Application Number:	N/A
National Grid Reference:	SH30870 40646
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Appendix A. Proposed Works

1.0 Introduction

C.R Archaeology have been instructed by Amgueddfa Forwrol Llŷn to conduct further archaeological works at St Mary's Church, Nefyn.

St Mary's Church, Stryd Y Llan, Nefyn (figure 1) is a Grade II Listed Building (Cadw ID: 4371) within the ancient community of Nefyn on the north-western coast of the Llŷn Peninsula. Previous works have been undertaken at the site to rectify structural problems with the church, provide drainage, erect a new storage shed with solar panels, create pathways and a play area and to rectify a structural problem with the churchyard boundary wall.

The proposed works new works at the site are: the excavation for 2 pad foundations within the existing building to support a new mezzanine floor, the extension of the existing external store to twice the current size, the forming of a concrete base to support an original quarry wagon and the forming of 2 bases for new signage. Further details are provided in Appendix A.

The site is in the ownership of the Church in Wales but is no longer in use for active worship and as such is no longer subject to Ecclesiastical Exemption. The Church has been consulted prior to the production of this specification. The building is rented by Amgueddfa Forwrol Llŷn and is in use as a museum and café.

The current church building was erected in 1825-7 on the site of a much earlier building. Little is known of the architecture of the previous building, although it is known to have important historical associations. The earliest surviving records date from the mid-12th Century and detail how Cadwaladr, son of Gruffudd ap Cynan and brother of Owain Gwynedd, granted Nefyn Church, its appurtenances and the associated land to the Augustinian Abbey of Haughmond. In 1535 the church had the status of vicarage of the Abbey. St Mary's Nefyn survived the reformation and became a parochial church.

During a previous phase of works a 1m wide section of Medieval wall was uncovered in the church yard (and which may potentially be further exposed by the proposed works) although it is unclear as to the form or function of the structure to which this wall belonged. Also excavated during previous works were a cist grave containing an articulated female skeleton and an unassociated Medieval ring brooch. Previous works also demonstrated the presence of disarticulated and articulated human remains, box graves and cut graves within the top 0.50m of the existing ground level.

This specification has been written as a methodology for a programme of works at the site. The Ministry of Justice have been contacted and an application approved for an "Authority to Excavate Human Remains for Archaeological Purposes" prior to the commencement of works.

2.0 Project Aims & Objectives

The aims of this programme of works are to monitor all ground works associated with the proposed works and to record any archaeological remains (including articulated and disarticulated human remains) uncovered during the works. A basic photographic record of the church interior will also be made.

The objective of the archaeological programme is to establish and make available information about the archaeological resource existing on the site.

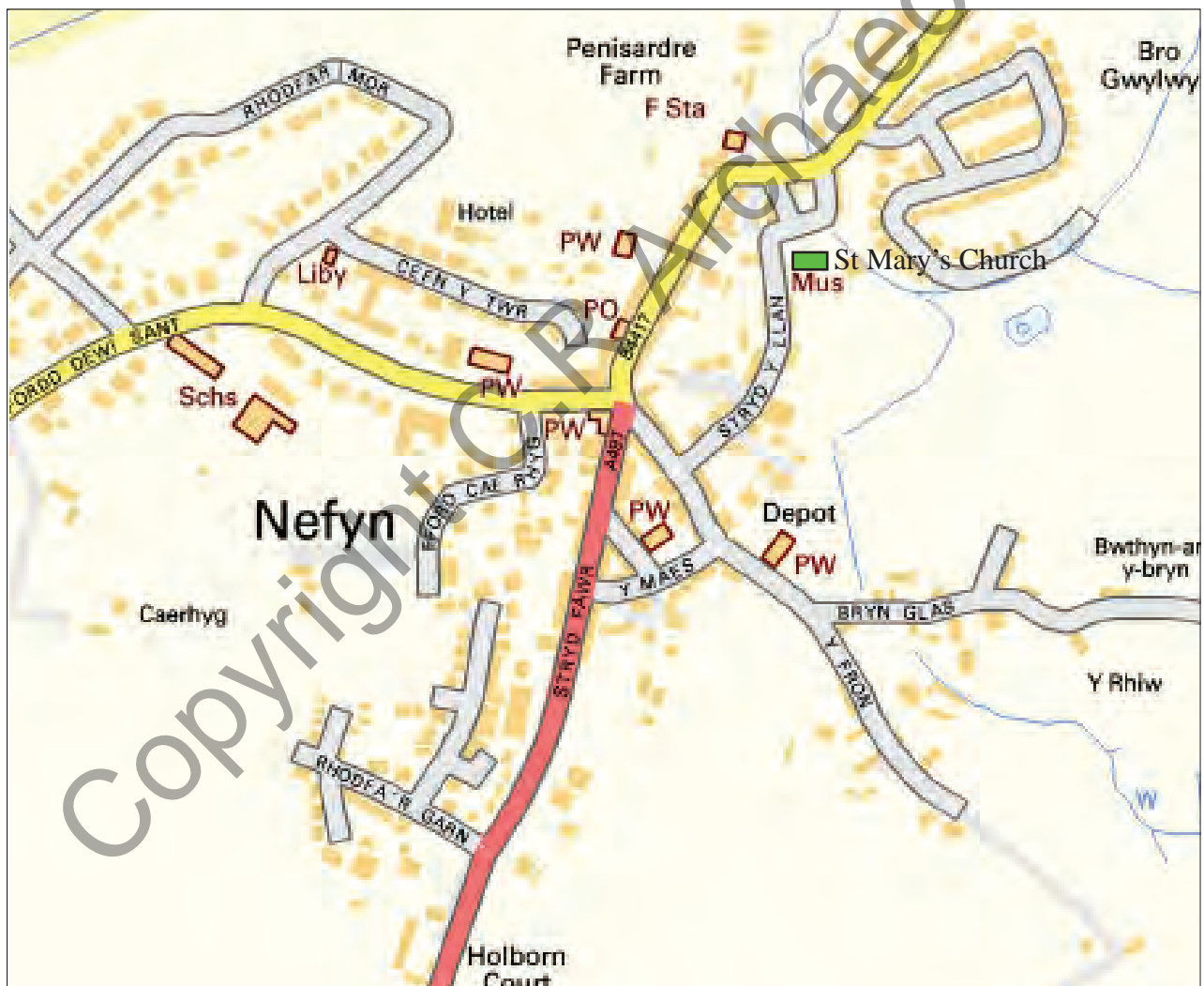
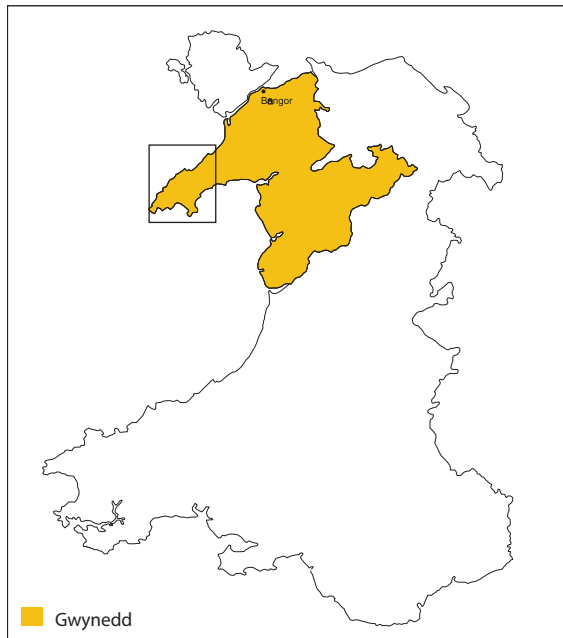


Figure 1. St Mary's Church Location Map
 (Source: OS Open Data Mapping Contains Ordnance Survey data
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3.0 Historical Background

As an element of previous works at the site a history of the church at Nefyn was compiled (see document CR56-2015). This is included (without figures) below.

Prehistoric

Mesolithic

There were no Mesolithic remains within the 500m search radius. Roland Bond (Bond 2008: 12) discusses finds of flint and stone tools found within the Nefyn parish area although none were listed in the Royal Commission or HER search areas.

Neolithic

There were no Neolithic remains within the 500m search radius. Roland Bond (Bond 2008: 12) discusses finds of flint and stone tools found within the Nefyn parish area although none were listed in the Royal Commission or HER search areas.

Bronze Age

There were no Bronze Age remains within the 500m search radius. Roland Bond (Bond 2008: 12) discusses finds of urns and tools within the Nefyn parish and he lists a number of standing stones although none were listed in the Royal Commission or HER search areas.

General Prehistoric

Three stone artefacts (a single large grey flint secondary flake, a possible saddle quern and a grinding stone) were recovered from the topsoil during the excavations associated with the rebuilding of the church boundary wall. It was not possible to refine the dating of the artefacts beyond a broad prehistoric attribution.

Iron age/ Romano-British

There were no Iron Age remains within the 500m search radius. There is a large promontory fort - Trwyn Porth (NPRN 302273) located to the west of the study area and the 1936 RCAHMW Inventory includes a possible hut circle settlement to the east of the church (RCAHMW 1936: 85).

Early Medieval

A stone with an inscribed cross (NPRN 275727) was discovered at Ty'n-y-Cae farm and is now used as a lintel for a barn/cow shed. The stone has been dated to the 7th century (Bond 2008: 12). The stone was originally placed on top of a mound facing towards the sea. The mound has since been destroyed but it was noted that it was located in a field called Cae Pen-y-maen and was found to have contained human bones (Owen 1896: 170-171).

The field where the cross was found was locally known as an area which had produced small copper coins (Owen 1896: 170-171).

It has been suggested that the church of St Mary's (PRN 4316) which was completely rebuilt in 1825 has an Early Medieval foundation date. The church is located on the Pilgrimage Route to Bardsey Island.

Medieval

The earliest documentary reference to Nefyn is as a landing place for Gruffudd Ap Cynan in the mid 11th century (Evans 1990) although it is unclear as to the precise nature of the settlement there at this time.

Further information can be found in grants of land in Nefyn which were granted by Cadwaladr ap Owain to the Augustinians of Haughmond in Shropshire in documents dated 1155-6 and 1161-2 (Bond 2008: 17).

In his tour of 1188 Gerald of Wales stayed at Nefyn of the 9th of April and it is thought that Nefyn held an important place as part of the pilgrimage route with a religious house (priory) with boarding which catered for pilgrims on their way to Bardsey Island (Thorpe 2004: 183).

Turvey records that Nefyn was established as a borough some time before AD 1200 but notes that it does not seem to have been fortified and may have been centred around the mote (Turvey 2007: 6). There are also suggestions that there may have been a Princely Llys (PRN 6622) within the area although no evidence of this has been found.

Nefyn Priory (PRN4317) is mentioned in the records of Caernarvon dated to 1252. The site of the priory is suggested to have been sited to the south-east of St Mary's Church. This location is attributed to a title deed of 1585 discussing land called Tir y Manach (Monks land) and the map field name evidence naming Bryn Mynach and Cae Mynach (Hill and Monks Field) (Bond 2008: 16).

Later grants of land in Nefyn were recorded to the Haugmond Abbey by Dafydd ab Owain in 1177 and 1190 and later by Llywelyn ap Iorwerth in 1230. During the same period there is evidence for the town of Nefyn expanding as a trading centre and records show the a grant of bondsman was witnessed by two burgesses of the town (Carr 1995:70).

The town was served by a mill with two other mills listed as operating within the associated manor (Bond 2008: 20). In 1252 William, Prior of Nefyn was a witness concerning an agreement about tenurial arrangements in Aberdaron (GAT Report PRN 33497).

There are the remains of a motte (NPRN 308100, PRN 1535) to the east of the site. The area is surrounded by the remnants of a Medieval farming landscape which was identified through a Gwynedd Archaeological Trust landscape project (PRN 3408). This system includes strip field systems (PRN 13936,13937,13934,13935), field banks (PRN 17197,17199) and lynchets (PRN 17198).

Nefyn came under the control of the English Crown following the collapse of the House of Gwynedd with the death of Llywelyn ap Gruffudd. In 1284 Edward I held an elaborate tournament at the town to celebrate his victory and his choice of site would suggest that Nefyn (PRN 6529) held a elevated position within Welsh society. Nefyn expanded greatly at this time and its expansion in trade and social position meant that, like many Medieval towns, Nefyn was severely affected by the Black death in the mid 1300's (Bond 2008: 20).

Tokens made from tin-plate which appear to copy a design of Charles VI of France which were struck in 1389 and thought to come from the low countries or German (PRN 5554) have been discovered with 500m of the development site.

The revolt of Owain Glyndwr in 1400 focused on the town as it had expanded and flourished under English rule and his attack on Nefyn was so systemic and the damage so great that it was reduced to the status of a village (Hodges 1995: 169).

In 1535 on the eve of the Dissolution of the Monasteries the church had the status of vicarage of the Abbey (PRN 33497).

Post-Medieval/ Modern

The town of Nefyn developed throughout this later period and become well known for herring fishers, agriculture and boat building. The development of quarries to the east of the town in the 1800's was also undertaken.

A watch tower (NPRN 34168, PRN 12718) was built on the remains of the motte in the early 19th century and is associated with the protection of the large herring fishing fleet.

In this period the town developed and expanded this can be seen by the large number of buildings constructed during the 1800's. The Royal commission lists sixteen important buildings dating from this period.

The current church of St Mary's was constructed in 1825-1827 (NPRN 43787, PRN 4316).

4.0 Geographical and Geological Context

4.1 Topography

The site is located within the ancient town of Nefyn and is the original Parish Church.

Nefyn is a small town on the north-western coast of the Llŷn Peninsular.

4.2 Geology

The superficial geology of the site is described as “glacial sand and gravel”. The deposit is described as “sand and gravel with rare clay interbeds; often cross-bedded; of glacial origin.” The bedrock is recorded as “Llanvirn Rocks (Undifferentiated)” and no further detail is given (www.bgs.ac.uk).

5.0 Scheme of Works – Methodology

5.1 Desk Based Research

A history of the site was compiled during the previous phases of work (see documents CR56-2015 and CR108-2016) and the direction of further research will be influenced by the results of the current works. It will be carried out as necessary to place the finds made in their contemporary local, regional and national context.

The works will be carried out accordance with the CIfA Standards and Guidance (2014).

5.2 Photographic Survey

A basic photographic survey of the interior of St Mary's Church will be undertaken. All accessible elevations will be photographed with scales from a variety of angles, including front on where possible. The methodology employed will conform to the requirements of photographic recording to the equivalent of a Level 1 Survey, as specified in *Understanding Historic Buildings: A Guide to Good Recording Practice* (Historic England 2016) and will include works specified in points 1-2.

A basic photographic record of the affected exterior areas will also be made and any affected gravestones photographed with scales.

5.2.1 Equipment

A photographic survey of the wall and affected internal area will be undertaken using a 14.2 mega-pixel Sony Alpha-350 digital camera with a standard lens using a tripod where necessary. Images will be captured in RAW format for later processing into high resolution JPG and TIFF files.

5.3 Methodology for Archaeological Watching Brief

It is possible that some gravestones located within the proposed development area may be affected by the forthcoming works and prior to the commencement of works the gravestone locations are to be recorded by the principle contractor who will be responsible for the lifting and safe storage of the stones for the duration of the project. They are to be re-laid in their previous location, or as close to this location as possible following the completion of works, although it is acknowledged that some may not currently be insitu following previous phases of graveyard landscaping.

All intrusive ground works at the site will be monitored by an archaeologist from C.R Archaeology. When working outside the church the topsoil will be removed using a mechanical excavator with toothless bucket. Following the removal of the topsoil the location of any grave cuts will be recorded photographically and drawn in plan. From this point onwards all excavation will be undertaken by hand. All works to the interior of the church will be undertaken by hand following the removal of the current flooring.

Any archaeological features, structures or articulated human remains identified in the course of the excavation 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.

Should structural remains be encountered the preference will be for preservation in situ, and following the recording of any features, every effort will be made to avoid any damage being caused by the structural works. Should it be necessary to dismantle or partially dismantle the remains then consultation will first take place between C.R Archaeology, the client, the Church in Wales and GAPS as to the appropriate course of action.

5.3.1 The Recovery and Recording of Human Remains

During the previous phases of works human remains were encountered and it is considered almost certain that further remains will be uncovered during these works. Different methodologies have therefore been devised depending on the nature and position of the remains encountered.

As stated in the Historic England Recording Manual (2010: Module 10 (revised 2016)) *“For each grave forethought is needed so that procedures can be completed before the end of the working day”*. Therefore graves which are encountered towards the end of the day will be left in situ for the following day and excavation will not be undertaken unless it can be completed before the end of work. Skeletal remains will not be left exposed overnight.

5.3.1.1 Disarticulated Human Remains Recovered During Excavation

Where disarticulated human remains are encountered they are to be collected, bagged and a note will be made of the location of bone concentrations and larger bone fragments. They are then to be securely stored on site and will be reburied on completion of the project. They will not be subject to any analysis.

The possible exception to this would be if remains are encountered at depth with no apparent contemporary articulated remains or if they are recovered from within other feature e.g. cut feature under wall. This will be examined on an individual basis and GAPS will be consulted before reburial.

5.3.1.2 Articulated Remains Uncovered During Excavation

Where possible the extent of the grave cut within the development area will be defined in plan and the skeleton exposed, recorded and planned at a scale of 1:10. The bones which lie within the development area will be lifted and securely stored on site and will be reburied on completion of the project. A drawn and photographic record of any associated grave items will be made. Should items warrant further study then specialist analysis will be undertaken. Where items are identified as having an association with a specific grave then the items will be kept with these remains and if they are to be reburied will be placed with the deceased.

This is in line with the Historic England Annex E5 Point 183 in “Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England” (the recommendations of which also apply to Christian burials in Wales). The section entitled “*Excavation of Skeletons Lying Partly Under Baulks*” specifies that when a skeleton lies partly beyond the excavation trench limits only that part of the skeleton which lies within the trench area is to be lifted, with the remainder left in situ.

The exception will be should any Medieval or earlier burials be encountered as these would be considered to be a significant discovery. Where possible it is proposed that these graves be excavated in their entirety. This is once more in line with the Historic England Guidance (ibid Point 187) which recommends remains considered to be osteologically or archaeologically important should be lifted in their entirety provided that it does not cause disturbance to other burials.

Where human remains are undated or are of Post-Medieval date the bones within the development area will be assigned a Skeleton Number and a written record compiled on pro-forma sheets. The exposed skeleton will be photographed vertically with an appropriate scale. Additional close-up shots and photographs from a variety of different angles will also be taken. The skeleton will be drawn at a scale of 1:10. If necessary this will be supplemented by the redrawing of certain areas at a larger scale to record the details of grave goods, coffin fittings etc. The remains lying within the development area will be bagged and labelled as belonging to a single individual and will be kept together for reburial on site. They will not be subject to any further analysis.

Where the remains of infants and babies are encountered special care will be taken to ensure that the remains are kept together and that all bones are collected. This may involve block lifting, and when infant burials are encountered the surrounding soil will be hand sieved with a fine mesh on site.

Where human remains are clearly of Medieval or earlier date (for example as signified by the presence of a cist grave or distinctive grave goods such as ring brooch shroud pins) then following recording they will be lifted and retained for further study. This will include examination by osteoarchaeologist Stephanie Vincent, radiocarbon dating and isotopic analysis. This is detailed below (section 5.3.1.3).

Following analysis discussions will be held between C.R Archaeology, GAPS, The Church in Wales and Dr Mark Redknap of the National Museum of Wales as to the most appropriate long-term future of the remains. This will likely either be reburial on site or deposition within the research collection at Cardiff.

5.3.1.3 Excavation Methodology for Medieval and Earlier Burials

Should cist structures be uncovered they will be trowel cleaned and fully exposed in plan before being photographed and drawn at a scale of 1:20. A written record will also be made. The top slabs will then be numbered and removed and the grave fill excavated to expose the skeleton. Once the grave fill has been removed any side and base slabs forming the cist will be photographed, drawn and recorded before being lifted and retained for possible future use in an exhibition. Each slab will be numbered for ease of reconstruction.

All Medieval and earlier remains will be assigned a Skeleton Number and a written record compiled on pro-forma sheets. The exposed skeleton will be photographed vertically with an appropriate scale. Additional close-up shots and photographs from a variety of different angles will also be taken. The skeleton will be drawn at a scale of 1:10. If necessary this will be supplemented by the redrawing of certain areas at a larger scale to record the details of grave goods, coffin fittings etc.

For all Medieval and earlier remains all grave fill will be coarse sieved on site to recover all surviving human remains and any small artefacts such as shroud pins etc associated with the grave. A separate context number will be assigned to the material above and below the body and a written context record will be compiled for each deposit.

Once the recording of the bones is complete they will be lifted and bagged as follows: skull, torso, left arm, right arm, left leg, right leg. Four separate bags will also be used for the right and left hands and feet. Any disarticulated bones in the grave fill will be bagged separately. The various bags will all be stored together in a larger storage container prior to removal from site for analysis. Remains are to be sent to osteoarchaeologist Stefanie Vincent (MA) for initial analysis. Following this Stefanie will process the remains for radiocarbon dating and isotopic analysis.

Following the lifting of the bones any soil remaining on the grave floor will be recovered as four separate bulk samples: one from the head, one from the torso, one from the stomach area and one from the leg/foot area. If an area has to be split due to excavation phases then a sample will be taken from both sides. The samples will be wet sieved and sorted to recover small grave goods/bones.

5.4 Recording

The record forms at C.R Archaeology are based on the English Heritage (now Historic England) 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. A temporary benchmark (TBM) will be established on the site and plans, elevations and sections will contain grid and level information relative to OS data. All drawings will be numbered and listed in a drawing register, these drawing numbers being cross-referenced to written site records.

A high-resolution 14.2mp 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, north arrow and a record board detailing the site name, number and context number. 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'.

A 'harris matrix' diagram will be constructed for the excavated area.

5.5 Additional Mitigation/Contingency Measures

In the event of a significant archaeological discovery being made during the excavation C.R Archaeology will immediately inform the client, The Church in Wales and the development control archaeologist. Consultation will take place between C.R Archaeology and the parties detailed above with regards to the most suitable course of action.

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

Although the church is leased by Amgueddfa Forwrol Llyn it is owned by The Church in Wales who retain all rights and responsibilities for the graveyard and those interred therein. Diocesan permission has been granted for works to be conducted and the Diocese will be consulted regarding the reburial of human remains on site.

A Ministry of Justice license for the “Authority to Excavate Human Remains for Archaeological Purposes” will be secured prior to the commencement of works.

5.6 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.

Specialist conservation will be undertaken by an approved conservator on advice provided by a suitable specialist. This will be conducted in accordance with guidelines issued by the Institute for Conservation.

Following analysis all archaeological material, not to be re-interred with the remains to be reburied, recovered will be retained by the Maritime Museum provided that there is suitable provision made for conservation and storage/display space. Processed assemblages will be boxed according to issued guidelines and a register of contents compiled prior to deposition.

It must however be noted that the Church in Wales retains full ownership of all artefactual material and should the museum cease to operate/dispose of its collection then the material is to be returned to the Church for deposition elsewhere – the likely recipient being Bangor Museum.

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

5.7 Archive Compilation

All records created during the fieldwork will be checked for consistency and accuracy and will form part of the *Primary Site Archive (PI)* (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.

It is envisaged that Nefyn Maritime Museum will retain all artefactual material. The exception to this is the human remains which are to be reburied at the site or deposited within the National Museum of Wales' reference collection in Cardiff. Should the finds be retained by Nefyn Maritime Museum or should there be no artefactual material recovered then archive material will be deposited at the RCAHMW in accordance with the organisations terms and conditions for archive deposition. If artefactual material is deposited at an alternative museum then the paper/digital archive will accompany the finds and will be deposited in accordance with the museums terms and conditions for archive deposition.

5.8 Timetable for Proposed Works

It is envisaged that this phase of works at St Mary's Church will commence on the 15th January and works are to be conducted on a day rate basis. It is currently thought that works will take a minimum of 6 – 8 weeks. Gwynedd Archaeological Planning Services and The Church in Wales will be informed of the exact site days to allow monitoring of works.

5.9 Staffing

The project will be managed by Catherine Rees (MICfA, MA – Archaeology, BA – Archaeology, PgDip – Historic Environment Conservation). Site work is also to be conducted by Catherine Rees, Matthew Jones (BA - Archaeology, MA - Archaeological Practise) and Dr Ian Brooks (MICfA, PhD). Extra staff will be brought in if required. All staff will have a skill set equivalent to the CIfA AIfA 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.

5.10 Monitoring

The project will be subject to monitoring by Gwynedd Archaeological Planning Services and The Church in Wales archaeological consultant Frances Lynch. The monitors 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 of the commencement dates for archaeological site work.

5.11 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 C.R Archaeology

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

a Construction Related Organisation (CRO) White Card for Archaeological Technician (Code 5363) or a Site Visitor card.

The principle contractor is responsible for the overall H&S on site and for the implementation, erection and maintenance of safety equipment such as shoring, acrows or scaffolding. C.R Archaeology staff will 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.

Due to the antiquity of the skeletal material it is felt unlikely that any pathogens or fungal spores will have survived in the burial environment. However as an additional precaution disposable gloves will be worn during excavation.

It is recognised that psychological stress may occur during the excavation of human remains. Although this is more common amongst those working with human remains preserving soft-tissues it is a consideration here and if at any time staff are feeling uncomfortable/anxious then they are to withdraw from the excavation area.

Although considered unlikely should a lead coffin be encountered then gloves must be worn. If the ground conditions are dusty then a suitable mask covering the nose and mouth must also be worn to minimise the risk of lead inhalation.

5.12 The Report

The results of the works will be presented 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.

The report will include:

- A copy of the agreed specification
- A location plan
- Drawings detailing the locations of all excavated areas
- All identified features plotted on an appropriately scaled plan of the development site
- Appropriately scaled plans and sections showing identified features and significant finds
- Full dimensional and descriptive detail of all identified features
- A plan illustrating the location and direction of any photographs or drawings
- All specialist reports in full
- A full bibliography of sources consulted
- An archive compact disc

A copy of the report 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 the completion of post excavation work. At present the time scale for report production following the completion of fieldwork is unknown. This is due to the variable nature and duration of post excavation works.

In the event of the discovery of archaeological material articles detailing the results of the works will be submitted to relevant publications. As a minimum this will be Archaeology in Wales but dependant upon the results is likely also to include Medieval Archaeology, Current Archaeology and the Council for British Archaeology magazine.

5.12.1 Public Engagement

Due to the sensitive nature of the works to be undertaken and in order to comply with burial legislation the site will be screen from public view and there will be no unauthorised access to the site. Specific site visits by groups will be allowed but these are to be prearranged through the Maritime Museum. Further outreach will be conducted in conjunction with the museum and dependant on the results of the works is likely to take the form of a blog and later public talk.

5.12.2 Copyright

C.R 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.

6.0 Bibliography

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Appendix B.

Proposed Works

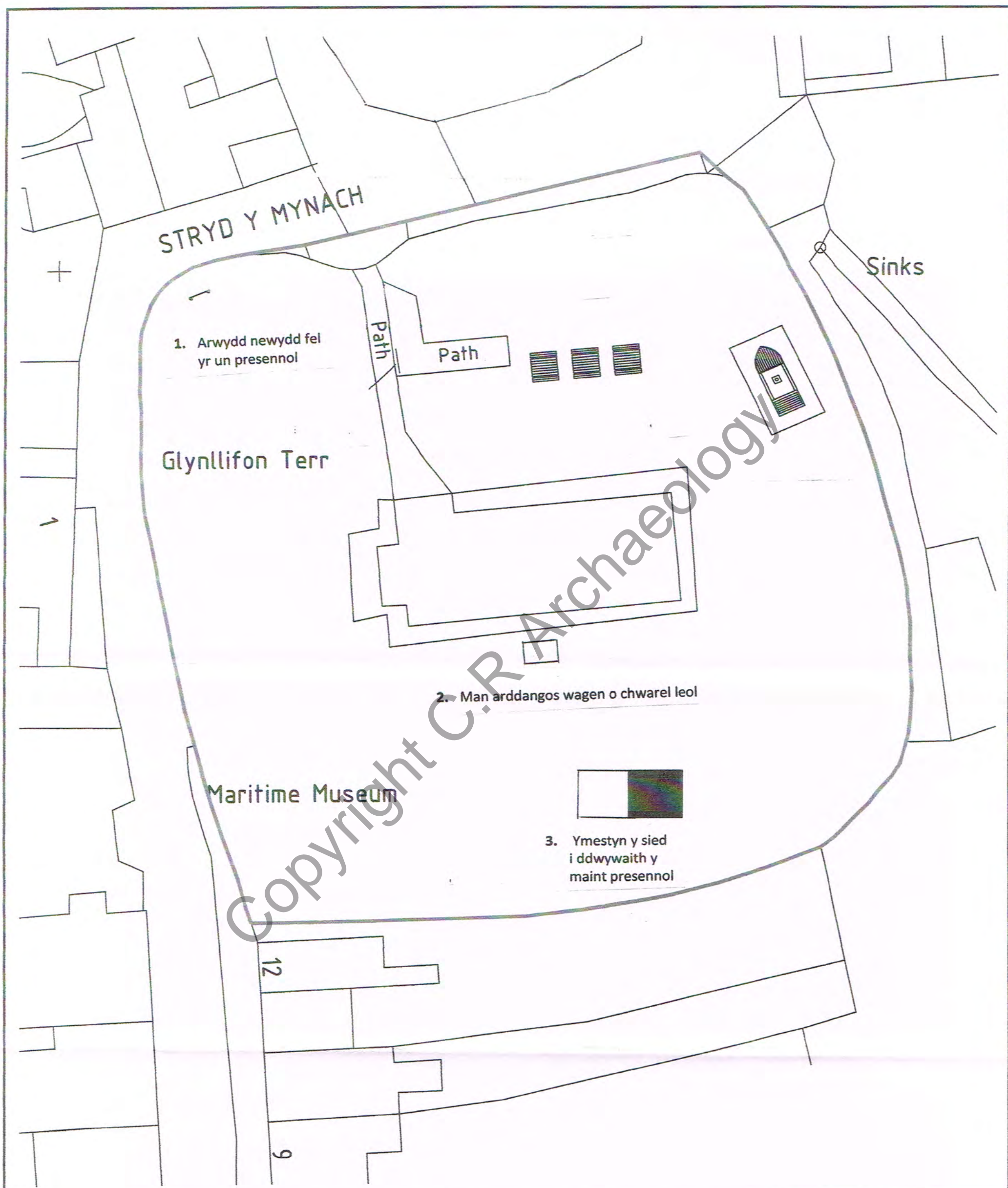
Copyright C.R Archaeology

ITEM	DESCRIPTION	Q'TY	UNIT	RATE	£	P
	<u>WORKS INTERNALLY</u>					
A	Carefully remove and cart away existing stub partitions forming storage area over kitchen/ office/ reception	7	m			
B	Carefully remove and cart away existing first floor structure over storage area over kitchen/ office/ reception	7	m2			
C	Carefully form cut out in drylined wall covering and framework to accept timber wall bearer	7	m			
D	Carefully form cut out in drylined wall covering and framework to steel support posts	6	m			
	<i>Note: existing external walls consists of NHL2 render to Ty Mawr spec on 50mm Ty Mawr building board on 38 x 19 battens on Tyvek air tightness barrier on 100 x 50 studwork</i>					
E	Drain down UFH system		Item			
F	Carefully break out existing stone paving and screed to location of proposed pad foundations	2	nr			
G	Excavate foundation pits, cart away spoil and cast 750 x 450 x 225mm pad foundations.	2	nr			
H	Allow for the Provisional Sum of £500.00 for repairs to UFH		Item		£	500.00
J	Backfill pits with hardcore, blind, dpm taped to existing, replace insulation like for like, re-sreed and lay masonry slabs to match existing, seal slabs on completion	2	nr			
K	Provide and fix 100 x 100 x 4 SHS with base plates bolted to pads and bolted to existing masonry at 900 c/c with M12 masonry anchors as SE details	2	nr			
L	Provide and fix 200 x 90 x 30 PFC beam connected to posts as SE details	7	m			
M	Provide and fix 200 x 75 timber wall bearer bolted to existing masonry at 400 c/c with M12 masonry anchors as SE details	7	m			
N	Provide and fix 200 x 75 timber floor joists at 400mm centres	90	m			
P	extra over for 200 x 75mm blocking pieces bolted to steel	7	m			
R	extra over for joist hangers	18	nr			
S	extra over for 'Bowtie HD'	8	nr			

ITEM	DESCRIPTION	Q'TY	UNIT	RATE	£	P
A	extra over for doubling up joists and framing opening for loft ladder/ hatch	1	nr			
B	extra over for framing steel to receive and apply two layers 12.5 fireline plasterboard and skim finish					
C	SHS's	6	m			
D	PFC	7	m			
E	Provide and fix FAKRO LLTFKDH1206 loft ladder and hatch	1	nr			
F	Provide and lay 22mm moisture resistant chipboard decking	33	m2			
G	Provide and fix two layers 12.5mm fireline plasterboard and skim finish to ceiling	33	m2			
H	Provide and fix frameless glass balustrade	7	m			
J	Make good heads of partitions disturbed		Item			
K	Make good drylining areas disturbed in construction as before described on Page 1		Item			
L	Prepare and apply one mist coat and two full coats earthborn clay paint to new plaster ceiling and boxing	40	m2			
M	Prepare and apply one mist coat and two full coats earthborn clay paint to made good finishes areas		Item			
N	Allow for the Provisional Sum of £2,000.00 for electrical/ PV installations		Item		£	2,000.00
	<u>QUARRY WAGON</u>					
P	Excavate to reduce level for base of wagon nominally 250mm below existing ground level; excavated material to be sread and levelled on site	3	m2			
R	Provide and lay new concrete base for wagon nominally 125mm on 100mm well compacted and blinded hardcore	3	m2			
S	Fix in position wagon and rails under		Item			
	<u>FIXED SIGN</u>					
T	Fix only sign as shown and described on drawing 05A		Item			

ITEM	DESCRIPTION	Q'TY	UNIT	RATE	£	P
	<u>EXTERNAL STORE</u>					
	<i>The new store is to be of the same footprint as the existing, with the roof to run through at the same level</i>					
A	Excavate topsoil only to reduce level for base; excavated material to be spread and levelled on site. Provide and lay 200mm reinforced concrete slab	9	m2			
B	Construct external walls in 140 x 50mm studwork with bolted sole plates on dpc. Face studwork with 9mm OSB with 50 x 25mm battens over to take 7mm PPC finish corrugated steel profiled sheets to match existing	24	m2			
C	extra over for forming ledged and braced doors to match existing with hasp and staple lock		Item			
D	Provide 2nr 225 x 63mm C24 timber purlis to roof with corrugated profile sheets to match existing; allow for all flashings and fillers	13	m2			
	<u>PROVISIONAL SUMS</u>					
E	Archaeological works					£1,000.00
					To Collection £	

Page 4 To Summary £

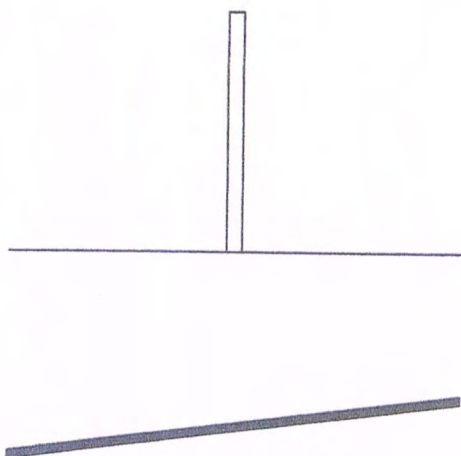


Amgueddfa Morwrol Nefyn, Stryd y Mynach, Nefyn
External Works

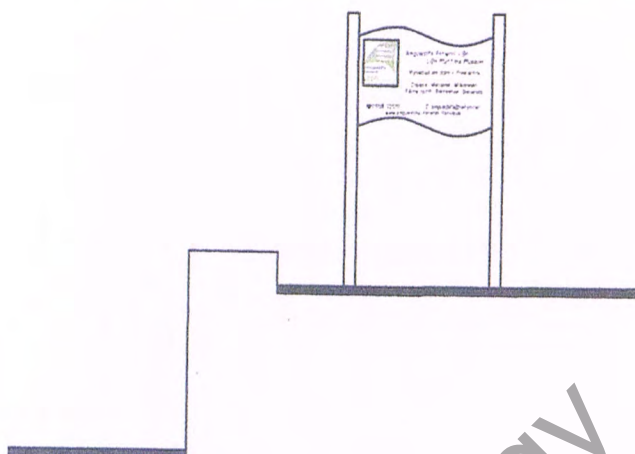
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Proposed Site Plan

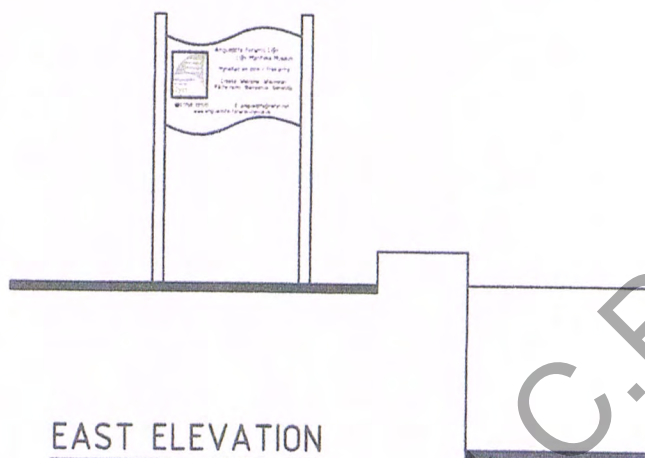
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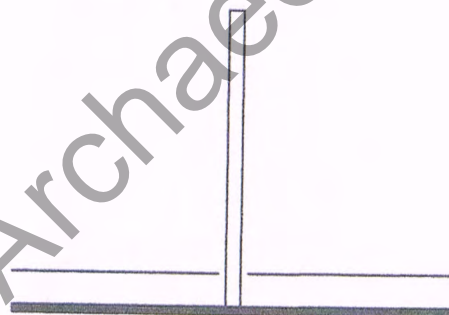
NORTH ELEVATION



WEST ELEVATION



EAST ELEVATION



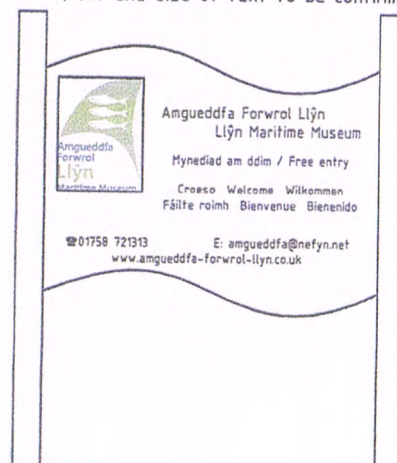
SOUTH ELEVATION

Solid hardwood post, nom. 100 x 100 x 1800mm (above ground level) with concrete surround infill. Fixed "wave" profile treated softwood sign with painted notice / lettering.

NOTE: colours of sign board and post to be confirmed.

SIGN WORDING (1:20)

(font and size of text to be confirmed)



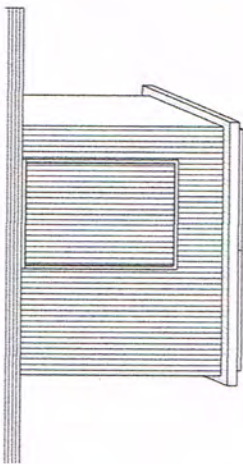
Amgueddfa Morwrol Nefyn, Nefyn
External Works

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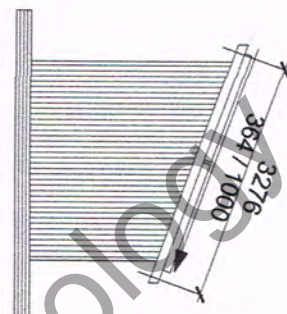
Fixed Sign

Drg No: 05A

Drysay efo gwyneb sinc fel y waliau



4
BLAEN Y CWT
1 : 100



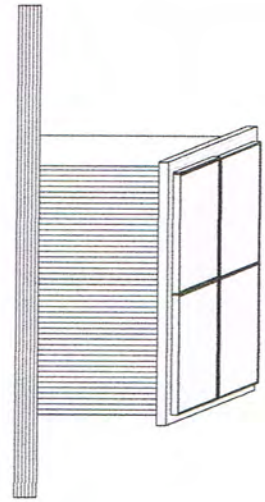
5
OCHR A
1 : 100

4 panel PV ar to y cwt
Y cwt o shitiau sinc efo lliw
merlin grey

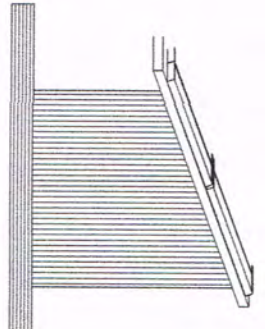
Waliau shitiau sinc ar membrane
ar batins croes ar OSB ar ffram
bren 140x50 pob 400mm ar wal blat wedi bolttio
i'r slab

ar dpc ar slab concrid 200mm wedi ei atgyfnethu
ar dpm
ramp i'r mynedfa eto mewn concrid

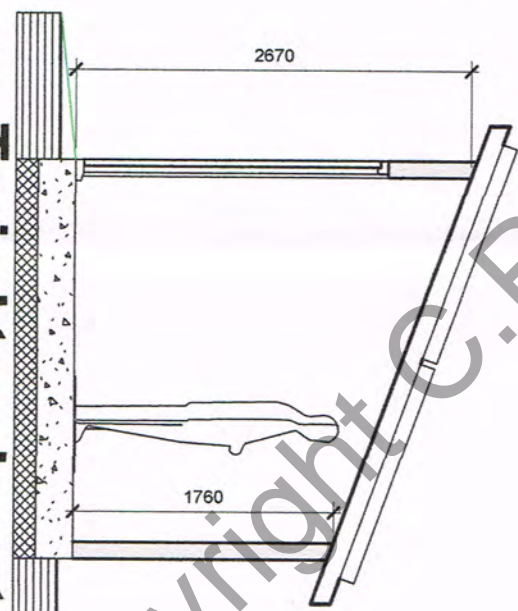
2
To y Cwt
1 : 50



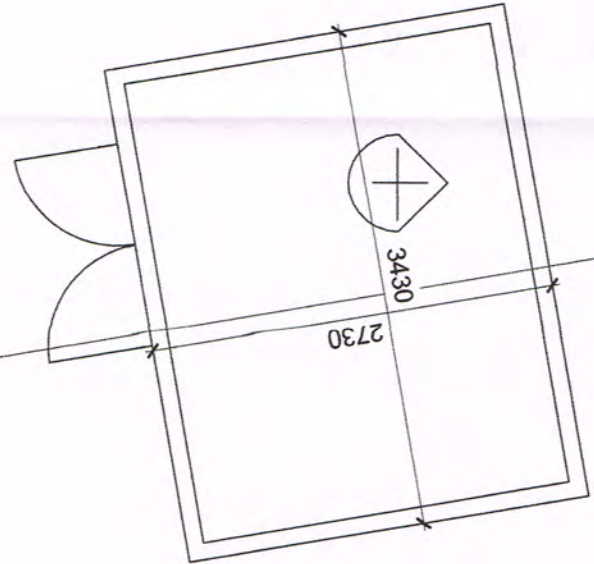
3
CEFN Y CWT
1 : 100



6
OCHR B
1 : 100



7
Toriad trwy'r cwt
1 : 50



No.	Description	Date
A	Newid maint y styds	07/13

Amgueddfa Forwrol a
Chanolfan treftadaeth Llyn
Ramp a stepiau i'r safle

Manylion y Cwt		
Project number	D15	L07A
Date	Mai 2015	
Drawn by	Selwyn Jones	
Checked by	Selwyn Jones	
Scale	As indicated	

GENERAL NOTES:

- ALL DIMENSIONS, SETTING OUT, LEVELS & GENERAL BUILDERS DETAILS TO BE CONFIRMED ON SITE BY CONTRACTOR.
- ALL DRAINAGE, INSULATION, TANKING (WATERPROOFING) & SERVICE DUCT DETAILS TO BE CONFIRMED BY OTHERS.
- ALL TEMPORARY WORKS TO BE DESIGNED & DETAILLED BY THE CONTRACTOR. SHORING/PROPPING ARRANGEMENTS TO BE ADEQUATE TO SUPPORT ALL APPLIED LOADS AND CONSIDERATION GIVEN TO THE ADJACENT STRUCTURE IN THE TEMPORARY CONDITION.
- IN THE ABSENCE OF SITE INFORMATION, ALL FOUNDATIONS WILL BE DESIGNED ASSUMING NORMAL GROUND CONDITIONS ARE PRESENT. IF NECESSARY, USE C16/20 MASS CONCRETE FILL TO ACHIEVE REQUIRED BEARING LEVELS.
- MASS CONCRETE FILL & MASS CONCRETE FOUNDATIONS TO BE C16/20 (GEN 3, MIN. 220kg/m³ CEMENT CONTENT).
- ALL EXISTING SERVICES TO BE CONFIRMED ON SITE.
- MIN. 150mm END BEARINGS FOR STEEL AND TIMBER BEAMS, UNLESS OTHERWISE NOTED.
- ALL STEELWORK TO BE GRADE MIN. S275JR.
- ALL FABRICATED STRUCTURAL STEELWORK TO BE IN ACCORDANCE WITH BS EN 1090.
- ALL STRUCTURAL STEEL BOLTS TO GRADE 8.8 TO BS EN 15048, UNLESS NOTED OTHERWISE.
- ALL STRUCTURAL WELDS TO BE MIN. 6mm FILLET CONTINUOUS FILLET WELDS TO BS EN 1090, UNLESS NOTED OTHERWISE.
- ALL STEELWORK TO BE BLAST CLEANED TO ISO SA 2½ AFTER FABRICATION AND RECEIVE MINIMUM DFT OF 80 MICRONS OF A SUITABLE EPOXY ZINC PHOSPHATE PRIMER (E.G. INTERGARD 251, BY CROMADEX, TEL. 0161 848 7056). FINAL FINISH TO BE CONFIRMED BY OTHERS. ALL TO BS5493 UNO, ON DRAWINGS.
- STEELWORK END BEARINGS SHALL RECEIVE ADDITIONAL COAT OF BITUMEN PAINT (E.G. INTERUF 16 BITUMEN, BY CROMADEX, TEL. 0161 848 7056).
- ALL STRUCTURAL STEELWORK TO BE UNDERTAKEN TO THE CURRENT THE NATIONAL STRUCTURAL STEELWORK SPECIFICATION (NSSS) FOR BUILDING CONSTRUCTION - 5TH EDITION, CE MARKING VERSION.
- ALL STRUCTURAL STEELWORK TO BE FABRICATED TO EXECUTION CLASS EXC2.
- PLEASE CONTACT ENGINEER IF SPICE CONNECTION DETAILS ARE REQUIRED FOR HEAVY OR LONG SPAN STEEL MEMBERS.
- ALL TIMBER TO TIMBER/STEEL CONNECTIONS TO BE FORMED USING SUITABLE STEEL BRACKETS, CLIPS, HANGERS ETC. INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION (BY SIMPSON STRONG-TIE, TEL. 01827 235600, OR SIMILAR APPROVED), UNLESS NOTED OTHERWISE.
- FULL DEPTH NOGINS (OR STRUTTING) TO BE INTRODUCED BETWEEN FLOOR JOISTS AT SUPPORTS & JOINTS, AND TO JOISTS WITH SPANS GREATER THAN 2500mm.
- MULTIPLE TIMBERS FORMING PRINCIPAL SUPPORT BEAMS (E.G. TRIMMERS) TO BE BOLTED TOGETHER WITH M12 (GR4.6) BOLTS @ MAXIMUM 600mm ALONG THE SPAN, UNLESS NOTED OTHERWISE.
- ALL TIMBER PLATES TO BE BOLTED TO STEEL MEMBERS USING M10 (GR8.8) BOLTS @ MAX 600mm STAGGERED CTS TYP. (MIN. 25mm EDGE DISTANCE TO BOLTS).
- THE WALLS & FOUNDATIONS TO THE EXISTING STRUCTURE HAVE NOT BEEN INSPECTED AND ARE ASSUMED TO BE SUITABLE - IF IN DOUBT, PLEASE CONTACT ENGINEER.

KEY:

ALL DIMENSIONS, SETTING OUT, LEVELS & GENERAL BUILDERS DETAILS TO BE CONFIRMED ON SITE BY CONTRACTOR.

ALL DRAINAGE, INSULATION, TANKING (WATERPROOFING) & SERVICE DUCT DETAILS TO BE CONFIRMED BY OTHERS.

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IN THE ABSENCE OF SITE INFORMATION, ALL FOUNDATIONS WILL BE DESIGNED ASSUMING NORMAL GROUND CONDITIONS ARE PRESENT. IF NECESSARY, USE C16/20 MASS CONCRETE FILL TO ACHIEVE REQUIRED BEARING LEVELS.

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STEELWORK END BEARINGS SHALL RECEIVE ADDITIONAL COAT OF BITUMEN PAINT (E.G. INTERUF 16 BITUMEN, BY CROMADEX, TEL. 0161 848 7056).

ALL STRUCTURAL STEELWORK TO BE UNDERTAKEN TO THE CURRENT THE NATIONAL STRUCTURAL STEELWORK SPECIFICATION (NSSS) FOR BUILDING CONSTRUCTION - 5TH EDITION, CE MARKING VERSION.

ALL STRUCTURAL STEELWORK TO BE FABRICATED TO EXECUTION CLASS EXC2.

PLEASE CONTACT ENGINEER IF SPICE CONNECTION DETAILS ARE REQUIRED FOR HEAVY OR LONG SPAN STEEL MEMBERS.

ALL TIMBER TO TIMBER/STEEL CONNECTIONS TO BE FORMED USING SUITABLE STEEL BRACKETS, CLIPS, HANGERS ETC. INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION (BY SIMPSON STRONG-TIE, TEL. 01827 235600, OR SIMILAR APPROVED), UNLESS NOTED OTHERWISE.

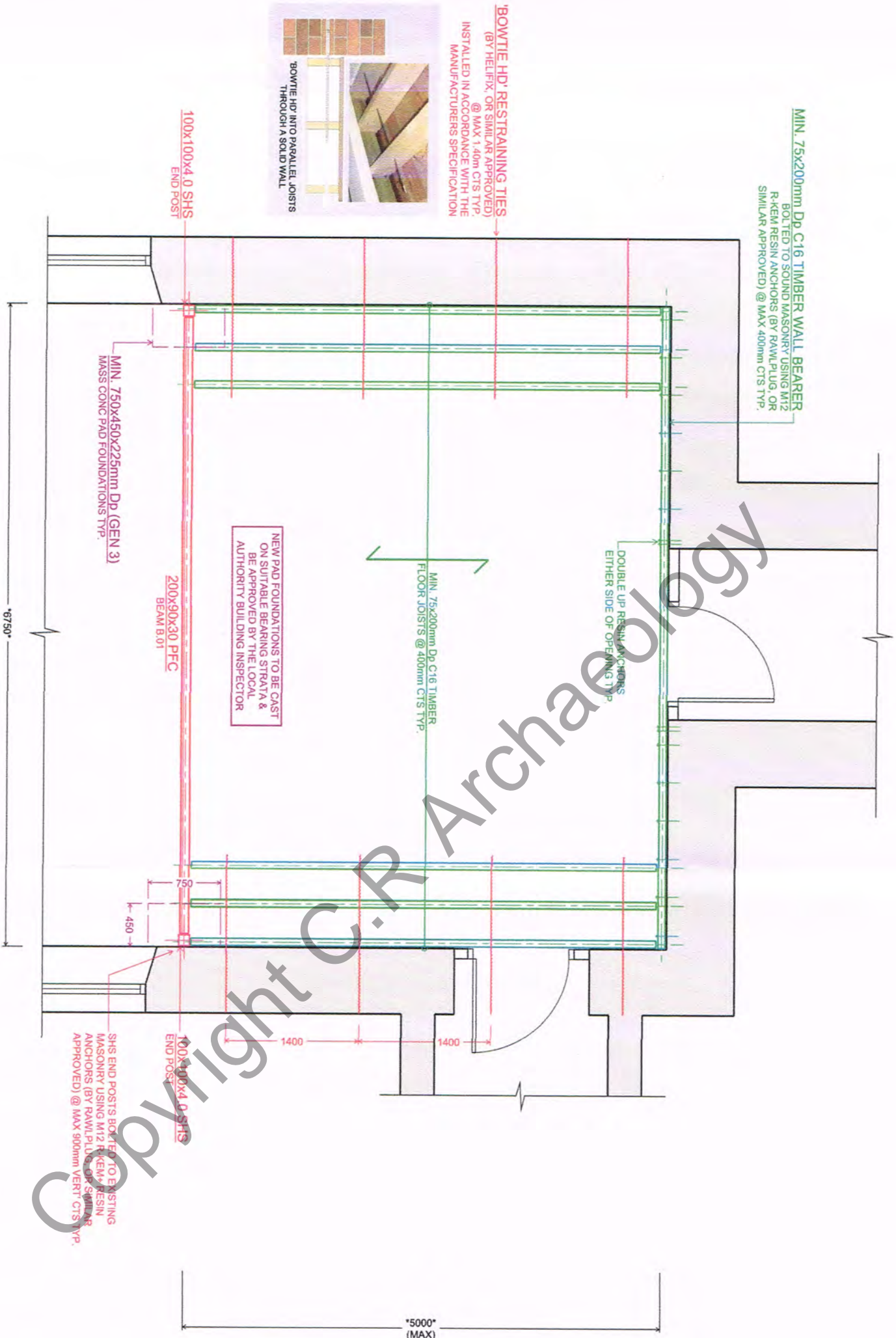
FULL DEPTH NOGINS (OR STRUTTING) TO BE INTRODUCED BETWEEN FLOOR JOISTS AT SUPPORTS & JOINTS, AND TO JOISTS WITH SPANS GREATER THAN 2500mm.

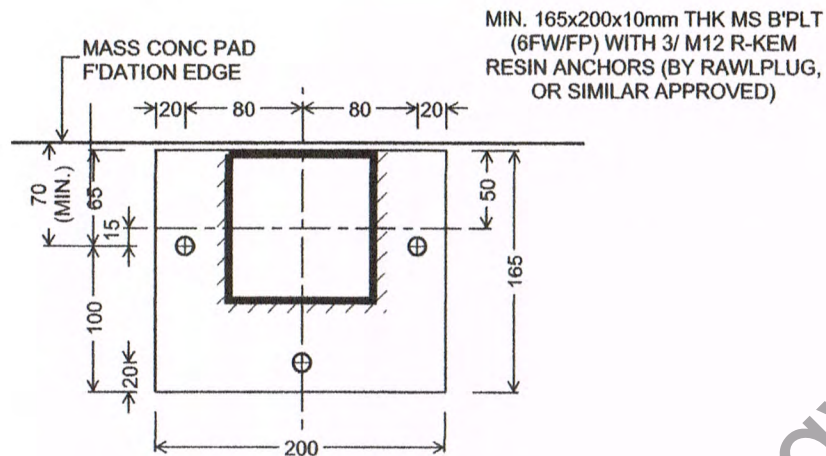
MULTIPLE TIMBERS FORMING PRINCIPAL SUPPORT BEAMS (E.G. TRIMMERS) TO BE BOLTED TOGETHER WITH M12 (GR4.6) BOLTS @ MAXIMUM 600mm ALONG THE SPAN, UNLESS NOTED OTHERWISE.

ALL TIMBER PLATES TO BE BOLTED TO STEEL MEMBERS USING M10 (GR8.8) BOLTS @ MAX 600mm STAGGERED CTS TYP. (MIN. 25mm EDGE DISTANCE TO BOLTS).

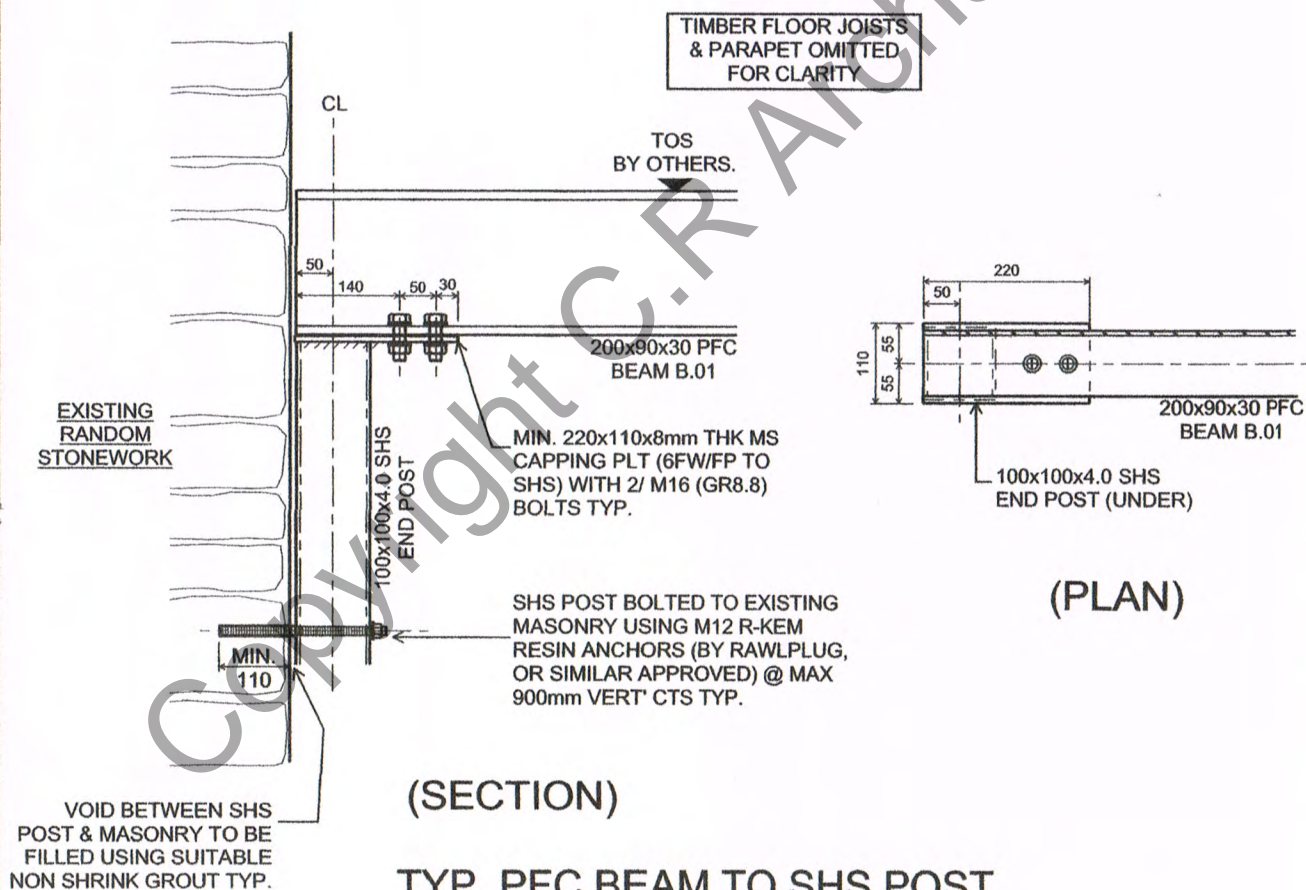
THE WALLS & FOUNDATIONS TO THE EXISTING STRUCTURE HAVE NOT BEEN INSPECTED AND ARE ASSUMED TO BE SUITABLE - IF IN DOUBT, PLEASE CONTACT ENGINEER.

TITLE		PROJECT		Sam P Jones		Job No. 1516192		DATE 25.02.16		SCALE 1:50 @a3	
Proposed Mezzanine Floor		Angueddfa Forwrol Llyn,		Peiriantwr Yngyngfhorol Consulting Engineer		DRAWN SJ		CHECKED			
- Foundations & Structure Over -		Nefyn		M: 0775559979 E: sjp@sam-p-jones.co.uk A: 43 High Street, Pwllheli, Gwynedd, LL53 5RT		DRAWING No. 1516192/SK01				REV	





1:5



TYP. PFC BEAM TO SHS POST HEAD CONNECTION DETAIL

1:10

(INDICATIVE ONLY)

TITLE

Steelwork
Details

PROJECT

Amgueddfa
Forwrol Llyn

Sam P Jones

Peirianwr Ymgynghorol | Consulting Engineer

DRAWN SJ

SCALE As Shown

DATE 25.03.16

CHKD

DRG No. 1516192/0001