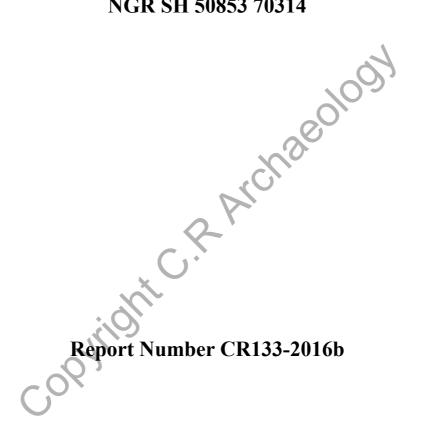
Results of Archaeological Strip, Map and Record at

Bryn Celli Ddu Farm, Llanddaniel Fab

NGR SH 50853 70314





C.R Archaeology Compiled by C. Rees & M. Jones on Behalf of Mr Matthew Venables



Results of Archaeological Strip, Map and Record at: Bryn Celli Ddu Farm, Llanddaniel Fab

Planning Application Number: National Grid Reference: Client: Report Authors: Report Number: Date: 21C170 NGR SH 50853 70314 Mr Matthew Venables C. Rees & Matthew Jones CR133-2016b 09-10-2016

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1.0 Introduction

C.R Archaeology were instructed by Mr Matthew Venables to conduct archaeological works at the proposed site of a new milking parlour, collecting yard, slurry lagoon and cattle tracks at Bryn Celli Ddu Farm, Llanddaniel Fab, Anglesey.

The site (figure 1) is situated in a rural location within a known area of high archaeological sensitivity. This was indicated by a concentration of prehistoric monuments in the immediate vicinity of the proposed development including the burial chamber of Bryn Celli Ddu (Scheduled Ancient Monument AN002), the Bryn Celli Ddu standing stone (Scheduled Ancient Monument AN085) and the nearby Tyddyn Bach standing stone (Scheduled Ancient Monument AN084). The application area itself fell within the extent of a field system and associated hut settlement recorded on the regional Historic Environment Record (PRN 2711). The site was in use as improved pasture and the landscape was characterised by undulating open countryside with mature hedge banks.

A specification was written with reference to a Gwynedd Archaeological Planning Service (GAPS) letter dated July 14th 2016 (Reference: 0714je01/D3031) as a methodology for a programme of strip, map and record. It was also considered appropriate that the mitigation outlined in this document should encompass the archaeological inspection of the area already excavated in order to determine the potential loss or survival of archaeological deposits, together with the excavation/recording of any archaeological evidence identified. The specification is included as Appendix A. The specification was written as a methodology for a scheme of archaeological works which encompassed the entirety of the development footprint for the slurry lagoon, yard, bund and milking parlour. The proposed works are shown in Appendix B.

Although there was an extensive cattle trackway associated with the scheme GAPS did not consider that the trackway had adverse implications for archaeological remains as they are to be constructed directly on the turf. The trackway route is not therefore to be stripped as part of this scheme of archaeological works.

Given the extent of the previously completed works it is very unlikely that, if there have been archaeological remains beneath the affected areas, anything but the very deepest of features would have survived. No archaeological material was noted in the spoil heaps but it is impossible to determine with certainty that no archaeological remains have been damaged/destroyed. The remainder of the works were subject to a programme of archaeological strip, map and record. No archaeological features were uncovered although two Prehistoric flint artefacts believed to be of Late Neolithic/Early Bronze Age date were recovered.

2.0 Project Aims

The scheme of works for the development site aimed to undertake a programme of archaeological strip, map and record on the area covered by the development footprint of the slurry lagoon, yard, bund and milking parlour at the site in order to assess the survival, character and date of any archaeological remains and to excavate, record and analyse all archaeological remains uncovered.

It also aimed to inspect the area already excavated in order to determine the potential loss or survival of archaeological deposits, and to excavate/record any archaeological evidence identified.

This project aimed to fulfil the criteria for undertaking an Archaeological Excavation as specified in the CIfA Standard and Guidance documents (revised 2014).

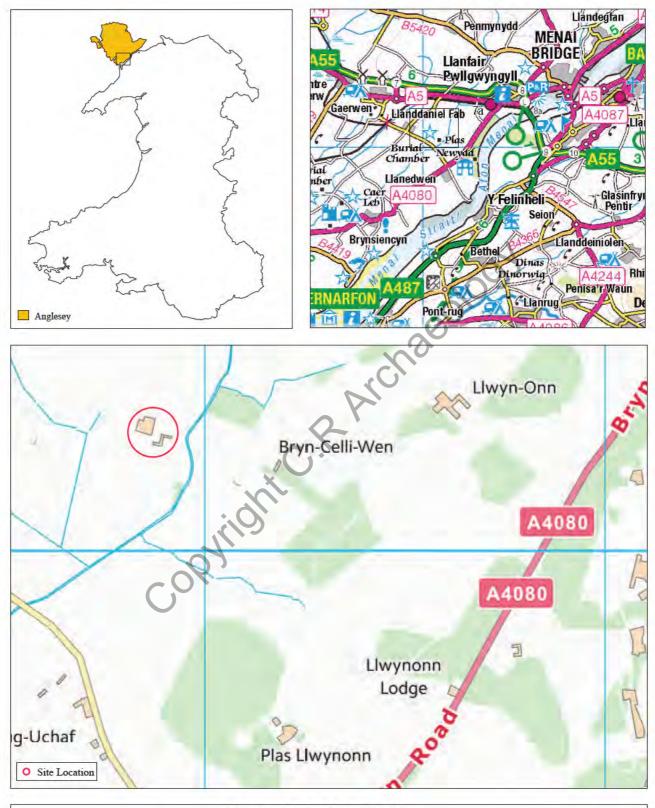


Figure 1. Site Location Map (Source: OS Open Data Mapping. Contains Ordnance Survey data © Crown copyright and database right [2016]) The objectives of this programme of works were:

- To excavate/record all archaeological remains uncovered
- To enhance the existing archaeological record through the examination of the results of the fieldwork in relation to the relevant "*Research Framework for the Archaeology of Wales*"

3.0 Scheme of Works - Methodology

3.1 Desk Based Research

It was envisaged that a detailed history of the site would be compiled utilising information sourced from Anglesey Record Office and the Gwynedd Historic Environment Record Office. This was however deemed unnecessary given the negative result of the fieldwork although the Tithe and historic Ordnance Survey Mapping of the farm were examined in an attempt to investigate whether there were any structures/information which could be utilised to determine whether there may have been some previous damage in the development area.

The Gwynedd Historic Environment Record was consulted and a search radius of 500m was examined.

The works were carried out accordance with the CIfA Standards and Guidance for historic environment desk-based assessment (CIfA 2014).

This material forms the historical background for the archaeological report. The report includes the results of the archaeological strip, map and record.

3.2 Archaeological Strip, Map and Record and Inspection of Area Previously Excavated

The entirety of the remaining development footprint which included the slurry lagoon, yard and bund were stripped down to the archaeological horizon/level of the underlying natural. This work was undertaken using a mechanical excavator fitted with a toothless ditching bucket. All machine excavation was supervised by an archaeologist from C.R Archaeology. The works to the milking parlour had been completed prior to our involvement in the scheme.

No archaeological features/potential archaeological features were identified during the works.

C.R Archaeology notified GAPS as to the date of the commencement of works. Following discussion with GAPS a site visit visit to allow for the inspection of works was not deemed to be necessary given the negative results of the works.

Fieldwork was conducted and managed Matthew Jones (MA) of C.R Archaeology.

The works were carried out in accordance with the CIfA Standard and Guidance documents for Archaeological Excavation (2014).

3.2.1 Recording

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

A high-resolution 14.2mp Sony Alpha digital camera was used to create a photographic record of the site. This will be comprised of general photographs which were taken of the excavation process and to demonstrate the negative results of the works.

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'.

3.2.2 Additional Mitigation/Contingency Measures

Due to the negative results of the works no additional mitigation or contingency measures were necessary.

3.2.3 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 (IfA 2008) 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 (IfA 2008).

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

The assemblage has been examined according to typological and chronological criteria and no conservation needs were identified. An assessment report of all material was produced by Matthew Jones.

Following analysis all archaeological material recovered will be deposited in Llangefni Museum. 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 guidelines (Revised 2014).

3.2.4 Archive Compilation

All records created during the fieldwork were checked for consistency and accuracy and form part of the *Primary Site Archive (P1)* (EH 2006). The archive contains all data collected, including records and other specialist materials. It is 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 archive material created during this archaeological project will be deposited at Anglesey Archives, Llangefni. Archive material will be deposited in accordance with the archive's terms and conditions for archive deposition.

3.3 Timetable for Proposed Works

The archaeological works were undertaken on September 30^{th.} and took a single day to complete.

3.4 Staffing

The project was managed by Catherine Rees (MCIfA, BA (Archaeology), MA (Archaeology) Postgraduate Diploma (Historic Environment Conservation) & Matthew Jones (BA (Archaeology), MA (Archaeology). The fieldwork was conducted by Matthew Jones.

Matthew Jones has a skill set equivalent to the CIFA ACIFA/MCIFA level. 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.

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 located in the site vehicle.

Staff were issued with appropriate Personal Protective Equipment (PPE) for the site work. Initially this consist of:

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

All staff have passed at least a CITB health and safety test at operative level and carry a Construction Related Organisation (CRO) White Card for Archaeological Technician (Code 5363). C.R Archaeology staff also comply with all Health and Safety Policy and specific on-site instructions provided by the client or their appointed Principal contractor or H&S coordinator.

3.7 The Report

This report clearly and accurately incorporates the 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. The report contains a site plan showing the locations of any photographs taken (included as Appendix C).

The final report includes:

- A copy of the agreed specification
- A location plan
- A plan showing the locations of the excavated areas within the development site
- 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 to GAPS 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 post excavation works.

In the event of a significant discovery it may be necessary to produce an interim report detailing the excavation results before producing a more detailed full report which would incorporate all specialist analysis and the results of any scientific or dating works.

3.7.1 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.

4.0 Geographical and Geological Context

4.1 Topography

The site is situated in a rural location within a known area of high archaeological sensitivity. This is indicated by a concentration of prehistoric monuments in the immediate vicinity of the proposed development including the burial chamber of Bryn Celli Ddu (Scheduled Ancient Monument AN002), the Bryn Celli Ddu standing stone (Scheduled Ancient Monument AN085) and the nearby Tyddyn Bach standing stone (Scheduled Ancient Monument AN084). The application area itself falls within the extent of a field system and associated hut settlement recorded on the regional Historic Environment Record (PRN 2711). The site is currently in use as improved pasture and the landscape is characterised by undulating open countryside with mature hedge banks.

4.2 Geology

The bedrock geology at the site is recorded as "Central Anglesey Shear Zone And Berw Shear Zone (undifferentiated) - Schist, Quartz. Metamorphic Bedrock formed approximately 508 to 635 million years ago in the Cambrian and Ediacaran Periods. Original rocks without interpretation. Later altered by low-grade metamorphism. These rocks have undergone low grade metamorphism, high grade regional metamorphism, or crushing in a fault or shear zone and it is not known whether they were of igneous, sedimentary or older metamorphic origin" (www.bgs.ac.uk). The superficial geology of the site is not recorded.

5.0 Historical Background

The development site is located within a known area of high archaeological sensitivity. This is indicated by a concentration of prehistoric monuments in the immediate vicinity of the proposed development including the burial chamber of Bryn Celli Ddu (Scheduled Ancient Monument AN002), the Bryn Celli Ddu Standing Stone (Scheduled Ancient Monument AN085) and the nearby Tyddyn Bach Standing Stone (Scheduled Ancient Monument AN084). The application area itself falls within the extent of a field system and associated hut settlement recorded on the regional Historic Environment Record (PRN 2711).

The following monuments belong to a complex of structures dating predominantly from the Late Neolithic and Early Bronze Age, although the Bryn Celli Ddu burial mound has earlier origins.

The Cadw description for the burial chamber of Bryn Celli Ddu (Scheduled Ancient Monument AN002, NPRN 93827, PRN 2694) is located just over 100m to the south of the proposed development site. The Cadw description is as follows "*The monument comprises the remains of a burial chamber probably dating to the Neolithic. It is located in the south-eastern part of Anglesey 1.5km from the Menai Strait. Bryn Celli Ddu – the Mound in the Dark Grove – is probably the best known prehistoric monument on Anglesey. First explored seriously in 1865, the tomb was thoroughly excavated in 1928-29. The excavations revealed that the monument seems to have begun in the later Neolithic as a 'henge' or ritual enclosure. It consisted of a bank (now lost) around an inner ditch, which enclosed a circle of upright stones. The ditch originally measured 21m in diameter and was 5.2m wide and 1.8m deep. Its outer edge can still be seen and several stones from the inner stone circle also survive. At a later date, towards the end of the Neolithic, the henge made way for a passage grave, a type of burial monument. A new stone burial chamber was constructed within the henge and was covered by a substantial mound that extended into the ditch, obscuring*

the earlier stone circle. The present mound is only a partial reconstruction, but the original kerb can be seen within the henge ditch. The entrance into the burial chamber is on the north-east and consists of a narrow dry-stone wall passage. The passage is divided by two tall portal stones into an outer stretch, 3m long which was probably never roofed, and an inner section 4.9m long and 1.5m high. The outer passage was blocked when the tomb ceased to be used. A low shelf can be seen along the north wall of the inner passage. The passage leads to a polygonal stone chamber 2.4m wide, roofed by two capstones. Inside the chamber stands a neatly dressed free-standing pillar almost circular in shape. One of the stones on the south wall of the chamber has a spiral design carved on it. Human bones, both burnt and unburnt were found in the chamber and passage of the tomb. The absence of pottery makes it difficult to date the tomb closely. Outside the tomb, to the rear, a large stone was discovered with a wavy, spiral pattern carved into it. The curvilinear style of decoration on the stone has parallels on tombs elsewhere, especially in Brittany. A cast of this has been set up to indicate its presumed original position. The monument is of national importance for its potential to enhance our knowledge of prehistoric burial and ritual practices. The burial chamber is an important relic of a prehistoric funerary and ritual landscape. It retains significant archaeological potential and there is a strong probability of the presence of burial, ritual or structural evidence. The monument's importance is further enhanced by its rare rock art. The scheduled area comprises the remains described and an area around them within which related evidence may be expected to survive".

The Bryn Celli Ddu Standing Stone (Scheduled Ancient Monument AN085, NPRN 302503, PRN 2710) is located approximately 140m to the south-west of the burial monument and around 260m from Bryn Celli Ddu Farm. It is recorded by Cadw in the Scheduling description as "the remains of a standing stone, which probably dates to the Bronze Age (c. 2300 - 800 BC). The stone is sited on semi cultivated pasture on a low slope within a micro - bowl with good views to Bryn Celli Du chambered Tomb. The Standing stone also is situated within the same field as a large rock outcrop with cup marked surface. It measures 1m high by 1.25 wide by 0.45m thick. The monument is of national importance for its potential to enhance our knowledge of prehistoric burial and ritual practices. It is an important relic of a prehistoric funerary and ritual landscape and retains significant archaeological potential. There is a strong probability of the presence of intact burial or ritual deposits, together with environmental and structural evidence. Standing stones are often part of a larger cluster of monuments and their importance can further enhanced by their group value. The scheduled area comprises the remains described and areas around them within which related evidence may be expected to survive".

A second standing stone, Tyddyn Bach, is also located within 500m of the development site. The Cadw description for Tyddyn Bach Standing Stone (Scheduled Ancient Monument AN084) records the monument as comprising "the remains of a standing stone, which probably dates to the Bronze Age (c. 2300 - 800 BC). The stone is located on a natural terrace with views to the Snowdonia range and measures 2.75m high. The monument is of national importance for its potential to enhance our knowledge of prehistoric burial and ritual practices. It is an important relic of a prehistoric funerary and ritual landscape and retains significant archaeological potential. There is a strong probability of the presence of intact burial or ritual deposits, together with environmental and structural evidence. Standing stones are often part of a larger cluster of monuments and their importance can further enhanced by their group value. The scheduled area comprises the remains described and areas around them within which related evidence may be expected to survive".

There is one known burial cairn and two possible cairn sites located to the south of the Bryn Celli Ddu burial mound. Llandaniel Fab Cairn (NPRN 309540, PRN 2708) is approximately 20m in diameter. It was constructed utilising an outer curcular curb of small upright stones which were likely to have been set within a small ditch. The site was excavated in 1931 when a central cist containing the cremated remains of a man was uncovered. Patches of charcoal and additional

fragments of cremated bones and small flints were also recovered from surviving floor areas. The RCAHMW states that the mound is reported to have been "despoiled in about 1800 when a gold wedge is said to have been found". Further excavation of the cairn was conducted in 2016 by University of Central Lancashire who recovered material for radiocarbon dating and further lithic artefacts (Seren Griffiths pers com).

A second cairn was identified by the RCAHMW in 2008. NPRN 408570 (PRN 25192) is described by the RCAHMW as a "*feint circular cropmark likely to represent the buried remains of a plough-levelled burial cairn of a barrow c.10m in diameter 48m south of the main tomb*". The third possible cairn - NPRN 308648 is described by the RCAHMW as an "uncertain feature – possibly a barrow or cairn in an area where rocky outcrops occur.

There are numerous rocky outcrops within the landscape surrounding the development site and a number of these have been found to have been modified with rock art. The largest concentration is recorded as NPRN 415847, PRN 28427. This is described by the RCAHMW as a "substantial natural outcrop, lying some 140m west of Bryn Celli Ddu tomb and 130m north of a standing stone (NPRN 302503). The outcrop has up to 28 cupmarks on its surface, clustered into different groups. Identified by George Nash and a team from the University of Bristol". Further works by Seren Griffiths and Adam Stanford which have yet to be published in full are believed to have identified further sites in the locality.

There is also Later Prehistoric activity within a 500m radius of the site and, as mentioned above, the application area itself falls within the extent of a field system and associated hut settlement recorded on the Gwynedd Historic Environment Record (PRN 2711). The entry for this site is as follows: *"Field System (Terraces and Hut Remains), Llandaniel. Terraces and shallow depressions, the remains of huts, in grass fields to the NW and NE of Bryn Celli Wen (area SH 512 704). In the field to the NW are two main terraces, the upper 3ft high running along the slope with a slight crossbank; and in the NE field is a large bank about 2 1/2 - 3ft high and another running in a curve down the slope. Terraces in good condition, but huts bad".*

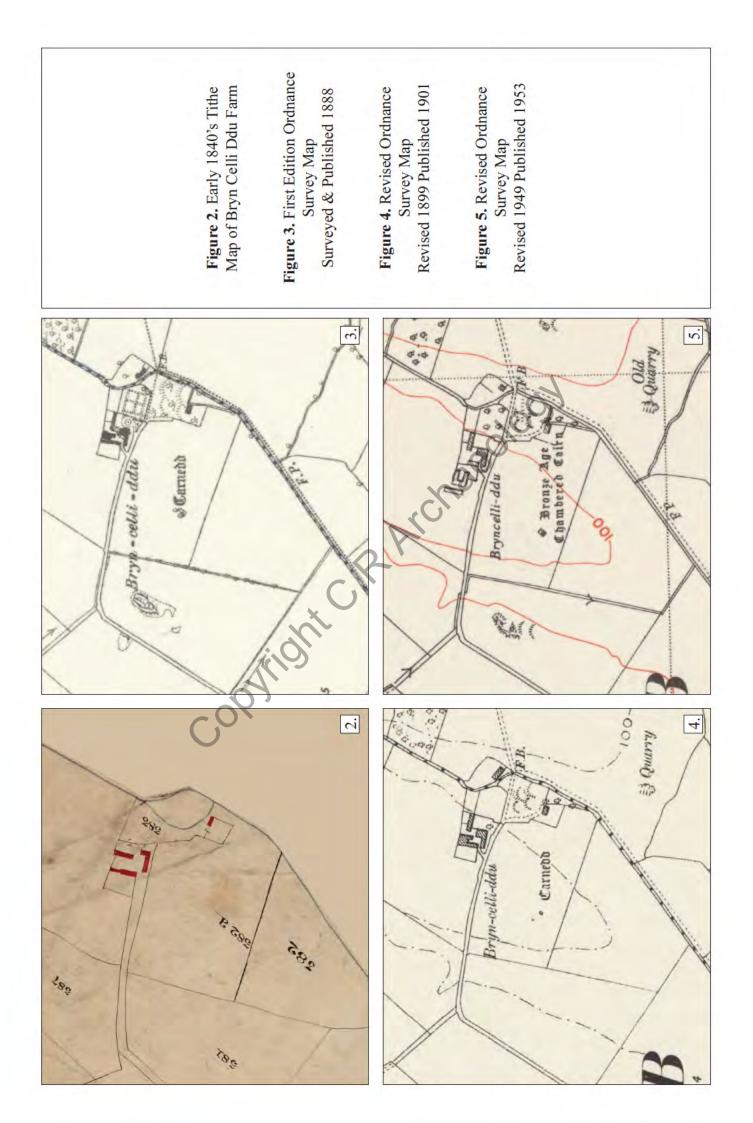
In addition to the concentration of Late Neolithic and Early Bronze Age ceremonial sites there are two Post Medieval sites within 500m of the development site. The first is the garden (NPRN 265336, PRN 28426) associated with the farm. The RCAHMW records that the garden is depicted on the Second Edition Ordnance Survey 25-inch map of Anglesey XIX, sheet 13 (1900) and its main elements on that map include a short carriage drive, orchard, sundial and a possible kitchen garden.

The final site is Bryn Celli Wen Farmstead (PRN 56083) which survives as a ruined standing building. The site appears on the early Ordnance Survey Editions.

A negative watching brief on a sewer replacement trench approximately 500m from the development site was carried out by Gwynedd Archaeological Trust in 2009. No evidence of archaeological activity was recorded during these works.

Cartographic Sources (Figures 2 - 5)

The earliest cartographic source consulted was the Tithe of the early 1840's. It shows the farm as a range of 3 buildings with an outbuilding a small distance away. The farm had developed by the 1888 Ordnance Survey Map and the farm now has two larger separate elements along with the aforementioned outbuilding. A second outlying building is shown on the opposite side of the stream. There was a walled garden shown and a possible carriageway indicative of a high status farm. This may however pre-date this mapping as this level of detail is not shown on the Tithe.



By the 1899 Ordnance Survey Map edition the main farm buildings have been divided back into three elements. The walled garden is no longer shown. There were no changes noted between this and the 1913 (published 1920) Ordnance Survey edition.

The edition revised 1949 shows that the north-western building has been demolished and there are two large structures and one smaller structure in their place. The colour coding on this map would indicate that they were structures of corrugated iron rather than the traditional stone farm buildings.

None of the map editions examined show any buildings in the area affected by the current development.

6.0 Results of Archaeological Works (Plates 1 - 8)

The parlour had been constructed prior to the site visit and appeared to have been cut into a low raise, although it is unclear as to where this raise began. The parlour faces onto some earlier 20^{th} century farm buildings and a concrete yard. It is unclear what damage this earlier building phase has caused to the surrounding landscape. There were also a number of drainage cuts associated with the parlour and one of these open cuts showed the top and subsoil to have been very shallow (it was between 0.09 - 0.20m in depth). It is unclear as to what archaeological remains have been lost due to this work although no archaeological material was noted in the spoil heaps from previous works.

The stripping of an area measuring 84m by 28m was monitored under strip, map and record conditions. The underlying natural was reached at a depth of between 0.18m and 0.32m.

No archaeological features were identified within this area and two contexts were identified. Context (01) was a turf topsoil layer which was 0.18m - 0.28m in depth. This layer was observed to have been disturbed by cattle. Context (02) was the underlying natural which was a pinkish clay slit with rare medium to large boulders.

Artefacts were recovered from the topsoil layer (context 01) and the material predominantly dated to the Post Medieval period. Two stray flint flakes were recovered from the topsoil.

Artefacts

Prehistoric (Plate 9)

Two flint flakes were recovered from the topsoil. The flints were both dark grey-black in colour. Small Find 01 was a large secondary flake measuring 4cm by 3cm. It was 0.1cm at its thickest point. Small Find 02 was a small flake measuring 2cm by 1cm. It was 0.2cm thick at its thickest point.

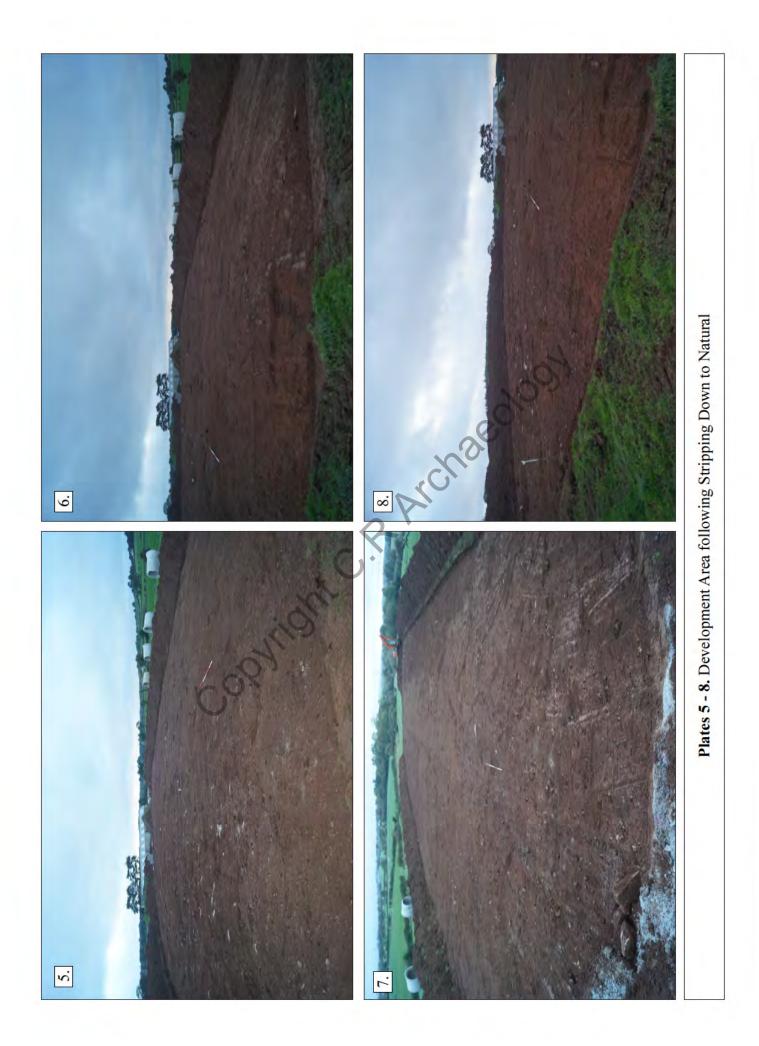
Stylistically the artefacts in themselves are undiagnostic beyond the broad attribution of a Prehistoric date. The flint material is however not the locally collected beach pebble flint but rather a much finer imported type which would make it more likely that the flints are of Late Neolithic or Early Bronze Age date. This would be in-keeping with the date of the majority of the monuments in the locality.

Post Medieval/Modern Black/dark brown glazed ware

Three connecting sherds of a looped handle black glazed ware with a light red pink body fabric were recovered. All are associated with the local Buckley pottery centre.

A single irregular shaped body sherd was collected. It measured 3cm by 3cm and had a thickness of 0.6cm. It was glazed internally and externally and had a ribbed design. It is unclear as to the vessel type this piece originated from.







A large rim sherd 10cm in length was collected. The lip of the rim was flat and 3cm in width. It stepped 0.5cm towards the thickest part of the body (2cm in thickness). This stepped towards the body for 0.5cm. The main body of the vessel is 0.5cm thick. There was a rough uneven glazing internally and externally with a smooth interior. This fragment was possibly part of a large wash pan or a tall pot used for storing milk in the dairy. Later versions of these vessel types have a smooth exterior so this piece is likely to be of late 19th or early 20th century date (McGarva 2000:26).

7.0 Conclusion

Works at the site which were conducted prior to the involvement of C.R Archaeology in the project were extensive and it is simply not possible to determine whether any archaeological remains have been lost as a result of them. All that can be said with certainty is that there was no artefactual material was noted in the spoil heaps examined and that given the soil depths encountered during the strip, map and record works the likelihood of any remains surviving is low. Only archaeological features of considerable depth would have had any chance of at least partial survival at the site.

No archaeological features were uncovered during the strip, map and record phase of works and therefore no features extended into the affected areas detailed above to allow us to say with certainty that any archaeological remains were actually destroyed. Two small flint flakes were recovered during the works.

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Appendix A.

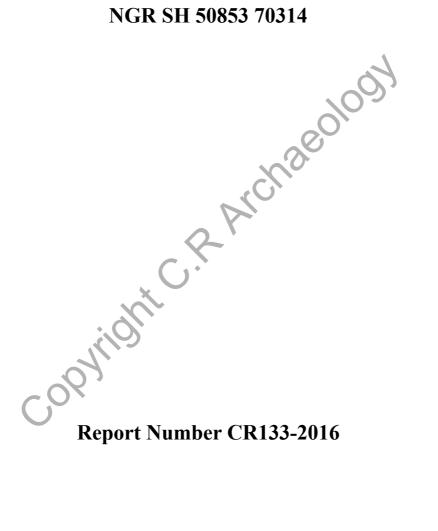
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5.0 **Bibliography**

Illustrations

Figure 1. Site Location Map

Appendix A. Site Plans Showing Proposed Works

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1.0 Introduction

C.R Archaeology have been instructed by Mr Matthew Venables to conduct archaeological works at the proposed site of a new milking parlour, collecting yard, slurry lagoon and cattle tracks at Bryn Celli Ddu Farm, Llanddaniel Fab, Anglesey.

The site is situateded in a rural location within a known area of high archaeological sensitivity. This is indicated by a concentration of prehistoric monuments in the immediate vicinity of the proposed development including the burial chamber of Bryn Celli Ddu (Scheduled Ancient Monument AN002), the Bryn Celli Ddu standing stone (Scheduled Ancient Monument AN085) and the nearby Tyddyn Bach standing stone (Scheduled Ancient Monument AN084). The application area itself falls within the extent of a field system and associated hut settlement recorded on the regional Historic Environment Record (PRN 2711). The site is currently in use as improved pasture and the landscape is characterised by undulating open countryside with mature hedge banks.

This specification has been written with reference to a Gwynedd Archaeological Planning Service (GAPS) letter dated July 14th 2016 (Reference: 0714je01/D3031) as a methodology for a programme of strip, map and record. It was also considered appropriate that the mitigation outlined in this document should encompass the archaeological inspection of the area already excavated in order to determine the potential loss or survival of archaeological deposits, together with the excavation/recording of any archaeological evidence identified.

This specification has been written as a methodology for a scheme of archaeological works which will encompass the entirety of the development footprint for the slurry lagoon, yard, bund and milking parlour. The proposed works are shown in Appendix A.

Although there is an extensive cattle trackway associated with the scheme GAPS do not consider that the trackway has adverse implications for archaeological remains as they are to be constructed directly on the turf. The trackway route is not therefore to be stripped as part of this scheme of archaeological works.

2.0 Project Aims

This scheme of works for the development site aims to undertake a programme of archaeological strip, map and record on the area covered by the development footprint of the slurry lagoon, yard, bund and milking parlour at the site in order to assess the survival, character and date of any archaeological remains and to excavate, record and analyse all archaeological remains uncovered.

It also aims to inspect the area already excavated in order to determine the potential loss or survival of archaeological deposits, and to excavate/record any archaeological evidence identified.

This project aims to fulfil the criteria for undertaking an Archaeological Excavation as specified in the CIfA Standard and Guidance documents (revised 2014).

The objectives of this programme of works are:

- To excavate/record all archaeological remains uncovered
- To enhance the existing archaeological record through the examination of the results of the fieldwork in relation to the relevant "*Research Framework for the Archaeology of Wales*"

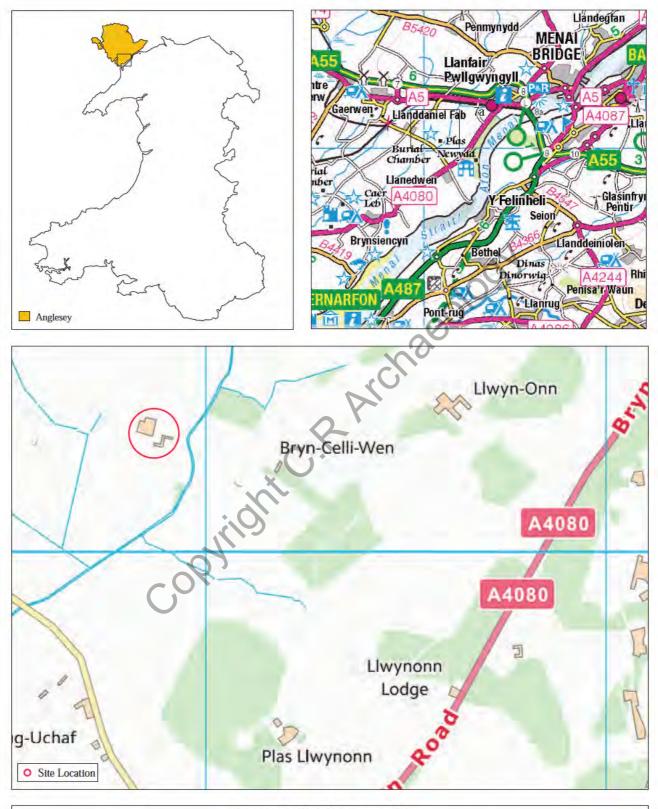


Figure 1. Site Location Map (Source: OS Open Data Mapping. Contains Ordnance Survey data © Crown copyright and database right [2016])

3.0 Historical Background

The following section is, through necessity, brief and is intended to merely place the site in context. A more detailed history of the site will form an element in the proposed works. Further sites are also known within the area and these will be discussed in greater detail when recording the results of the Desk Based Research.

The proposed development site is located within a known area of high archaeological sensitivity. This is indicated by a concentration of prehistoric monuments in the immediate vicinity of the proposed development including the burial chamber of Bryn Celli Ddu (Scheduled Ancient Monument AN002), the Bryn Celli Ddu Standing Stone (Scheduled Ancient Monument AN085) and the nearby Tyddyn Bach Standing Stone (Scheduled Ancient Monument AN084). The application area itself falls within the extent of a field system and associated hut settlement recorded on the regional Historic Environment Record (PRN 2711).

The Cadw description for the burial chamber of Bryn Celli Ddu (Scheduled Ancient Monument AN002) is as follows "The monument comprises the remains of a burial chamber probably dating to the Neolithic. It is located in the south-eastern part of Anglesey 1.5km from the Menai Strait. *Bryn Celli Ddu – the Mound in the Dark Grove – is probably the best known prehistoric monument* on Anglesey. First explored seriously in 1865, the tomb was thoroughly excavated in 1928-29. The excavations revealed that the monument seems to have begun in the later Neolithic as a 'henge' or ritual enclosure. It consisted of a bank (now lost) around an inner ditch, which enclosed a circle of upright stones. The ditch originally measured 21m in diameter and was 5.2m wide and 1.8m deep. Its outer edge can still be seen and several stones from the inner stone circle also survive. At a later date, towards the end of the Neolithic, the henge made way for a passage grave, a type of burial monument. A new stone burial chamber was constructed within the henge and was covered by a substantial mound that extended into the ditch, obscuring the earlier stone circle. The present mound is only a partial reconstruction, but the original kerb can be seen within the henge ditch. The entrance into the burial chamber is on the north-east and consists of a narrow dry-stone wall passage. The passage is divided by two tall portal stones into an outer stretch, 3m long which was probably never roofed, and an inner section 4.9m long and 1.5m high. The outer passage was blocked when the tomb ceased to be used. A low shelf can be seen along the north wall of the inner passage. The passage leads to a polygonal stone chamber 2.4m wide, roofed by two capstones. Inside the chamber stands a neatly dressed free-standing pillar almost circular in shape. One of the stones on the south wall of the chamber has a spiral design carved on it. Human bones, both burnt and unburnt were found in the chamber and passage of the tomb. The absence of pottery makes it difficult to date the tomb closely. Outside the tomb, to the rear, a large stone was discovered with a wavy, spiral pattern carved into it. The curvilinear style of decoration on the stone has parallels on tombs elsewhere, especially in Brittany. A cast of this has been set up to indicate its presumed original position. The monument is of national importance for its potential to enhance our knowledge of prehistoric burial and ritual practices. The burial chamber is an important relic of a prehistoric funerary and ritual landscape. It retains significant archaeological potential and there is a strong probability of the presence of burial, ritual or structural evidence. The monument's importance is further enhanced by its rare rock art. The scheduled area comprises the remains described and an area around them within which related evidence may be expected to survive".

The Bryn Celli Ddu Standing Stone (Scheduled Ancient Monument AN085) is recorded by Cadw in the Scheduling description as "the remains of a standing stone, which probably dates to the Bronze Age (c. 2300 - 800 BC). The stone is sited on semi cultivated pasture on a low slope within a micro - bowl with good views to Bryn Celli Du chambered Tomb. The Standing stone also is situated within the same field as a large rock outcrop with cup marked surface. It measures 1m high by 1.25 wide by 0.45m thick. The monument is of national importance for its potential to enhance our knowledge of prehistoric burial and ritual practices. It is an important relic of a prehistoric

funerary and ritual landscape and retains significant archaeological potential. There is a strong probability of the presence of intact burial or ritual deposits, together with environmental and structural evidence. Standing stones are often part of a larger cluster of monuments and their importance can further enhanced by their group value. The scheduled area comprises the remains described and areas around them within which related evidence may be expected to survive".

The Cadw description for Tyddyn Bach Standing Stone (Scheduled Ancient Monument AN084) records the monument as comprising "the remains of a standing stone, which probably dates to the Bronze Age (c. 2300 - 800 BC). The stone is located on a natural terrace with views to the Snowdonia range and measures 2.75m high. The monument is of national importance for its potential to enhance our knowledge of prehistoric burial and ritual practices. It is an important relic of a prehistoric funerary and ritual landscape and retains significant archaeological potential. There is a strong probability of the presence of intact burial or ritual deposits, together with environmental and structural evidence. Standing stones are often part of a larger cluster of monuments and their importance can further enhanced by their group value. The scheduled area comprises the remains described and areas around them within which related evidence may be expected to survive".

As mentioned above the application area itself falls within the extent of a field system and associated hut settlement recorded on the Gwynedd Historic Environment Record (PRN 2711). The entry for this site is as follows: "Field System (Terraces and Hut Remains), Llandaniel. Terraces and shallow depressions, the remains of huts, in grass fields to the NW and NE of Bryn Celli Wen (area SH 512 704). In the field to the NW are two main terraces, the upper 3ft high running along the slope with a slight cross-bank; and in the NE field is a large bank about 2 1/2 - 3ft high and another running in a curve down the slope. Terraces in good condition, but huts bad".

3.1 Topography

The site is situated in a rural location within a known area of high archaeological sensitivity. This is indicated by a concentration of prehistoric monuments in the immediate vicinity of the proposed development including the burial chamber of Bryn Celli Ddu (Scheduled Ancient Monument AN002), the Bryn Celli Ddu standing stone (Scheduled Ancient Monument AN085) and the nearby Tyddyn Bach standing stone (Scheduled Ancient Monument AN084). The application area itself falls within the extent of a field system and associated hut settlement recorded on the regional Historic Environment Record (PRN 2711). The site is currently in use as improved pasture and the landscape is characterised by undulating open countryside with mature hedge banks.

3.2 Geology

The bedrock geology at the site is recorded as "Central Anglesey Shear Zone And Berw Shear Zone (undifferentiated) - Schist, Quartz. Metamorphic Bedrock formed approximately 508 to 635 million years ago in the Cambrian and Ediacaran Periods. Original rocks without interpretation. Later altered by low-grade metamorphism. These rocks have undergone low grade metamorphism, high grade regional metamorphism, or crushing in a fault or shear zone and it is not known whether they were of igneous, sedimentary or older metamorphic origin" (www.bgs.ac.uk).

The superficial geology of the site is not recorded.

4.0 Scheme of Works - Methodology

4.1 Desk Based Research

A history of the site will be compiled utilising information sourced from Anglesey Record Office and the Gwynedd Historic Environment Record Office. A full map progression will be undertaken along with a search of tithe records. Where appropriate the archive information will be supplemented with information from local libraries and specialist interest websites & journals.

The Gwynedd Historic Environment Record will be consulted and a search radius of 500m will be examined.

The works will be carried out accordance with the CIfA Standards and Guidance for historic environment desk-based assessment (CIfA 2014).

This material will form the historical background for a full archaeological report. The report will include the results of the Archaeological Strip, Map and Record.

4.2 Archaeological Strip, Map and Record and Inspection of Area Previously Excavated

The entirety of the development footprint for the slurry lagoon, yard, bund and milking parlour are to be stripped down to the archaeological horizon/level of the underlying natural. 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. Should significant remains be uncovered or should archaeological deposits extend beyond the limits of the development area it may then be necessary to follow the procedures for Additional Mitigation/Contingency Measures. All machine excavation will be supervised by an archaeologist from C.R Archaeology.

All archaeological remains/potential archaeological remains identified during works will be marked using spray paint and excavated by C.R Archaeology staff. 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. Excavation would generally involve the removal of 50% of pits/posthole fills and 10% of the fills of ditches/large linear features but given the sensitivity of the site and the archaeological significance of the area this will be discussed with GAPS imediately following the stripping of the site, and excavation of up to 100% of all features may be deemed appropriate. Should it be deemed necessary to understand the archaeological remains uncovered the area may be extended by up to 2m around the development area. This will be subject to prior agreement with GAPS and the client.

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 generally a sample of up to 40 litres will be taken but in the event of a significant discovery then up to 95% of a fill may be taken if deemed necessary by GAPS.

C.R Archaeology will notify GAPS as the date of the commencement of works. A site visit visit will be arranged to allow for the inspection of works. In the event of a significant discovery GAPS will be informed of the discovery and a mitigation strategy agreed before works will progress. Fieldwork is to be conducted and managed by Catherine Rees (MCIfA, MA) and Matthew Jones (MA) of C.R Archaeology.

The works will be carried out in accordance with the CIfA Standard and Guidance documents for Archaeological Excavation (2014).

4.2.1 Recording

The record forms at C.R 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. A temporary benchmark (TBM) will be established on the site and where possible 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 'harris matrix' diagram will be constructed for the excavated area.

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. General photographs will also be taken of the excavation process and significant finds/insitu artefactual material.

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 further significant archaeological discovery being made during the excavation C.R Archaeology will immediately inform both the client and the development control archaeologists Jenny Emmett. Consultation will take place between C.R Archaeology, GAPS and the client with regards to the most suitable course of action.

In the event that human remains are encountered site work will cease with immediate effect in the vicinity of the find. 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.

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. 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.

In the event of the discovery of Prehistoric remains Frances Lynch will be engaged as the ceramic specialist and Dr. Ian Brooks as the lithics expert.

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. Any archive material created during this archaeological project will be deposited at Anglesey Archives, Llangefni. Archive material will be deposited in accordance with the archive's terms and conditions for archive deposition. The landowner will retain ownership of any artefactual material in the first instance although it will be requested that any material recovered is donated to Oriel Mon, Llangefni.

4.3 Timetable for Proposed Works

It is envisaged that the excavation will be undertaken with a provisional start date of September 12th. The exact duration of the works will be dependent on the amount and complexity of archaeological remains uncovered. Works are to be carried out on a dayrate basis with 2 days allowed for the stripping of the site. Once the area is opened an accurate estimation of estimation will be possible and GAPS will be informed of the schedule. Further time will be allotted for post-excavation works.

4.4 Staffing

The project will be managed by Catherine Rees (MCIfA, BA (Archaeology), MA (Archaeology) Postgraduate Diploma (Historic Environment Conservation) & Matthew Jones (BA (Archaeology), MA (Archaeology). The fieldwork will be conducted by Matthew Jones and/or Catherine Rees with additional suitably qualified field staff brought in as necessary.

All staff will have a skill set equivalent to the CIFA ACIFA/MCIFA 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. 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. Due to the proximity of the development to a number of Scheduled Ancient Monuments Cadw will also be informed as to the programme of works.

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 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.

C.R Archaeology staff 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. This will include illustrations of any cartographic/pictorial sources. The report will contain a site plan showing the locations of any photographs taken.

The final report will include:

- A copy of the agreed specification
- A location plan
- A plan showing the locations of the excavated areas within the development site
- 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
- 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 to GAPS 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 post excavation works.

In the event of a significant discovery it may be necessary to produce an interim report detailing the excavation results before producing a more detailed full report which would incorporate all specialist analysis and the results of any scientific or dating works.

4.7.1 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.

5.0 Bibliography

Chartered Institute for Archaeologists. 2014. Code of Conduct

- Chartered Institute for Archaeologists. 2014. Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology
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www.archaeoleg.org.uk/neo.html www.archaeoleg.org.uk/pdf/neolithic/REGIONAL%20SEMINAR%20NW%20WALES %20NEOLITHIC%20AND%20EARLY%20BRONZE%20AGE.pdf www.archaeoleg.org.uk/pdf/neolithic/VERSION%2001%20NEOLITHIC%20AND%20EARLIER %20BRONZE%20AGE.pdf www.archaeoleg.org.uk/pdf/reviewdocs/neolithicsummary.pdf www.archaeologists.net/sites/default/files/node-files/DBA2010working%20draft.pdf www.archaeologists.net/sites/default/files/node-files/ifa_standards_field_eval.pdf www.bgs.ac.uk/geologyofbritain/home.html www.bradford.ac.uk/life-sciences/business-and-outreach/archaeological-sciences/organic-residueanalysis/sampling-protocol www.cadw.gov.wales/historicenvironment/recordsv1/cof-cymru/?lang=en

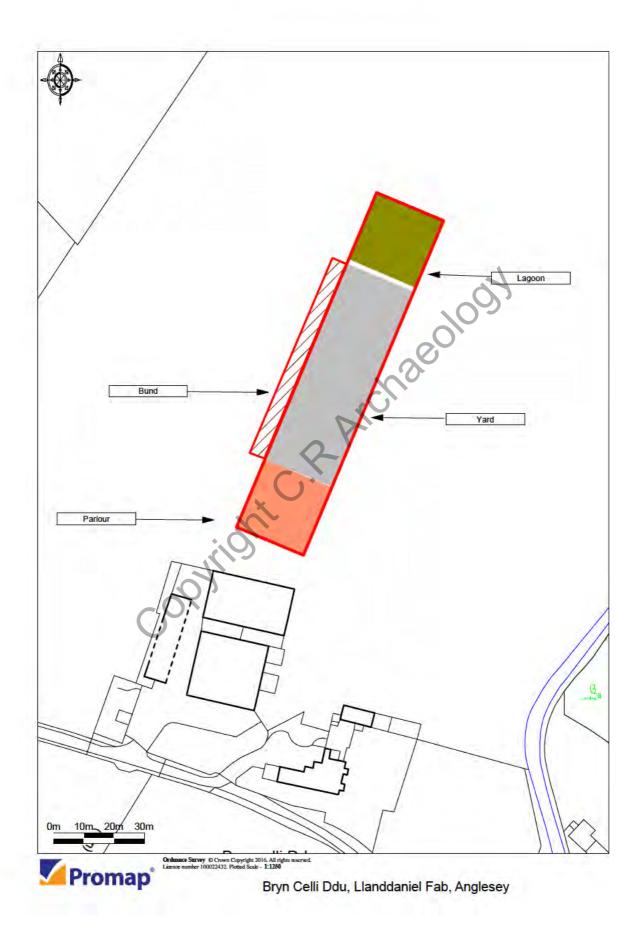
www.ordnancesurvey.co.uk

copyright c.R.M.Chaeology

Appendix B.

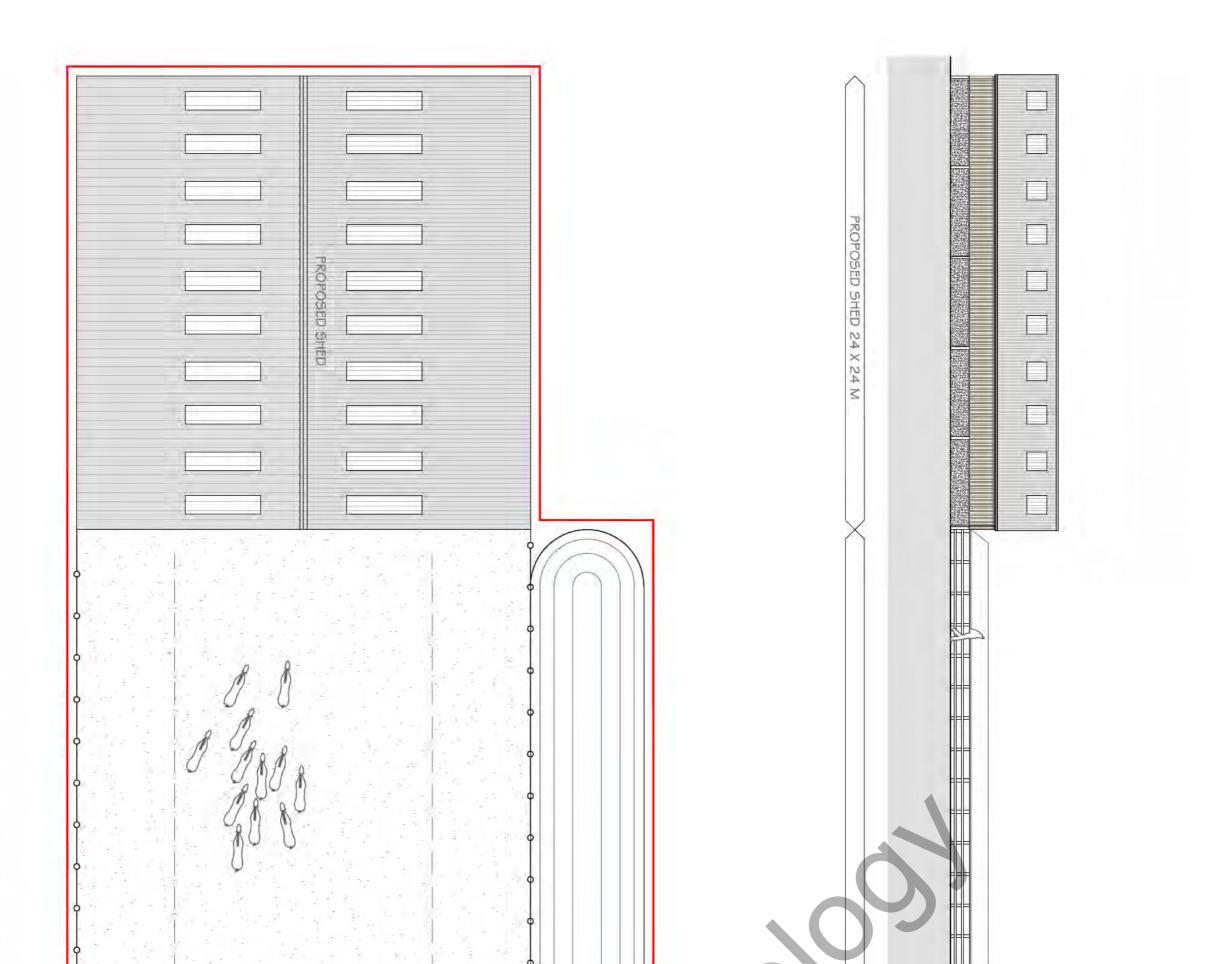
Proposed Site Works

copyright C.R. Archaeology



New Shed at Bryn Celli Ddu, Llanddaniel

Proposed Site Layout 1:200



Barn Studio Linhtfoot Green Farr	Rural Architecture + Residential I	James Bell	As Proposed

Drawing Title Site Layout and Section As Proposed Project New Shed at Bryn Celli Ddu, Llan

Client G8 Fabrications LTD

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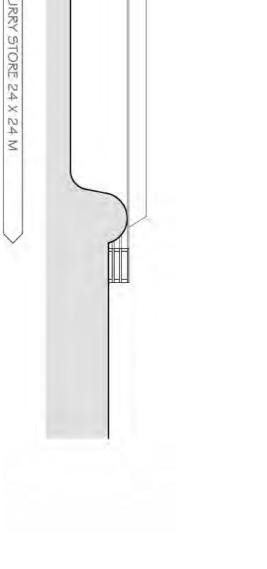
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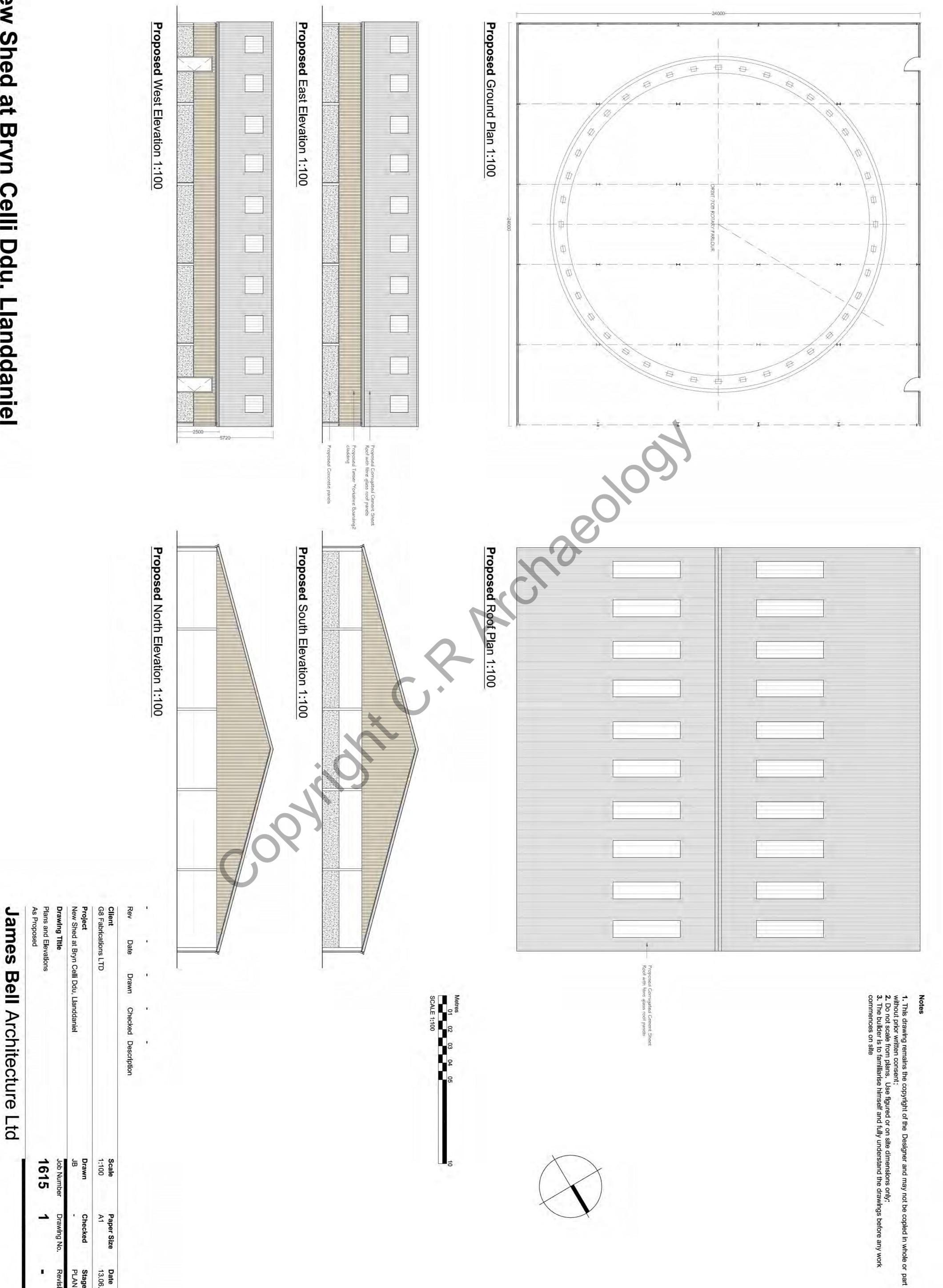
 This drawing remains the copyright of the Designer and may not be copied in whole or part without prior written consent;
Do not scale from plans. Use figured or on site dimensions only;
The builder is to familiarise himself and fully understand the drawings before any work commences on site Notes

Property rm, Schoo School Lane, Brereton, Cheshire, CW11 1RT, Tel: 01477 500648, admin@jamesbellarchitecture.com

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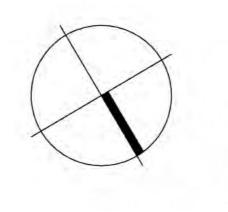




Rural Architecture + Residential Property Barn Studio, Lightfoot Green Farm, Schoo School Lane, Brereton, Cheshire, CW11 1RT, Tel: 01477 500648, admin@jamesbellarchitecture.com

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PROJECT STATEMENT (DAS)



North Elevation - Proposed General Location of Development

BRYN CELLI DDU FARM LLANDDANIEL FAB ANGLESEY LL61 6EQ SH 50853 70314

Proposed Agricultural Development – MILKING PARLOUR, COLLECTING YARD, SLURRY LAGOON and CATTLE TRACKS,

June 08, 2016

1. INTRODUCTION

- 1.1 This Project Statement is a communication and justification tool.
- 1.2 It is addressed to the local planning authority to aid its understanding of the project.
- 1.3 It should be read in conjunction with the supporting documents scheduled in **8.1** below.

2. THE SITE

2.1 The application site is –

BRYN CELLI DDU FARM LLANDDANIEL FAB ANGLESEY LL61 6EQ

3. THE DEVELOPMENT/PROPOSER

3.1 The Applicant is the landowner, The Plas Newydd Estate (Uxbridge 1988 Settlement).

RAICHZeology

3.2 The proposal is a composite application for full Planning Permission for agricultural development, comprising –

Milking Parlour, Collecting Yard, Slurry Lagoon and Cattle Tracks

4. SITE ANALYSIS

- 4.1 The agricultural/planning unit is a 437acre (176ha) working farm.
- 4.2 It comprises a traditional farmhouse and a cluster of outmoded mostly traditional stone/slate and part asbestos-sheeted farm buildings, as well as a steel portal framed/zink hay barn.
- 4.3 Historically it operated as a beef and sheep rearing farm.
- 4.4 Its operation now proposes to change to a dairy farm with a 450-head herd.

- 4.5 All elements of the proposal are necessary to support this new system.
- 4.6 The relevant site is variable in topography and requires minor reconfiguration.

5. LOCATION CONTEXT

- 5.1 The location is typically rural.
- 5.2 The general location fronts an unclassified road.
- 5.3 The location is characterised by undulating open countryside with mature hedgebanks.
- 5.4 There are no near (as to be directly affected) domestic dwellings within 1.25km.
- 5.5 Afon Braint runs within the farm, to its east.

6. RECENT PLANNING HISTORY

- 6.1 There is no known relevant planning history.
- 6.2 None of the farm buildings on the site are listed.
- 6.3 There are two registered Ancient Monuments within the farm
 - * Chambered Cairn (Burial Chamber), located some 100m SW of the farm building cluster.
 - * Standing Stone, located in a field some 350m west of the cluster

These, by their distant locations, are in no way affected by any part of the proposal or its operation.

7. PLANNING POLICY FRAMEWORK

7.1 The determinative policy framework is cited at Part 3.

Chartered Surveyors | Development Consultants

8. APPLICATION DOCUMENTS

8.1 The documents which support the application are –

This **Project Statement** by ERWCONSULTING dated June 08, 2016.

Location Plan ref. ERW/18.04.2016

Location/Route of Cattle Tracks (in red)

Typical Sketch Section of Track

Topographical Survey by NRG

Yard Cross Section JJR/08.06.16

Yard Layout Plan JJR/08.06.16

Lagoon Layout Plan JJR/08.06.16

Lagoon Cross Section JJR/08.06.16

Sketch Plans & Elevations of Proposed Milking Parlour JJR/08.06.16

Archaeolog



Rear/West view of Bryn Celli Ddu farm house

Chartered Surveyors | Development Consultants



Perspective, from Yard entrance



Hay Barn



East elevation

Chartered Surveyors | Development Consultants



North elevation / the proposed site location arrowed

PROJECT STATEMENT. BRYN CELLI DDU, LLANDDANIEL FAB June 08, 2016

Chartered Surveyors | Development Consultants

PART 1. PROJECT DESCRIPTION, DESIGN AND REASONING

CONTEXT - THE GRAZING SYSTEM

The proposed grass conversion system is popularly known as the *New Zealand System*.

This is a grass based 450-herd dairy farming system focusing on grazing as much grass as possible throughout the grazing season being 01 February to the end of November each year.

The system aims to graze 30% of the farm in February and the remaining 70% in March, it is then grazed rotationally going round the farm in 21 to 25 days until October when the farm is grazed once more from the beginning of October to the end of November.

Cows are dried off during November and therefore limited milking occurs during December and January.

The system is focused on maximising the amount of grass the land can grow and utilising as high a proportion of this as possible by grazing it with dairy cows.

Grass is the cheapest form of feed and grazing it is by far the most efficient way of harvesting it.

OPERATING THE PARLOUR SYSTEM

The operation of the milking parlour will be twice a day for 2-3 hours each time, starting at 5.00am and 2.00pm approx.

There is some noise from milking equipment; during milking times the vacuum pump will be operating.

This will be housed within the building, therefore noise will be suppressed.

No other equipment generates noise in the system.

THE CATTLE TRACKS¹

The proposed metalled/stone tracks 4m wide form an essential part of the system as they enable access to all of the farm's grazing without damaging pasture on fields not being grazed, avoiding soil damage and erosion which in turn can lead to water pollution.

It is also essential for animal welfare as cows are required to walk twice a day to and from the pasture, so need the optimum surface to do so quickly, in an energy-efficient manner and one that does not cause strain or provoke lameness.

The tracks are electrically-fenced to prevent the cattle straying

The spine of the track extends from Rhosbothan in the NE, to the public road to the SW.

THE MILKING PARLOUR²

The parlour comprises of a simple square-plan building measuring approx. 24m x 24m, so a gross external floor area of 576m2.

The height is 5.75m to ridge / 2.50m to eaves.

These levels are lower than those of the existing traditional building cluster.

The parlour is located to the north side, directly adjacent to the established cluster which are substantially higher and more imposing.

The roof cover is corrugated cement sheets with fibreglass roof-light panels.

The side elevations are corrugated alloy sheets and concrete lower panels, but the gables are open and have no cladding materials.

The shed is required to house a modern milking parlour, designed for the herd to be milked by 2no persons in as short a time as possible, increasing business efficiency and limiting the amount of time the herd spends away from their grazing and standing on concrete.

Cows will walk from the grazing along the tracks, enter onto the concrete collecting yard that will allow them to access the back of the parlour.

¹ Prior Notification procedure

² Prior Notification procedure

The collecting yard is floored in concrete and has a radius of approx. 14m.

Once milked cows exit back onto the track and return to grazing.

Along with the parlour the shed will house all plant and equipment required for milking, bulk milk tanks, office and storage.

THE COLLECTING YARD

The yard measures 1632m2 and is floored in concrete and bounded by an earth bund.

THE SLURRY LAGOON

The lagoon measures 24m x 24m, so an area of 576m2, with an earth perimeter bund and a 1.8m high enclosing fence, with a non-permeable liner to prevent leakage.

Slurry from the lagoon is to be regularly spread over the holding.



Perspective of the Location, from the Burial Chamber, looking N/NE

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PART 2. DESKTOP ASSESSMENT OF POTENTIAL ISSUES

VISUAL IMPACT

The metalled cattle tracks have minimal visual impact, they are low profiled at ground level and as such merge naturally into the landscape.

They are electrically-fenced, to avoid straying.

Their route follows a number of existing natural contours and established field boundaries, and mature hedge banks provide substantial natural screening.

So, the visual impact is negligible when the alternative would be to track across bare soil which would be visually worse, cover a greater area, be uncontrolled, and cause soil erosion leading to potential pollution and damage to any archaeological artefacts, as well as being detrimental to animal welfare.

The parlour is located to the north side of the building cluster and as aforesaid has eaves and ridge levels lower than those of the cluster.

ARCHAEOLOGY

There is no known, or measurable, archaeological impact as the 4m wide cattle tracks are laid in stone directly onto the surface of the land.

The proposed parlour requires only pad-excavations for the steel stanchions and is located within the farmyard cluster.

SMELLS

There is a negligible amount of smells as cows are predominantly out grazing and there is no significant build-up or storage of manures.

TRAFFIC

There is a HGV milk collection maximum once a day, reduced to every other day throughout February, March, October and November. Traffic movement is no greater than for the previous system of farming.

There is nominal movement of staff vehicles and routine deliveries.

HERITAGE

The Burial Chamber is unaffected by the development or its operation.

It remains openly accessible to the general public.



The Burial Chamber, enclosed in a square-plot, steel railed, SW of the project.



The Access from the public road, in course of splay and visibility improvement

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PART 2. ACCESS STATEMENT

2.1 Planning Objective

* Ensuring ease of access for all

Design Justification –

The proposal utilises the existing access from the unclassified road network.

It ensures safe, easy and unrestricted access for all.

It achieves inclusive pedestrian and vehicular access to, within, and from the site.

It achieves car parking and turning spaces on-site in compliance with the Design Guide, and local highway authority requirements.

2.2 Policy Context

The proposal accords with extant policy and guidance relating to access and car parking standards.

2.3 Specific Issues.

None, other than that the access has just been improved to maximise visibility and entry for HGV's.

2.4 Future Maintenance

Future maintenance of the access will be a private arrangement.

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PART 3. POLICY JUSTIFICATION STATEMENT

3.1 The Determination

By s38(6) of the Planning and Compulsory Purchase Act 2004 the determination must be made by reference to the extant local development plan, or other material considerations.

3.2 The Development Plan

The proposal is subject to and in our opinion sufficiently supported by the RAICHBEL following policy framework-

Gwynedd Structure Plan (1993) Policies

Ynys Mon Local Plan (1996) Policies

Stopped UDP (2005) Policies

Other Material Considerations 3.3

None, other than to state that this is a typical modern agricultural operation located in an established agricultural locality with good road access and no neardomestic neighbours.

Public footpath No.? runs through the farm, which is not impeded.

The property always was, and remains, a large, lawful, established working farm.

There is no proposed change of use, only of farming method.

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CONCLUSION

IN SUMMARY, THE PROPOSAL -

* IS SUPPORTED BY CURRENT AGRICULTURAL PLANNING POLICY AND GUIDANCE

* THERE IS NO MEASURABLE INJURY TO -

*LANDSCAPE CHARACTER OR VISUAL APPEARANCE rchaeolog

* HIGHWAY SAFETY

***PRIVATE AMENITIES**

***HERITAGE ASSETS**

* ARCHAEOLOGY, IF ANY

THE PROPOSAL MERITS CONDITIONAL APPROVAL.

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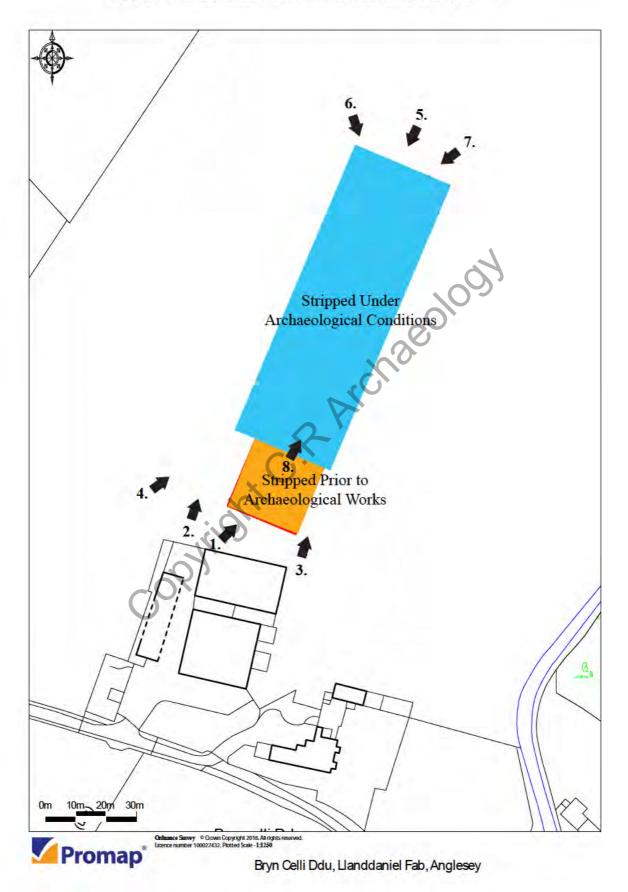
June 08, 2016

ENDS.

Appendix C.

Location and Direction of Photographic Plates

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Appendix C. Location and Direction of Photographic Plates