



---

# **New Access Road, Bryn Cefni, Llangefni, Ynys Môn, LL77 7SE.**

**January 2020  
V 1.0**



**aeon archaeology**



Archaeological Watching Brief  
Project Code: A0217.1  
Report no. 0229

---



aeon archaeology

---

# **New Access Road, Bryn Cefni, Llangefni, Ynys Môn, LL77 7SE.**

## **January 2020**

Report no. 0229 v1.0

Archaeological Watching Brief

Aeon Archaeology  
25, Mold Road  
Broughton  
Chester  
CH4 0PQ

Written by: Josh Dean BA ACIfA

Checked by: Richard Cooke BA MA MCIfA



Project Code: A0217.1  
Date: 13/01/2020  
Client: G.H. James Cyf  
[info@aeonarchaeology.co.uk](mailto:info@aeonarchaeology.co.uk)

---



aeon archaeology

---

# **New Access Road, Bryn Cefni, Llangefni, Ynys Môn, LL77 7SE.**

## **January 2020**

### **Copyright Declaration:**

Aeon Archaeology grants permission for the material presented within this report to be used by the archives/repository with which it is deposited, in perpetuity, although Aeon Archaeology retains the right to be identified as the author of all project documentation and reports, as specified in the Copyright, Designs and Patents Act 1988 (chapter IV, section 79). The permission will allow the repository to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.

### **Disclaimer:**

This Report has been prepared solely for the person/party which commissioned it and for the specifically titled project or named part thereof referred to in the Report. The Report should not be relied upon or used for any other project by the commissioning person/party without first obtaining independent verification as to its suitability for such other project, and obtaining the prior written approval of Aeon Archaeology. Aeon Archaeology accepts no responsibility or liability for the consequences of this Report being relied upon or used for any purpose other than the purpose for which it was specifically commissioned. The entitlement to rely upon this Report rests solely with the person/party which commissioned it and does not extend to any other person/party. Aeon Archaeology accepts no responsibility or liability for any use of or reliance upon this Report by any person/party other than the commissioning person/party.



Project Code: A0217.1  
Date: 13/01/2020  
Client: G.H. James Cyf  
[info@aeonarchaeology.co.uk](mailto:info@aeonarchaeology.co.uk)

---

# Figures

**Figure 01:** Location of the Bryn Cefni Industrial Estate, Llangefni, Anglesey. Scale 1:20,000 at A4.

**Figure 02:** Location of the Bryn Cefni Industrial Estate, Llangefni, Anglesey. Scale 1:5,000 at A4.

**Figure 03:** Location of the Bryn Cefni Industrial Estate, Llangefni, Anglesey. Scale 1:2,500 at A4.

**Figure 04:** Figure showing location of California Bearing Ratio (CBR) pits and Percolation pits within the New Access Road. Also shown are the angles of photographic plates 1-29 (excluding 17 & 18, see Figure?).

**Figure 05:** Figure showing location of post medieval wall (106), section through wall, generic section and stratigraphy seen in CBR pit 5 and photographic plates 17&18.

**Figure 06:** Illustration of site formation stratigraphy imposed over section of CBR 4 - scale 1m.

# Plates

- Plate 01:** Pre excavation shot of Compound Area, Parc Bryn Cefni, Llangefni, Ynys Môn - from the east - scale 1m
- Plate 02:** Pre excavation shot of Compound Area, Parc Bryn Cefni, Llangefni, Ynys Môn - from the west - scale 1m
- Plate 03:** Post topsoil strip of area looking from Chainage (CH) 150 to CH70 , Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m
- Plate 04:** Post topsoil strip of area looking from Chainage (CH) 70 to CH150 , Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m
- Plate 05:** California Bearing Ratio (CBR) Pit 1 and Percolation (PERC.) Pit 1 in Plan, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m
- Plate 06:** CBR Pit 1 and PERC. Pit 1 in section (CH30), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southwest - scale 1m
- Plate 07:** CBR Pit 2 in Plan (CH70), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m
- Plate 08:** CBR Pit 2 in Section (CH70), Parc Bryn Cefni, Llangefni, Ynys Môn - from the northeast - scale 0.50m
- Plate 09:** CBR Pit 3 in Plan (CH110), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m
- Plate 10:** CBR Pit 3 in Section (CH110), Parc Bryn Cefni, Llangefni, Ynys Môn - from the northeast - 0.50m
- Plate 11:** CBR Pit 4 in Plan (CH150), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m
- Plate 12:** CBR Pit 4 in Section (CH150), Parc Bryn Cefni, Llangefni, Ynys Môn - from the northeast - 0.50m
- Plate 13:** CBR Pit 5 in Section (CH10), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m
- Plate 14:** PERC. Pit 2 in section (CH50), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southwest - scale 1m
- Plate 15:** PERC. Pit 3 in section (CH70), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southwest - scale 1m
- Plate 16:** PERC. Pit 4 in section (CH110), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southwest - scale 1m
- Plate 17:** Post-medieval wall (106), (PRN 74,665) shot in Plan, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m
- Plate 18:** Post-medieval wall (106), (PRN 74,665) shot in Section, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m
- Plate 19:** South-western arm of Hammer Head (HH) CH10 - CH30 following reduced dig into redeposited clay, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southwest - scale 1m
- Plate 20:** Generic section of site following reduced dig, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m
- Plate 21:** North-Eastern arm of Hammer Head (HH) CH30 - CH10, following reduced dig into redeposited clay (102), Parc Bryn Cefni, Llangefni, Ynys Môn - from the northeast - scale 1m
- Plate 22:** Reduced dig into redeposited clay layer (102) between CH150 - CH110, Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m
- Plate 23:** Reduced dig into redeposited clay layer (102) between CH110 - CH150, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m
- Plate 24:** Reduced dig into redeposited clay layer (102) between CH110 - CH70, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m

# Plates

**Plate 25:** Reduced dig into redeposited clay layer (102) between CH110 - CH70, Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m

**Plate 26:** Reduced dig into redeposited clay layer (102) between CH70 - CH110, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m

**Plate 27:** Reduced dig into redeposited clay layer (102) Access Road (A) sub station shot in plan, Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m

**Plate 28:** Reduced dig into redeposited clay layer (102) Access Road (A) sub station shot in section, Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m

**Plate 29:** Reduced dig into redeposited clay layer (102) Access Road (B) estate road shot in plan, Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m



## Contents

1.0	NON-TECHNICAL SUMMARY .....	2
2.0	INTRODUCTION .....	3
3.0	POLICY CONTEXT .....	4
4.0	PROJECT AIMS.....	6
5.0	METHODOLOGY – ARCHAEOLOGICAL WATCHING BRIEF .....	8
5.1	Watching Brief.....	8
5.2	Data Collection from Site Records .....	8
5.3	Artefact Methodology .....	9
5.4	Environmental Samples Methodology .....	9
5.5	Report and dissemination.....	9
6.0	ARCHAEOLOGICAL BACKGROUND.....	10
7.0	QUANTIFICATION OF RESULTS .....	11
7.1	The Documentary Archive.....	11
7.2	Environmental Samples .....	11
7.3	Artefacts .....	11
8.0	RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF.....	12
8.1	Overview.....	12
8.2	Topsoil Strip.....	12
8.3	California Bearing Ratio (CBR) Pits (1 – 5).....	12
8.4	Percolation Pits (1-3) .....	13
9.0	CONCLUSION AND RECOMMENDATIONS.....	15
10.0	SOURCES.....	16
	APPENDIX I – DETAILS OF ARCHAEOLOGICAL CONTEXTS .....	17
	APPENDIX II: WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL WATCHING BRIEF .....	18

## 1.0 NON-TECHNICAL SUMMARY

*Comisiynwyd Aeon Archaeology gan G.H. James Cyf, y Cleient o hyn ymlaen, i gynnal briff gwylio archeolegol yn ystod y gwaith daear sy'n gysylltiedig ag adeiladu ffordd fynediad newydd a thanciau tanddaearol mawr cysylltiedig yn ystâd ddiwydiannol Bryn Cefni, Llangefni, Ynys Môn LL77 7SE (wedi'i ganoli ar NGR SH 46668 74969).*

*Rhoddwyd caniatâd cynllunio llawn ar gyfer y prosiect gan Gyngor Sir Ynys Môn ym mis Ebrill 2019 (Rhif ap FPL / 2019/42) er na roddwyd unrhyw amod penodol i archeoleg i'r caniatâd. Cafwyd ymateb Ymgynghoriad gan yr Archeolegydd Rheoli Datblygu yng Gwynedd Archaeological Planning Service (GAPS) a oedd yn argymhell y dylid cynnal briff gwylio archeolegol ar y gwaith daear cysylltiedig.*

*Roedd y gwaith yn ystâd ddiwydiannol Bryn Cefni yn cynnwys cloddio pum pwll o enw California Bearing Ratio (CBR), pedwar pwll trylfiad a gwneud y ddaear yn is gan 0.40m - 1.20m er mwyn cyflawni lefel ffurfio, y cyfan ar gyfer adeiladu a ffordd fynediad newydd. Wrth i'r uwchbridd gael ei symud o'r ardal, datgelwyd un wal ffin cae segur, rhagwelwyd hyn gan gyfnod cynharach o waith, roedd y wal wedi dadfeilio'n drwm ac yn pwyntio o'r gogledd-orllewin i'r de-ddwyrain, darganfuwyd ychydig o ddarnau o grochenwaith Edwardaidd ger yr wal. Fodd bynnag, ar ôl archwilio haenau pridd y safle daeth yn amlwg bod gan y safle lawer iawn o dynnu pridd a chasglu stoc pellach o 'glai wedi'i ail-leoli'; mae'r digwyddiad hwn bron yn sicr yn gysylltiedig ag adeiladu'r unedau diwydiannol eraill sydd wedi'u lleoli i'r gogledd-ddwyrain a'r de-orllewin o'r ardal a gorchuddio gan y brîff gwylio.*

Aeon Archaeology was commissioned by G.H. James Cyf, hereafter the Client, to carry out an archaeological watching brief during the groundworks associated with the installation of a new access road and associated attenuation tanks at Bryn Cefni industrial estate, Llangefni, Isle of Anglesey LL77 7SE (centred on **NGR SH 46668 74969**).

Full planning permission for the project was granted by Isle of Anglesey County Council in April 2019 (**App no. FPL/2019/42**) although no condition specific to archaeology was applied to the permission. Consultation response from the Development Control Archaeologist at the Gwynedd Archaeological Planning Service (GAPS) did however recommend that an archaeological watching brief be maintained on associated groundworks.

The works at Bryn Cefni industrial estate involved the excavation of five California Bearing Ratio (CBR) pits, four percolation pits and the reduction of the existing ground by 0.40m - 1.20m in order to achieve a formation level for the construction of a new access road. During the initial topsoil strip of the area a single relict field boundary wall was revealed which had been anticipated by an earlier phase of work, the wall was heavily dilapidated and orientated northwest to southeast, some fragments of Edwardian pottery were recovered in the vicinity of the wall. However, following an examination of the site stratigraphy it became evident that the site had been subject to a large soil strip and subsequent stockpiling of redeposited clay; this event was almost certainly associated with the construction of the other industrial units found to the northeast and southwest of the area covered by the watching brief.



## 2.0 INTRODUCTION

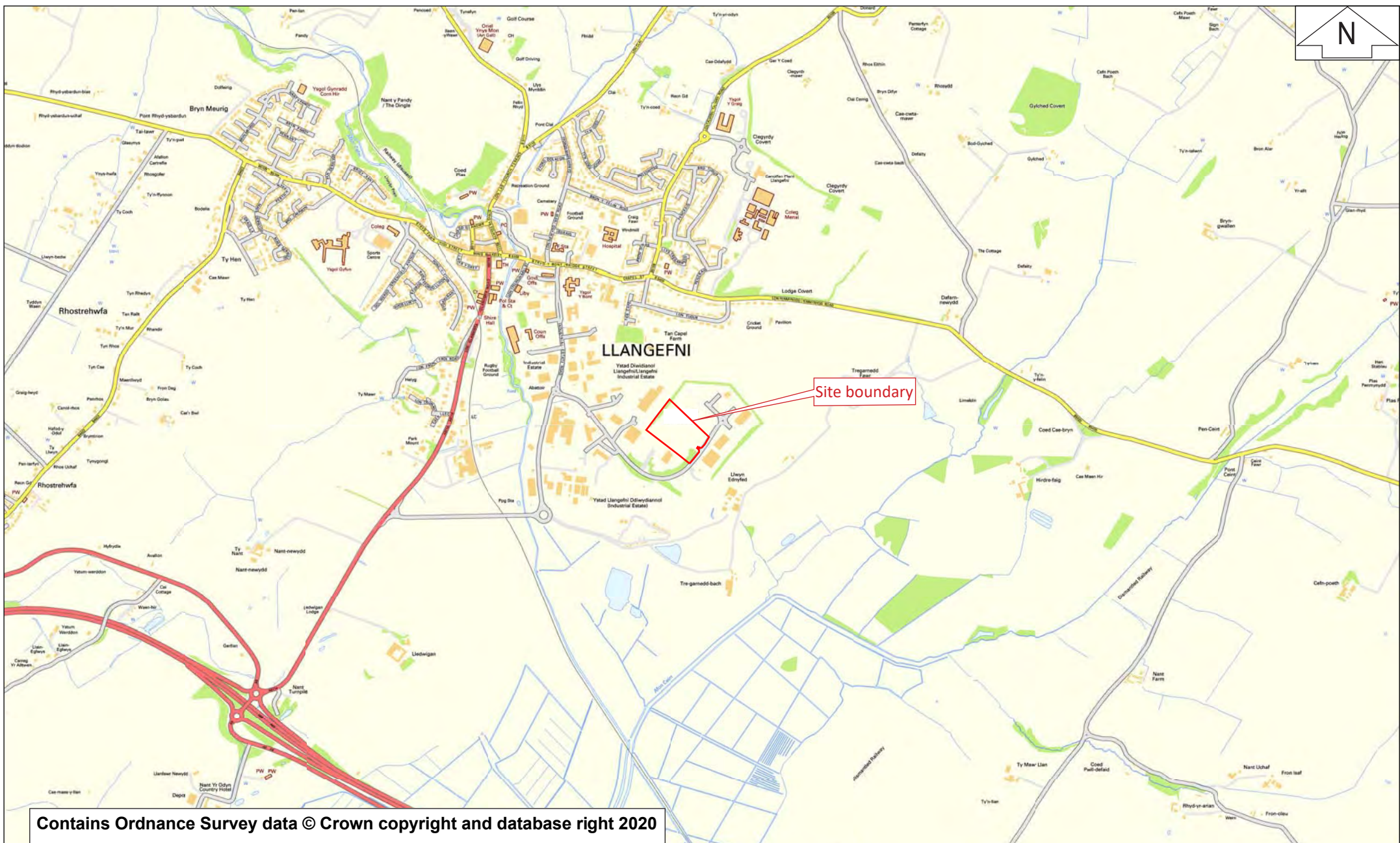
Aeon Archaeology was commissioned by G.H. James Cyf, hereafter the Client, to carry out an archaeological watching brief during the groundworks associated with the installation of a new access road and associated attenuation tanks at Bryn Cefni industrial estate, Llangefni, Isle of Anglesey LL77 7SE (centred on **NGR SH 46668 74969**).

Full planning permission for the project was granted by Isle of Anglesey County Council in April 2019 (**App no. FPL/2019/42**) although no condition specific to archaeology was applied to the permission. Consultation response from the Development Control Archaeologist at the Gwynedd Archaeological Planning Service (GAPS) did however recommend that an archaeological watching brief be maintained on associated groundworks.

The project was located within a large area of open land, as detailed in figures 1-3. The new access scheme included the excavation of five California Bearing Ratio (CBR) pits, four percolation pits and the reduction of the existing ground by 0.40m - 1.20m in order to achieve a formation level for the construction of a new access road.

The work adhered to the guidelines specified in Standard and Guidance for Archaeological Watching Brief (Chartered Institute for Archaeologists, 2014).

A Written Scheme of Investigation (WSI) was produced by Aeon Archaeology in July 2018 (appendix I) and submitted to the Development Control Archaeologist at GAPS. The WSI was subsequently approved in writing. This document reports on the results of the archaeological watching brief.



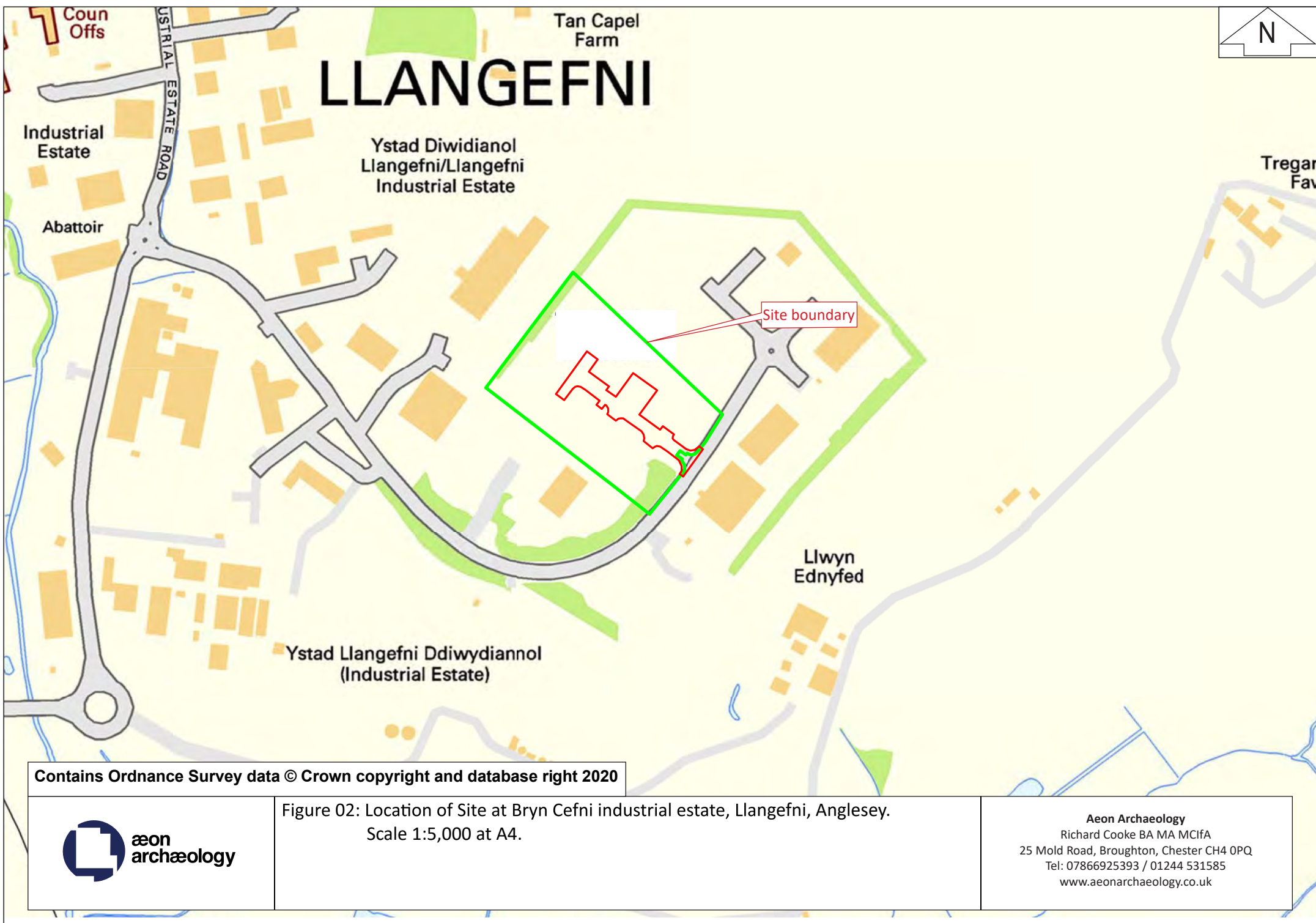
Contains Ordnance Survey data © Crown copyright and database right 2020

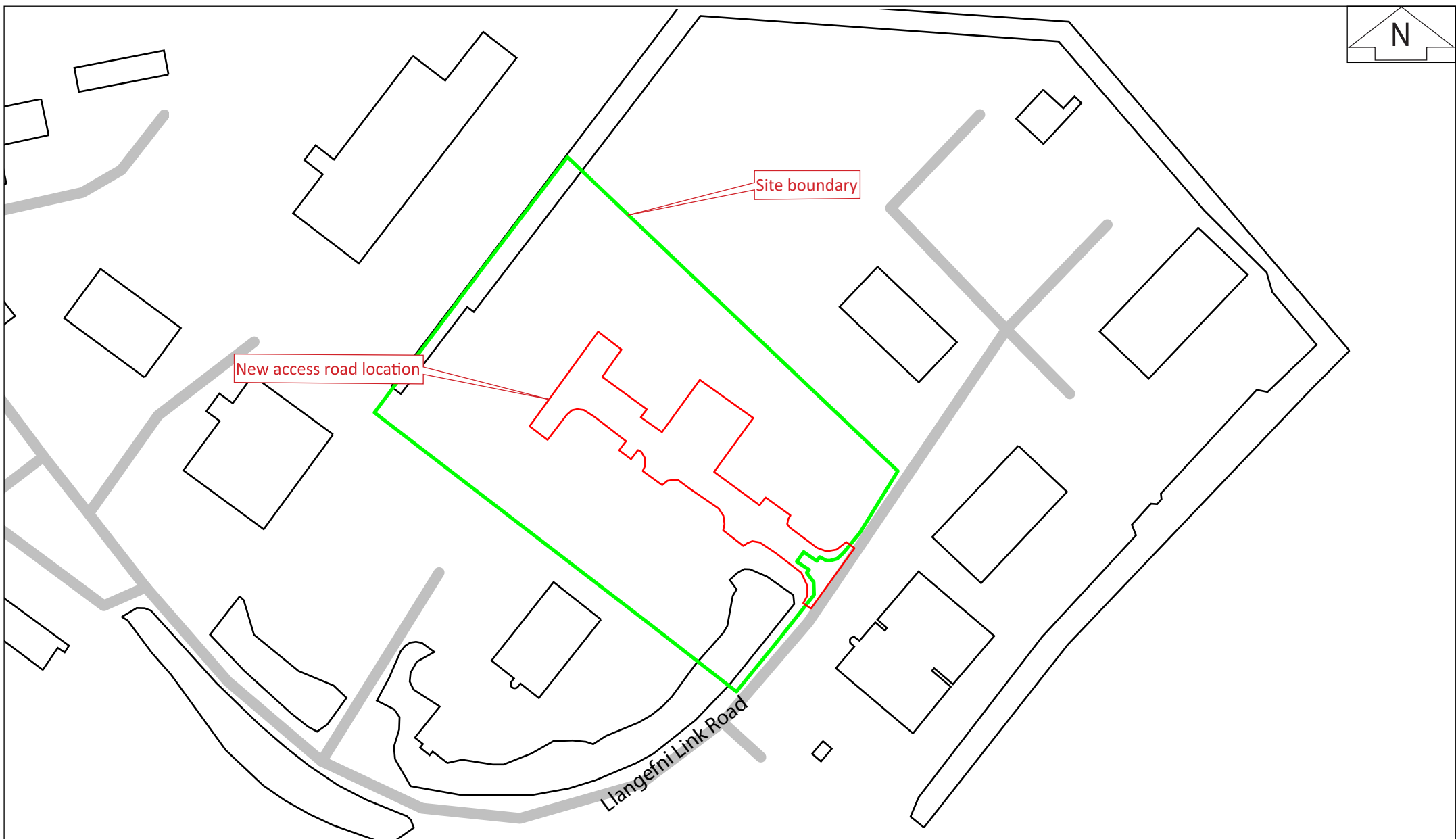


Figure 01: Location of Site at Bryn Cefni industrial estate, Llangefni, Anglesey.  
Scale 1:20,000 at A4.

**Aeon Archaeology**  
Richard Cooke BA MA MCifA  
25 Mold Road, Broughton, Chester CH4 0PQ  
Tel: 07866925393 / 01244 531585  
[www.aeonarchaeology.co.uk](http://www.aeonarchaeology.co.uk)







Contains Ordnance Survey data © Crown copyright and database right 2020



Figure 03: Location of Site at Bryn Cefni industrial estate, Llangefni, Anglesey.  
Scale 1:2,500 at A4.

**Aeon Archaeology**  
Richard Cooke BA MA MCifA  
25 Mold Road, Broughton, Chester CH4 0PQ  
Tel: 07866925393 / 01244 531585  
[www.aeonarchaeology.co.uk](http://www.aeonarchaeology.co.uk)

### 3.0 POLICY CONTEXT

At an international level there are two principal agreements concerning the protection of the cultural heritage and archaeological resource – the UNESCO *Convention Concerning the Protection of World Cultural and Natural Heritage*<sup>1</sup> and the *European Convention on the Protection of the Archaeological Heritage*<sup>2</sup>, commonly known as the Valetta Convention. The latter was agreed by the Member States of the Council of Europe in 1992, and also became law in 1992. It has been ratified by the UK, and responsibility for its implementation rests with Department for Culture Media and Sport.

The management and protection of the historic environment in Wales is set out within the following legislation:

- The Planning (Listed Buildings and Conservation Areas) Act 1990 (As amended)
- The Historic Environment (Wales) Act 2016
- The Town and Country Planning Act 1990
- The Ancient Monuments and Archaeological Areas Act 1979
- The Town and Country Planning (General Permitted Development Order) 1995 (As amended)

The Historic Environment (Wales) Act is the most recent legislation for the management of the Historic Environment and amends two pieces of UK legislation — the Ancient Monuments and Archaeological Areas Act 1979 and the Planning (Listed Buildings and Conservation Areas) Act 1990. The new Act has three main aims:

- to give more effective protection to listed buildings and scheduled monuments;
- to improve the sustainable management of the historic environment; and
- to introduce greater transparency and accountability into decisions taken on the historic environment.

With respect to the cultural heritage of the built environment the *Planning (Conservation Areas and Listed Buildings) Act*<sup>3</sup> 1990 applies. The Act sets out the legislative framework within which works and development affecting listed buildings and conservation areas must be considered. This states that:-

*“In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses” (s66(1))*

Other known sites of cultural heritage/archaeological significance can be entered onto county-based Historic Environment Records under the *Town and Country Planning 1995*.

Planning Policy Wales sets out the land use planning policies of the Welsh Government. Chapter 6 covers the historic environment and emphasises that the positive management of change in the

---

<sup>1</sup> UNESCO, 1972, *Convention Concerning the Protection of the World Cultural and Natural Heritage*

<sup>2</sup> Council of Europe, 1992, *European Convention on the Protection of the Archaeological Heritage*

<sup>3</sup> Great Britain. *Planning (Conservation Areas and Listed Buildings) Act*. Elizabeth II.(1990), London: The Stationery Office

historic environment is based on a full understanding of the nature and significance of historic assets and the recognition of the benefits that they can deliver in a vibrant culture and economy.

Various principles and policies related to cultural heritage and archaeology are set out in the Planning Policy Wales which guide local planning authorities with respect to the wider historic environment.

The following paragraphs from Planning Policy Wales are particularly relevant and are quoted in full:

Paragraph 6.5.5 concerns planning applications:

*The conservation of archaeological remains is a material consideration in determining a planning application, whether those remains are a scheduled monument or not. Where nationally important archaeological remains, whether scheduled or not, and their settings are likely to be affected by proposed development, there should be a presumption in favour of their physical protection in situ. It will only be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a scheduled monument (or an archaeological site shown to be of national importance) or has a significantly damaging effect upon its setting. In cases involving less significant archaeological remains, local planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development.*

Planning Policy Wales is supplemented by a series of Technical Advice Notes (TAN). Technical Advice Note 24: The Historic Environment contains detailed guidance on how the planning system considers the historic environment during development plan, preparation and decision making on planning and listed building consent applications. TAN 24 replaces the following Welsh Office Circulars:

- 60/96 Planning and the Historic Environment: Archaeology
- 61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas
- 1/98 Planning and the Historic Environment: Directions by the Secretary of State for Wales

#### 4.0 PROJECT AIMS

The aim of the watching brief works was to characterise the known, or potential, archaeological remains uncovered during the ground works associated with the proposed creation of a new access road at Bryn Cefni Industrial Estate, Llangefni, Isle of Anglesey, LL77 7SE.

The broad aims of the archaeological watching brief were to:

- To allow, within the resources available, the opportunity to gain information about and record the presence/absence, nature and date of archaeological remains on the Site affected by excavations and groundworks, the presence and nature of which could not be established with sufficient confidence in advance of works which may disturb them.
- To provide the facility to signal to the relevant authorities, before irreversible impact to remains that an archaeological and/or historic find has been made for which the resources allocated to the watching brief itself are inadequate to support their treatment to an adequate and satisfactory standard.

The detailed objectives of the archaeological watching brief were:

- To observe and recover any artefacts of archaeological significance.
- To record the location, dimensions and nature of any deposits, features, structures or artefacts of archaeological significance.
- To recover samples of any deposits considered to have potential for analysis for palaeoenvironmental data should the opportunity arise.

The management of this project has followed the procedures laid out in the standard professional guidance *Management of Research Projects in the Historic Environment Project Manager's Guide* (English Heritage 2006; rev 2015), and in the Chartered Institute for Archaeologists *Archaeological Watching Brief* (Chartered Institute for Archaeologists, 2014). Five stages are specified:

Phase 1: project planning

Phase 2: fieldwork

Phase 3: assessment of potential for analysis and revised project design

Phase 4: analysis and report preparation

Phase 5: dissemination

The current document reports on the phase 4 analysis and states the means to be used to disseminate the results. In this instance it was not necessary to prepare a revised project design as alluded to in Phase 3; as there was a paucity of evidence recovered in Phase 2 in terms of archaeological features and therefore did not warrant any alteration to the initial project design.

The site is to be set in its landscape context so that its full character and importance can be understood. All the information is to be presented in a report that will be held by the Historic Environment Record (HER) and the National Monument Record of the Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW) for long term archiving so that it can be

accessible to the public and future researchers. This phase of work also includes archiving the material and documentary records from the project.



## 5.0 METHODOLOGY – ARCHAEOLOGICAL WATCHING BRIEF

### 5.1 Watching Brief

The CIfA maintains a standard for archaeological watching brief which states that:

*An archaeological watching brief will record the archaeological resource during development within a specified area using appropriate methods and practices. These will satisfy the stated aims of the project, and comply with the Code of conduct and other relevant by-laws of CIfA.*

An archaeological watching brief is defined by the CIfA as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons (CIfA 2014a). The watching brief will take place within a specified area within the Site where there is a possibility that archaeological deposits may be disturbed or destroyed.

The CIfA further identifies the purpose of a watching brief as allowing, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established in advance of development or other potentially disruptive works.

It is also important to note that a watching brief provides an opportunity, if needed, for a signal to be made to all interested parties, before the destruction of the archaeological materials, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.

A watching brief is, therefore, not intended to reduce the requirement for excavation or preservation of known or inferred deposits, and it is intended to guide, not replace, any requirement for contingent excavation or preservation of possible deposits.

All excavations were undertaken using a mechanical excavator fitted with a toothless ditching bucket. A photographic record was maintained throughout, using a digital SLR camera (Canon 6000D) set to maximum resolution and any subsurface remains were to be recorded photographically, with detailed notations and measured drawings being undertaken if required.

In the event of archaeological discovery features were to be excavated by hand and fully recorded using Aeon Archaeology pro-formas, digital photographs, and plan and section drawings taken at a suitable scale (usually 1:20 for plan drawings and 1:10 for section drawings).

The archive produced is held at Aeon Archaeology under the project code **A0217.1**.

### 5.2 Data Collection from Site Records

A database of the site photographs was produced to enable active long-term curation of the photographs and easy searching. The site records were checked and cross-referenced and photographs were cross-referenced to contexts. These records were used to write the site narrative and the field drawings and survey data were used to produce an outline plan of the site.

All paper field records were scanned to provide a backup digital copy. The photographs were organised and precisely cross-referenced to the digital photographic record so that the Gwynedd Archaeological Trust (GAT) HER can curate them in their active digital storage facility.

### 5.3 Artefact Methodology

All artefacts were to be collected and processed including those found within spoil tips. They would be bagged and labelled as well any preliminary identification taking place on site. After processing, all artefacts would be cleaned and examined in-house at Aeon Archaeology. If required artefacts would be sent to a relevant specialist for conservation and analysis.

The recovery policy for archaeological finds was kept under review throughout the archaeological watching brief. Any changes in recovery priorities would be made under guidance from an appropriate specialist and agreed with the Client and the Gwynedd Archaeological Planning Service (GAPS) Development Control Archaeologist. There was a presumption against the disposal of archaeological finds regardless of their apparent age or condition.

### 5.4 Environmental Samples Methodology

The sampling strategy and requirement for bulk soil samples was related to the perceived character, interpretational importance and chronological significance of the strata under investigation. This ensured that only significant features would be sampled. The aim of the sampling strategy was to recover carbonised macroscopic plant remains, small artefacts particularly knapping debris and evidence for metalworking.

Advice and guidance regarding environmental samples and their suitability for radiocarbon dating, as well as the analysis of macrofossils (charcoal and wood), pollen, animal bones and molluscs would be obtained from Oxford Archaeology if required.

### 5.5 Report and dissemination

A full archive including plans, photographs, written material and any other material resulting from the project was prepared. All plans, photographs and descriptions were labelled, and cross-referenced, and will be lodged within a suitable repository to be agreed with the archaeological curator within six months of the completion of the project.

A draft copy of the report has been sent to the client and upon written approval from them paper and digital copies of the report will be sent to the regional HER, the GAPS Development Control Archaeologist, and will be logged with the RCAHMW. Copies of all notes, plans, and photographs arising from the watching brief will be stored at Aeon Archaeology under the project code **A0217.1** with the originals being lodged in a suitable repository to be agreed with the archaeological curator.

The project report and archive will adhere to the Welsh Trusts' and Cadw's *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (2018) including the translation of a non-technical summary into the medium of Welsh.

The standards for the digital archive will adhere to those set out in *Guidelines for Digital Archaeological Archives* (RCAHMW 2015).

## 6.0 ARCHAEOLOGICAL BACKGROUND

An archaeological assessment and subsequent geophysical survey of the proposed access road location and the immediate surrounding developable land was produced by the Gwynedd Archaeological Trust (GAT) in January 2019 (report 1444), the results of which need not be rehearsed here. However, in summary the immediate environs of the Site have been subject to previous archaeological assessment, evaluation and mitigation which has revealed prehistoric, Roman and medieval activity. The area of the proposed new access road was up until recently agricultural fields with former field boundaries shown on the 1843 Llangefni tithe map onwards. The GAT geophysical survey did not identify any features of definitive archaeological interest; however, two anomalies were identified as possible former field boundaries, whilst further anomalies suggested more modern disturbance.

Despite the apparent ground disturbance from the existing industrial estate and modern agricultural practice the Site was still thought to retain the potential for preserved archaeological remains at sub-surface level, and as a minimum it was expected that possible ditches (feature 6 in GAT report 1444) and relict field boundaries (features 1 and 2 in GAT report 1444) were to be encountered during the watching brief. Upon the demarcation of the area to be stripped of soil it became clear that feature 6 lay further to the north and would not be encountered by the works.

## **7.0 QUANTIFICATION OF RESULTS**

### **7.1 The Documentary Archive**

The following documentary records were created during the archaeological watching brief:

Watching brief day sheets	8
Context Sheets	9
Digital photographs	72

### **7.2 Environmental Samples**

No environmental samples were taken during the extent of these archaeological works and no ecofacts recovered.

### **7.3 Artefacts**

A single sherd of Edwardian blue and white transfer printed ware and a single sherd of early 20<sup>th</sup> century blackware were recovered from the topsoil in the proximity of the relict field wall (106). Apart from these ceramics the soils only contained modern agricultural refuse e.g. fragments of corroded barbed wire, fencing and plastic.

## **8.0 RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF**

### **8.1 Overview**

The archaeological watching brief was maintained by Josh Dean BA, archaeological contractor at Aeon Archaeology. The site was attended at various dates spread across August 2019 and the weather conditions varied between bright sunshine, overcast with persistent rain to heavy rain.

The works at Bryn Cefni industrial estate involved the excavation of five California Bearing Ratio (CBR) pits, four percolation pits and the reduction of the existing ground by 0.40m - 1.20m in order to achieve a formation level for the construction of a new access road. All of these works were conducted with a 13-tonne tracked excavator with toothless ditching bucket.

A single archaeological feature was encountered during the watching brief near the northern end of the site; a single linear relict field boundary wall (106) which was 62.30m in length and was orientated northeast to southwest.

### **8.2 Topsoil Strip**

Initially the site was reduced by 0.20m which included the removal of 0.15m of a soft dark black-brown, clay-silt topsoil (103) with frequent sub rounded pebbles and occasional plastic inclusions. It also removed 0.05m of a very firm, mid grey/orange-brown, silt-clay subsoil (102) with occasional sub angular and sub rounded small boulder inclusions. During this process the relict field wall (106) was discovered; this was located near the north western end of the site (see figure 05). It extended into the north western section formed by the hammerhead of the access road before running 62.30m southeast at which point it formed a right angle. This angle led to a 0.20m projection of what would have formed a perpendicular return to the wall (106) which would have extended away to the southwest, it appeared that this had been truncated and completely removed during an earlier phase of works. The wall constituted of several sub angular and sub rounded small boulders and large cobbles heavily mixed within a 0.17m deep matrix of dark grey-brown, clay-silt. This material may represent a low 'clawdd' bank or the collapsed wall core of a heavily 'robbed-out' wall.

### **8.3 California Bearing Ratio (CBR) Pits (1 – 5)**

Following the topsoil strip five CBR pits were excavated in order to ascertain the load bearing capability of the ground in advance of the road construction and in order to inform the required depth of excavation required for an appropriate formation level. The locations of these pits have been recorded on figure 04. The 1<sup>st</sup> CBR pit was excavated in the central part of the road area at the southeast chainage (CH) 30, this pit was excavated through a further remaining 0.38m of the subsoil (102), this deposit was 0.43m deep in its entirety (context as described above). Beneath this the pit cut through 0.30m of a very hard yellow-orange, redeposited clay (109) with frequent fragments of sub angular/angular small cobbles and occasional fragments of timber and plastic.

The 2<sup>nd</sup> CBR pit was excavated 40.00m to the northwest of CBR 1 and measured 1.50m by 1.50m and was located in the central part of the road area at SE CH 70, this pit was once again excavated through the remaining 0.38m of the subsoil (102). Below this the pit cut through 0.34m of a very hard yellow-orange, redeposited clay (109) with frequent fragments of sub angular/angular small cobbles and occasional fragments of timber and plastic.

The 3<sup>rd</sup> CBR pit was excavated 40.00m to the northwest of CBR 2 and measured 1.50m by 1.50m and was located in the central part of the road area at SE CH 110. Once more this pit was once again excavated through the remaining 0.38m of the subsoil (102). Below this the pit cut through the 0.35m of a very hard yellow-orange, redeposited clay (109) with frequent fragments of sub angular/angular small cobbles and occasional fragments of timber and plastic.

The 4th CBR pit was excavated 30.00m to the northwest of CBR 3 and measured 1.50m by 1.50m and was located in the central part of the road area at SE CH 140. This pit was once again excavated through the remaining 0.38m of the subsoil (102). Below this the pit cut through the 0.35m of a very hard yellow-orange, redeposited clay (109) with frequent fragments of sub angular/angular small cobbles and occasional fragments of timber and plastic.

The 5<sup>th</sup> and final CBR pit was excavated 45.00m to the west of CBR 4 and measured 1.50m by 1.50m and was located in the south western section of the hammerhead of the access road at SW CH 10. This pit was excavated through the remaining 0.38m of the subsoil (102). Below this the pit cut through the 0.55m of a very hard yellow-orange, redeposited clay (109) with frequent fragments of sub angular/angular small cobbles and occasional fragments of timber and plastic. This then cut into 0.48m of a dark red-brown, silt-clay buried subsoil (105). Beneath this was 0.20m (maximum) deep patches of a firm light grey-blue, clay natural (101) which filled voids in the natural bedrock.

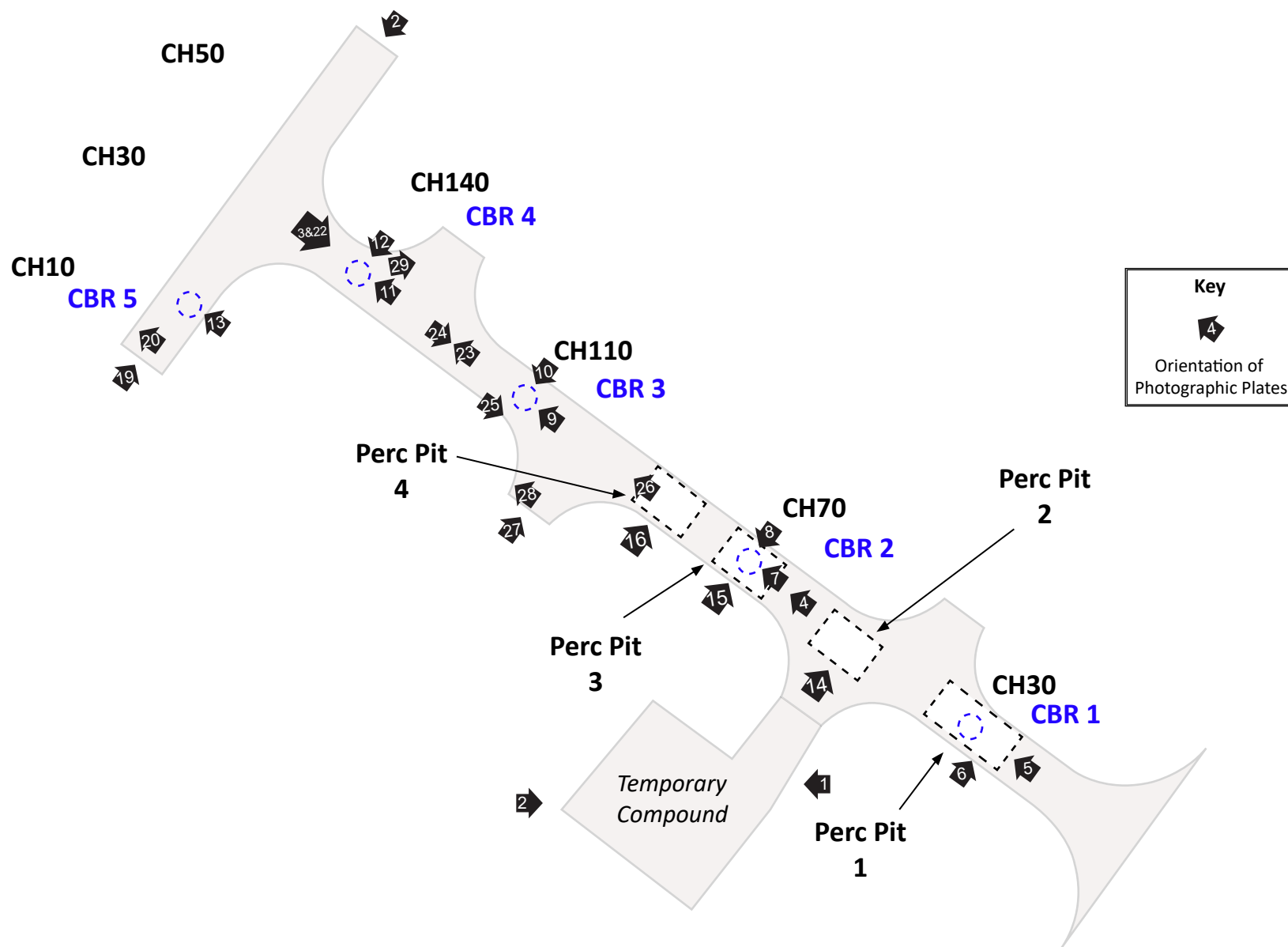
#### **8.4 Percolation Pits (1-3)**

Following the excavation of the five CBR pits, four percolation pits were then excavated in order to ascertain the drainage capacity of the ground in advance of the installation of the access road and excavation of the surface drainage trenches for the project, the locations of these pits have been recorded on figure 04. The 1<sup>st</sup> percolation pit was excavated near the entrance in the far southeast of the site centred on SE CH 30. This pit measured 8.00m long by 4.00m wide and was approximately 3.00m deep. It was excavated through the remaining 0.38m of the subsoil (102 (context as described above in paragraph 1 of section 8.3). Beneath this the pit cut through 0.30m of a very hard yellow-orange, redeposited clay (109) with frequent fragments of sub angular/angular small cobbles and occasional fragments of timber and plastic. Beneath which was 2.32m of a firm light grey-blue, clay natural (101) which filled voids in the natural bedrock.

The 2<sup>nd</sup> percolation pit was excavated 15.00m northwest of percolation pit 1 centred on SE CH 55. This pit measured 6.50m long by 3.80m wide and was approximately 2.90m deep. It was excavated through the remaining 0.38m of the subsoil (102) which lay above 0.30m of a very hard yellow-orange, redeposited clay (109) with frequent fragments of sub angular/angular small cobbles and occasional fragments of timber and plastic. Beneath which was 2.22m of a firm light grey-blue, clay natural (101) which filled voids in the natural bedrock.

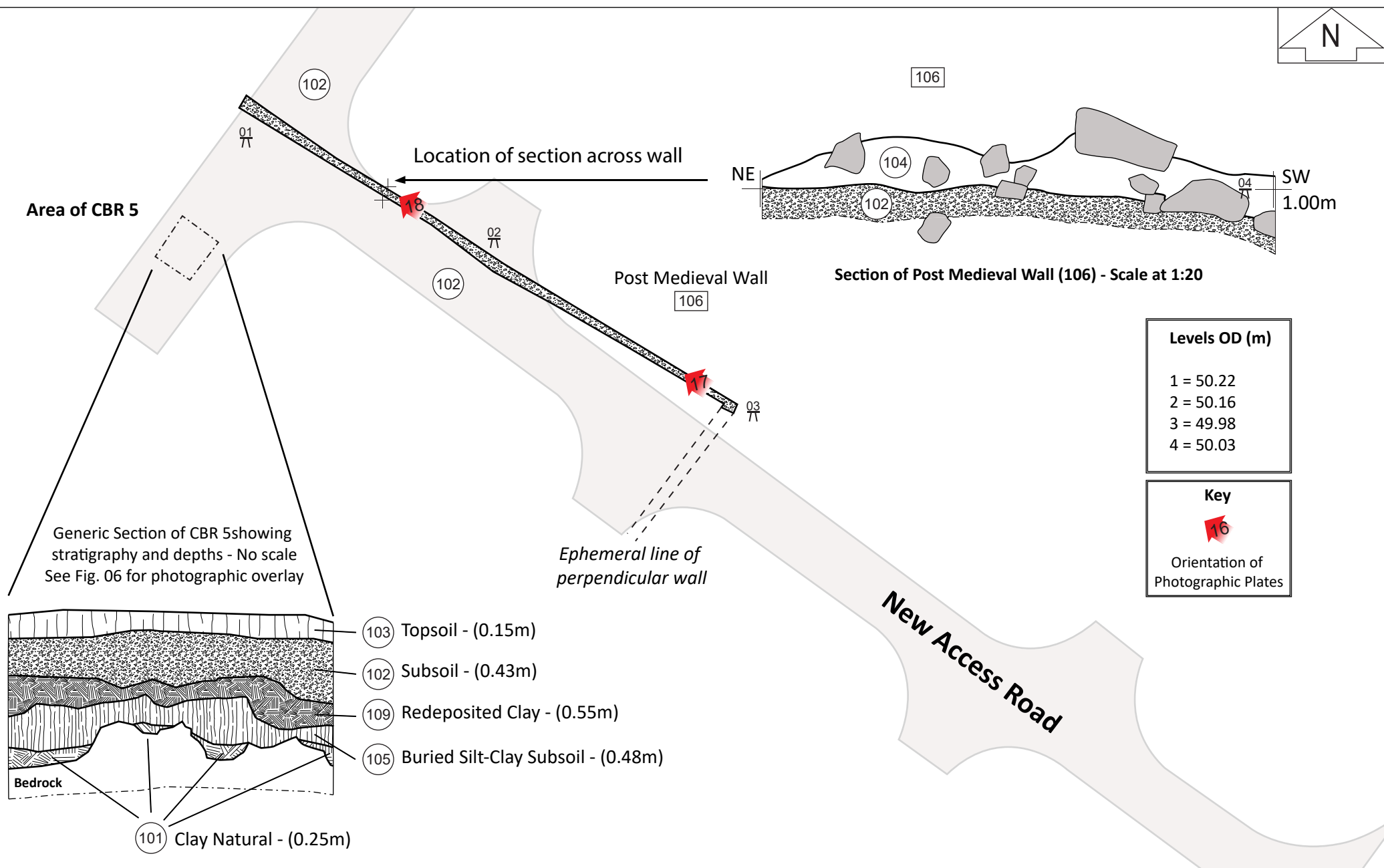
The 3<sup>rd</sup> percolation pit was excavated 10.00m northwest of percolation pit 2 centred on SE CH 70. This pit measured 8.20m long by 4.00m wide and was approximately 3.50m deep. It was excavated through the remaining 0.38m of the subsoil (102) which lay above 0.30m of a very hard yellow-orange, redeposited clay (109) with frequent fragments of sub angular/angular small cobbles and occasional fragments of timber and plastic. Beneath which was 2.82m of a firm light grey-blue, clay natural (101) which filled voids in the natural bedrock.

The 4<sup>th</sup> percolation pit was excavated 7.00m northwest of percolation pit 2 centred on SE CH 88. This pit measured 7.00m long by 4.00m wide and was approximately 3.50m deep. It was excavated through the remaining 0.38m of the subsoil (102) which lay above 0.30m of a very hard yellow-orange, redeposited clay (109) with frequent fragments of sub angular/angular small cobbles and occasional fragments of timber and plastic. Beneath which was 2.82m of a firm light grey-blue, clay natural (101) which filled voids in the natural bedrock.

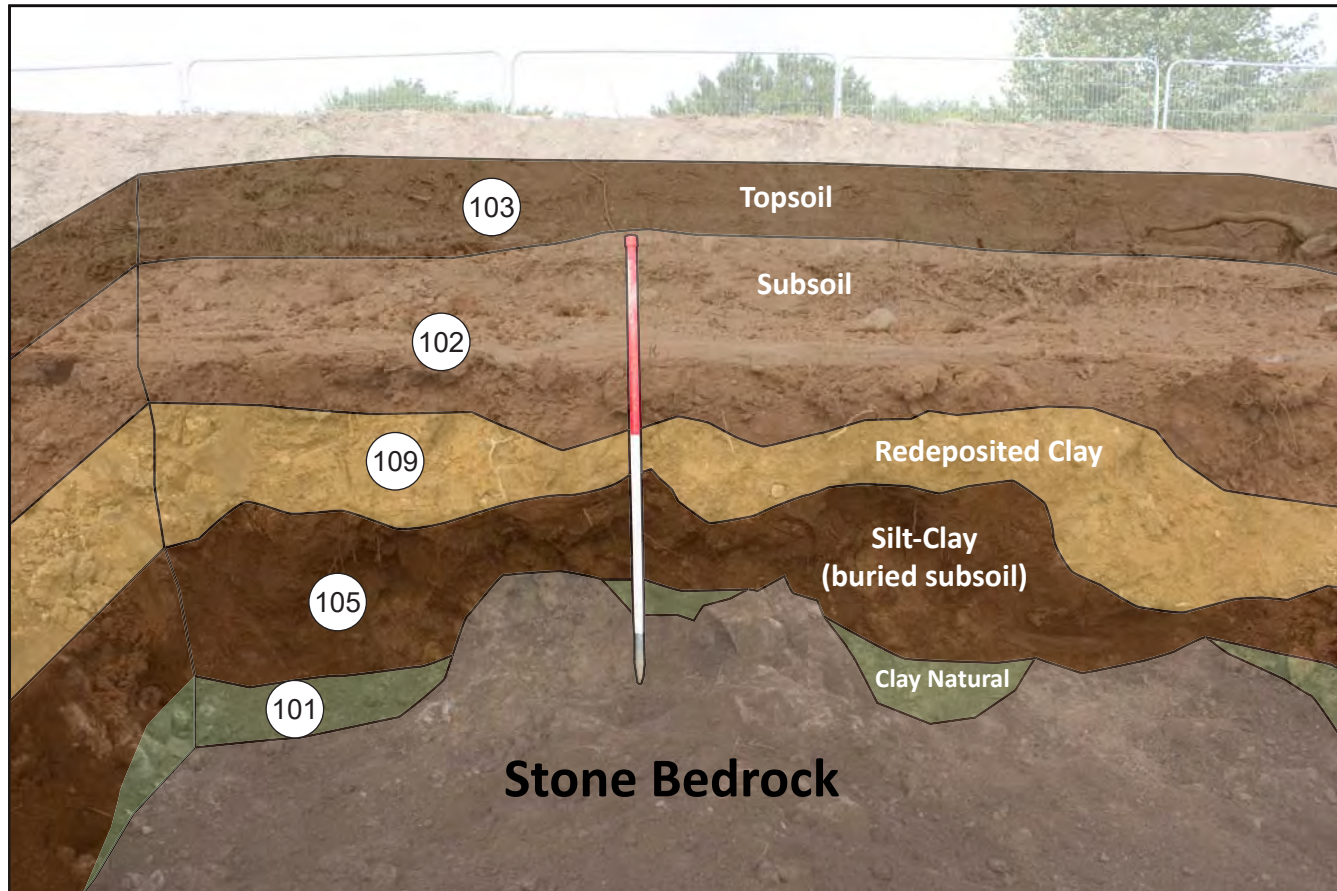


**Figure 04.** Figure showing location of California Bearing Ratio (CBR) pits and Percolation pits within the New Access Road. Also shown are the angles of photographic plates 1-29 (excluding 17 & 18, see Figure?).





**Figure 05.** Figure showing location of post medieval wall (106), section through wall, generic section and stratigraphy seen in CBR pit 5 and photographic plates 17&18.



**Figure 06.** Illustration of site formation stratigraphy imposed over section of CBR 05 - scale 1m



**Plate 01:** Pre excavation shot of Compound Area, Parc Bryn Cefni, Llangefni, Ynys Môn - from the east - scale 1m





**Plate 02:** Pre excavation shot of Compound Area, Parc Bryn Cefni, Llangefni, Ynys Môn - from the west - scale 1m



**Plate 03:** Post topsoil strip of area looking from Chainage (CH) 150 to CH70 , Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m





**Plate 04:** Post topsoil strip of area looking from Chainage (CH) 70 to CH150 , Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m



**Plate 05:** California Bearing Ratio (CBR) Pit 1 and Percolation (PERC.) Pit 1 in Plan, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m





**Plate 06:** CBR Pit 1 and PERC. Pit 1 in section (CH30), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southwest - scale 1m





**Plate 07:** CBR Pit 2 in Plan (CH70), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m



**Plate 08:** CBR Pit 2 in Section (CH70), Parc Bryn Cefni, Llangefni, Ynys Môn - from the northeast - scale 0.50m





**Plate 09:** CBR Pit 3 in Plan (CH110), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m



**Plate 10:** CBR Pit 3 in Section (CH110), Parc Bryn Cefni, Llangefni, Ynys Môn - from the northeast - 0.50m





**Plate 11:** CBR Pit 4 in Plan (CH150), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m



**Plate 12:** CBR Pit 4 in Section (CH150), Parc Bryn Cefni, Llangefni, Ynys Môn - from the northeast - 0.50m





**Plate 13:** CBR Pit 5 in Section (CH10), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m



**Plate 14:** PERC. Pit 2 in section (CH50), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southwest - scale 1m





**Plate 15:** PERC. Pit 3 in section (CH70), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southwest - scale 1m





**Plate 16:** PERC. Pit 4 in section (CH110), Parc Bryn Cefni, Llangefni, Ynys Môn - from the southwest - scale 1m





**Plate 17:** Post-medieval wall (106), (PRN 74,665) shot in Plan, Parc Bryn Cefni, Llangefni, Ynys Môn  
- from the southeast - scale 1m



**Plate 18:** Post-medieval wall (106), (PRN 74,665) shot in Section, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m





**Plate 19:** South-western arm of Hammer Head (HH) CH10 - CH30 following reduced dig into redeposited clay, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southwest - scale 1m



**Plate 20:** Generic section of site following reduced dig, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m





**Plate 21:** North-Eastern arm of Hammer Head (HH) CH30 - CH10, following reduced dig into redeposited clay (102), Parc Bryn Cefni, Llangefni, Ynys Môn - from the northeast - scale 1m





**Plate 22:** Reduced dig into redeposited clay layer (102) between CH150 - CH110, Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m



**Plate 23:** Reduced dig into redeposited clay layer (102) between CH110 - CH150, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m





**Plate 24:** Reduced dig into redeposited clay layer (102) between CH110 - CH70, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m



**Plate 25:** Reduced dig into redeposited clay layer (102) between CH110 - CH70, Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m





**Plate 26:** Reduced dig into redeposited clay layer (102) between CH70 - CH110, Parc Bryn Cefni, Llangefni, Ynys Môn - from the southeast - scale 1m



**Plate 27:** Reduced dig into redeposited clay layer (102) Access Road (A) sub station shot in plan, Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m





**Plate 28:** Reduced dig into redeposited clay layer (102) Access Road (A) sub station shot in section, Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m





**Plate 29:** Reduced dig into redeposited clay layer (102) Access Road (B) estate road shot in plan, Parc Bryn Cefni, Llangefni, Ynys Môn - from the northwest - scale 1m

## 9.0 CONCLUSION AND RECOMMENDATIONS

The works at Bryn Cefni Industrial Estate involved the excavation of five California Bearing Ratio (CBR) pits, four percolation pits and the reduction of the existing ground by 0.40m - 1.20m in order to achieve a formation level for the construction of a new access road. During the initial topsoil strip of the area a single relict field boundary wall was revealed which had been anticipated by an earlier geophysical survey, the wall was heavily dilapidated and orientated northwest to southeast, some fragments of Edwardian pottery were recovered in the vicinity of the wall. However, following an examination of the site stratigraphy it became evident that the site had been subject to a large soil strip and subsequent stockpiling of redeposited clay; this event is almost certainly associated with the construction of the other industrial units found to the northeast and southwest of the area covered by the watching brief.

The relict field wall (106) correlates with the feature identified in the GAT assessment and geophysics report (1444) as the feature numbers 1 & 2.

Following an examination of the evidence, provided by the opportunity of the groundworks conducted at Bryn Cefni Industrial Estate, the watching brief can be said to have met the aims and expectations set out in the written scheme of investigation and satisfied the recommendations of the Development Control Archaeologist at GAPS.

## 10.0 SOURCES

British Geological Survey website. [www.bgs.ac.uk](http://www.bgs.ac.uk).

British Ordnance survey maps; SH67NE, SH67NW, SH67SE and SH67W.

English Heritage, (2006, rev 2015). Management of Research Projects in the Historic Environment (MORPHE).

Gwynedd Archaeological Trust (GAT) (2019), Bryn Cefni Infrastructure works, Ynys Mon, Archaeological Assessment, Report 1444.

The Chartered Institute for Archaeologists (2014) Standard and Guidance for Archaeological Watching Brief.

## APPENDIX I – DETAILS OF ARCHAEOLOGICAL CONTEXTS

Context	Description
101	Topsoil
102	Subsoil
103	Natural
104	Cut of northern ditch
105	Buried Subsoil
106	Relict field Wall
107	Relict field Wall return
108	
109	Redeposited Clay



## **APPENDIX II: WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL WATCHING BRIEF**



aeon archaeology

---

**New Access Road,  
Bryn Cefni Industrial Estate,  
Llangefni, Anglesey LL77 7SE.**

**Written Scheme of Investigation  
for Archaeological Watching Brief.**

**July 2019 v1.0**



Project Code: A0217.1  
Planning Ref: FPL/2019/42  
Event PRN: 45456

---



---

# **New Access Road, Bryn Cefni Industrial Estate, Llangefni, Anglesey LL77 7SE.**

## **July 2019**

### Copyright Declaration:

Aeon Archaeology grants permission for the material presented within this report to be used by the archives/repository with which it is deposited, in perpetuity, although Aeon Archaeology retains the right to be identified as the author of all project documentation and reports, as specified in the Copyright, Designs and Patents Act 1988 (chapter IV, section 79). The permission will allow the repository to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.

### Disclaimer:

This Report has been prepared solely for the person/party which commissioned it and for the specifically titled project or named part thereof referred to in the Report. The Report should not be relied upon or used for any other project by the commissioning person/party without first obtaining independent verification as to its suitability for such other project, and obtaining the prior written approval of Aeon Archaeology. Aeon Archaeology accepts no responsibility or liability for the consequences of this Report being relied upon or used for any purpose other than the purpose for which it was specifically commissioned. The entitlement to rely upon this Report rests solely with the person/party which commissioned it and does not extend to any other person/party. Aeon Archaeology accepts no responsibility or liability for any use of or reliance upon this Report by any person/party other than the commissioning person/party.

1.0 INTRODUCTION .....	2
2.0 POLICY CONTEXT .....	3
3.0 ARCHEOLOGICAL BACKGROUND .....	5
4.0 WATCHING BRIEF - ARCHAEOLOGICAL AIMS.....	6
5.0 METHODOLOGY .....	7
5.1 Archaeological Watching Brief .....	7
5.2 Watching brief report.....	8
5.2.1 Post-excavation Assessment .....	8
5.2.2 Post-excavation Report.....	9
6.0 FURTHER ARCHAEOLOGICAL WORKS DESIGNS (FAWDs) .....	10
7.0 ENVIRONMENTAL SAMPLES.....	10
8.0 HUMAN REMAINS .....	10
9.0 ARTEFACTS .....	10
10.0 UNEXPECTED DISCOVERIES: TREASURE TROVE .....	12
11.0 ARCHIVING .....	12
12.0 PERSONNEL .....	13
13.0 MONITORING AND LIAISON .....	13
14.0 HEALTH AND SAFETY .....	13
15.0 INSURANCE .....	13



## 1.0 INTRODUCTION

Aeon Archaeology has been commissioned by G.H. James Cyf, hereafter the Client, to provide a written scheme of investigation (WSI) for carrying out an archaeological watching brief during the groundworks associated with the installation of a new access road and associated attenuation tanks at Bryn Cefni industrial estate, Llangefni, Isle of Anglesey LL77 7SE (centred on **NGR SH 46668 74969**).

Full planning permission for the project was granted by Isle of Anglesey County Council in April 2019 (**App no. FPL/2019/42**) although no condition specific to archaeology was applied to the permission. Consultation response from the Development Control Archaeologist at the Gwynedd Archaeological Planning Service (GAPS) did however recommend that an archaeological watching brief be maintained on associated groundworks.

This written scheme of investigation (WSI) details the aims and objectives of the project and the methods by which they will be met in order to meet the spirit and intent of the consultation response from GAPS.

The work will adhere to the guidelines specified in Standard and Guidance for Archaeological Watching Brief (Chartered Institute for Archaeologists, 2014).

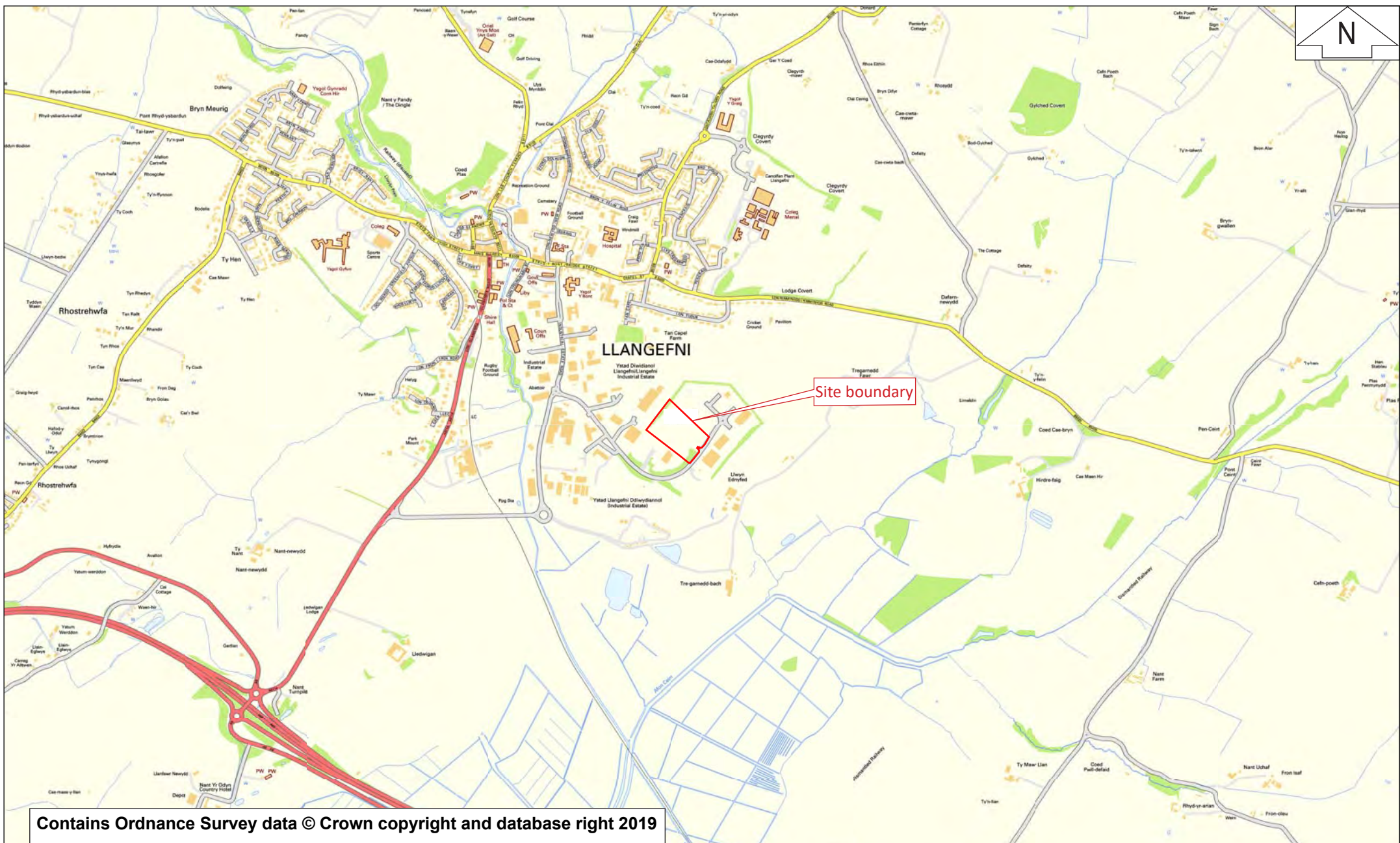
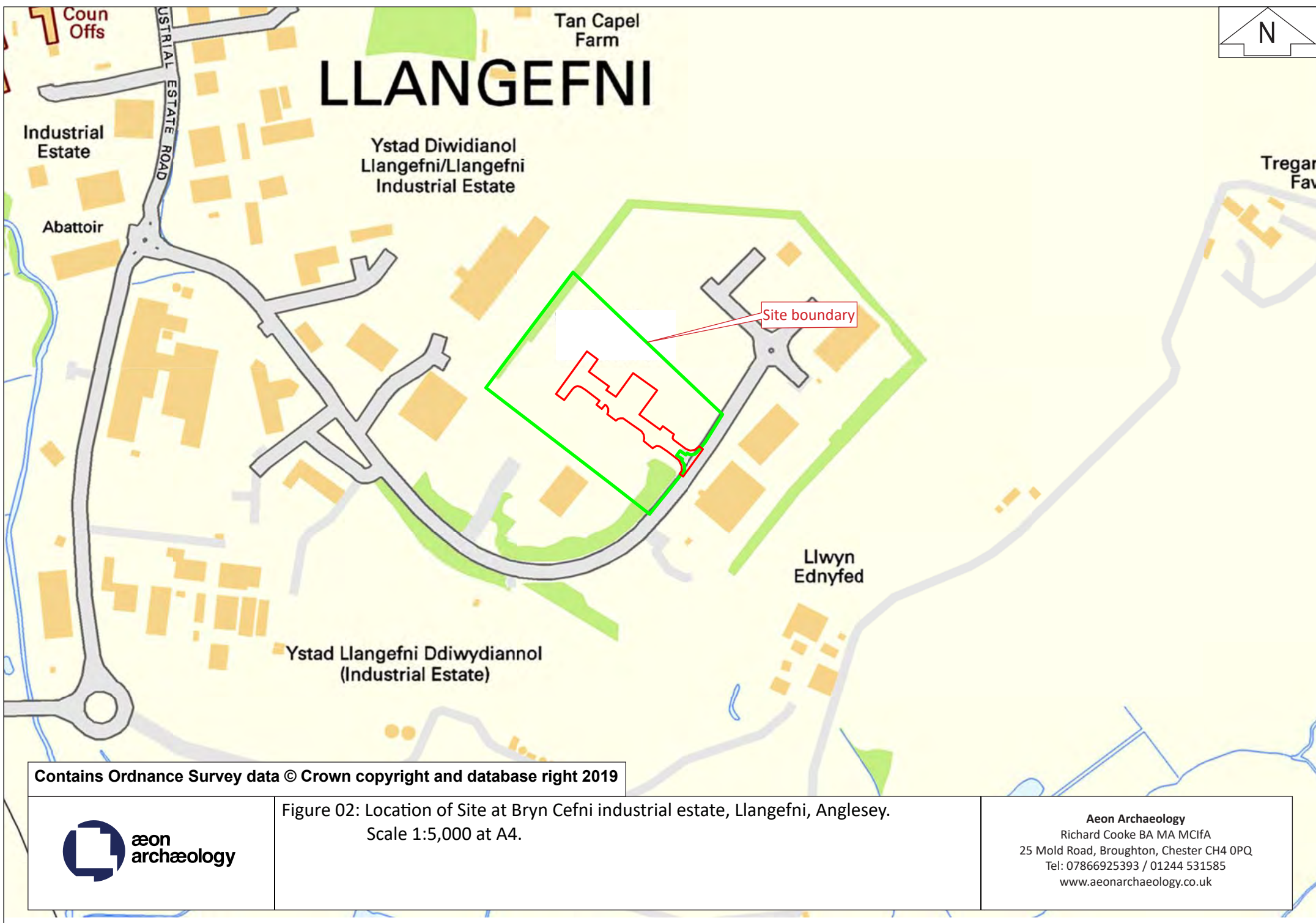


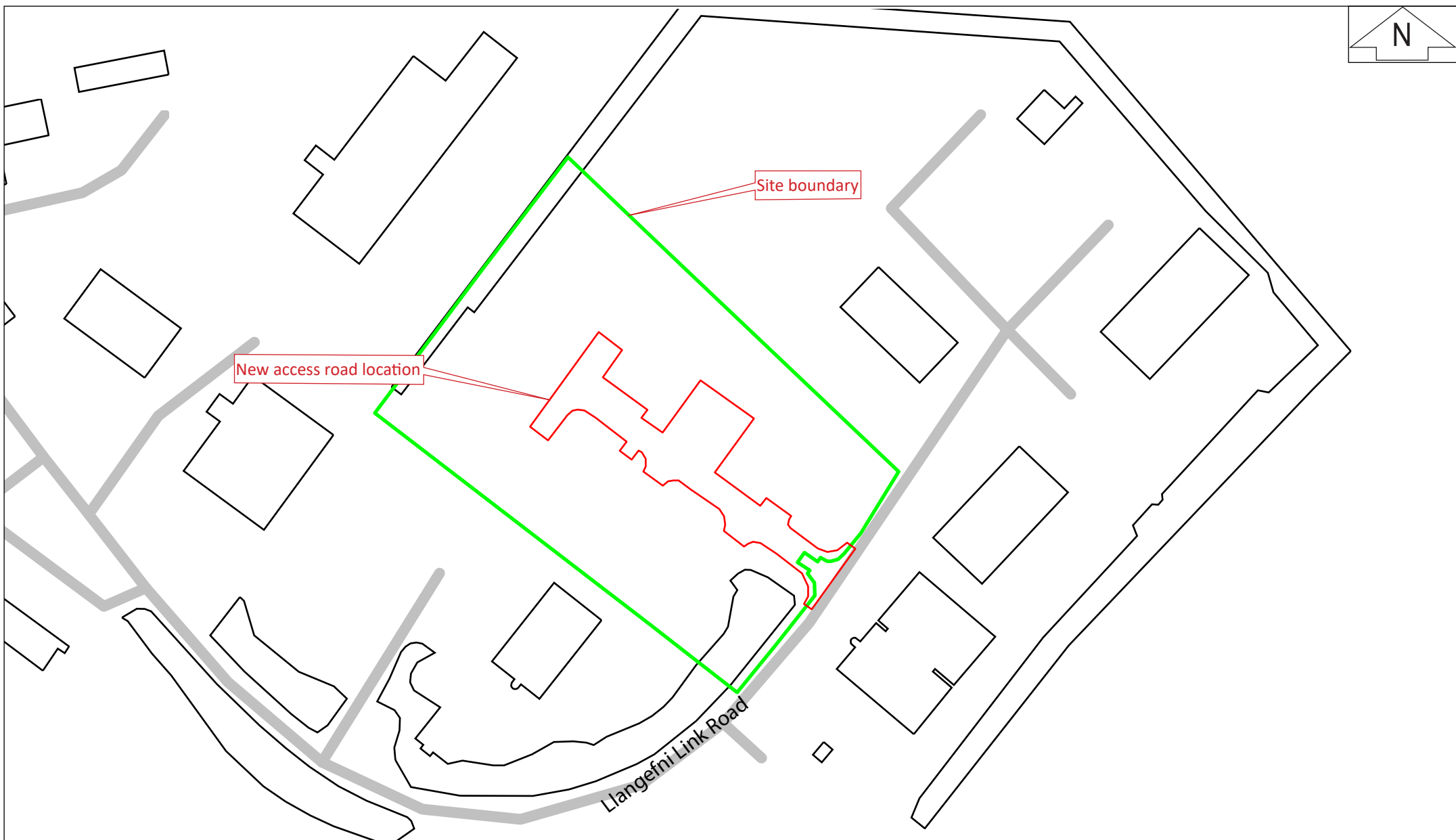
Figure 01: Location of Site at Bryn Cefni industrial estate, Llangefni, Anglesey.  
Scale 1:20,000 at A4.

**Aeon Archaeology**  
Richard Cooke BA MA MCifA  
25 Mold Road, Broughton, Chester CH4 0PQ  
Tel: 07866925393 / 01244 531585  
[www.aeonarchaeology.co.uk](http://www.aeonarchaeology.co.uk)









Contains Ordnance Survey data © Crown copyright and database right 2019



Figure 03: Location of Site at Bryn Cefni industrial estate, Llangefni, Anglesey.  
Scale 1:2,500 at A4.

**Aeon Archaeology**  
Richard Cooke BA MA MCifA  
25 Mold Road, Broughton, Chester CH4 0PQ  
Tel: 07866925393 / 01244 531585  
[www.aeonarchaeology.co.uk](http://www.aeonarchaeology.co.uk)

## 2.0 POLICY CONTEXT

At an international level there are two principal agreements concerning the protection of the cultural heritage and archaeological resource – the UNESCO Convention Concerning the Protection of World Cultural and Natural Heritage and the European Convention on the Protection of the Archaeological Heritage, commonly known as the Valetta Convention. The latter was agreed by the Member States of the Council of Europe in 1992, and also became law in 1992. It has been ratified by the UK, and responsibility for its implementation rests with Department for Culture Media and Sport.

The management and protection of the historic environment in Wales is set out within the following legislation:

- The Planning (Listed Buildings and Conservation Areas) Act 1990 (As amended)
- The Historic Environment (Wales) Act 2016
- The Town and Country Planning Act 1990
- The Ancient Monuments and Archaeological Areas Act 1979
- The Town and Country Planning (General Permitted Development Order) 1995 (As amended)

The Historic Environment (Wales) Act is the most recent legislation for the management of the Historic Environment and amends two pieces of UK legislation – the Ancient Monuments and Archaeological Areas Act 1979 and the Planning (Listed Buildings and Conservation Areas) Act 1990. The new Act has three main aims:

- to give more effective protection to listed buildings and scheduled monuments;
- to improve the sustainable management of the historic environment; and
- to introduce greater transparency and accountability into decisions taken on the historic environment.

With respect to the cultural heritage of the built environment the Planning (Conservation Areas and Listed Buildings) Act 1990 applies. The Act sets out the legislative framework within which works and development affecting listed buildings and conservation areas must be considered. This states that:-

“In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses” (s66(1))

Other known sites of cultural heritage/archaeological significance can be entered onto county-based Historic Environment Records under the Town and Country Planning 1995.

Planning Policy Wales sets out the land use planning policies of the Welsh Government. Chapter 6 covers the historic environment and emphasises that the positive management of change in the historic environment is based on a full understanding of the nature and significance of historic assets and the recognition of the benefits that they can deliver in a vibrant culture and economy.

Various principles and policies related to cultural heritage and archaeology are set out in the Planning Policy Wales which guide local planning authorities with respect to the wider historic environment.

The following paragraphs from Planning Policy Wales are particularly relevant and are quoted in full:

Paragraph 6.1.5 concerns planning applications:

*The planning system must take into account the Welsh Government's objectives to protect, conserve, promote and enhance the historic environment as a resource for the general well-being of present and future generations. The historic environment is a finite, non-renewable and shared resource and a vital and integral part of the historical and cultural identity of Wales. It contributes to economic vitality and culture, civic pride, local distinctiveness and the quality of Welsh life. The historic environment can only be maintained as a resource for future generations if the individual historic assets are protected and conserved. Cadw's published Conservation Principles highlights the need to base decisions on an understanding of the impact a proposal may have on the significance of an historic asset.*

Planning Policy Wales is supplemented by a series of Technical Advice Notes (TAN). Technical Advice Note 24: The Historic Environment contains detailed guidance on how the planning system considers the historic environment during development plan, preparation and decision making on planning and listed building consent applications. TAN 24 replaces the following Welsh Office Circulars:

- 60/96 Planning and the Historic Environment: Archaeology
- 61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas
- 1/98 Planning and the Historic Environment: Directions by the Secretary of State for Wales



### **3.0 ARCHEOLOGICAL BACKGROUND**

An archaeological assessment and subsequent geophysical survey of the proposed access road location and the immediate surrounding developable land was produced by the Gwynedd Archaeological Trust (GAT) in January 2019 (report 1444), the results of which need not be rehearsed here. However in summary the immediate environs of the Site have been subject to previous archaeological assessment, evaluation and mitigation which has revealed prehistoric, Roman and medieval activity. The area of the proposed new access road was up until recently agricultural fields with former field boundaries shown on the 1843 Llangefni tithe map onwards. The GAT geophysical survey did not identify any features of definitive archaeological interest, however two anomalies were identified as possible former field boundaries, whilst further anomalies suggested more modern disturbance.

Despite the apparent ground disturbance from the existing industrial estate and modern agricultural practice the Site is still thought to retain the potential for preserved archaeological remains at sub-surface level, and as a minimum it is expected that possible ditches (feature 6 in GAT report 1444) and relict field boundaries (features 1 and 2 in GAT report 1444) will be encountered during the watching brief.

#### 4.0 WATCHING BRIEF - ARCHAEOLOGICAL AIMS

The archaeological watching brief shall be maintained:

1. During groundworks associated with the new access road and attenuation tanks.

The ClfA maintains a standard for archaeological watching brief which states that:

*An archaeological watching brief will record the archaeological resource during development within a specified area using appropriate methods and practices. These will satisfy the stated aims of the project, and comply with the Code of conduct and other relevant by-laws of ClfA.*

An archaeological watching brief is defined by the ClfA as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons (ClfA 2014). The watching brief will take place within a specified area within the Site where there is a possibility that archaeological deposits may be disturbed or destroyed.

The ClfA further identifies the purpose of a watching brief as allowing, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established in advance of development or other potentially disruptive works.

It is also important to note that a watching brief provides an opportunity, if needed, for a signal to be made to all interested parties, before the destruction of the archaeological materials, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.

A watching brief is, therefore, not intended to reduce the requirement for excavation or preservation of known or inferred deposits, and it is intended to guide, not replace, any requirement for contingent excavation or preservation of possible deposits.

The aims of the watching brief are:

- To allow, within the resources available, the opportunity to gain information about and record the presence/absence, nature and date of archaeological remains on the Site affected by excavations and groundworks, the presence and nature of which could not be established with sufficient confidence in advance of works which may disturb them.
- To provide the facility to signal to the relevant authorities, before irreversible impact to remains that an archaeological and/or historic find has been made for which the resources allocated to the watching brief itself are inadequate to support their treatment to an adequate and satisfactory standard.

The specific objectives of the watching brief are:

- To observe and recover any artefacts of archaeological significance.
- To record the location, dimensions and nature of any deposits, features, structures or artefacts of archaeological significance.

- To recover samples of any deposits considered to have potential for analysis for palaeoenvironmental data should the opportunity arise.

## **5.0 METHODOLOGY**

### **5.1 Archaeological Watching Brief**

The methodology for the watching brief has been prepared with reference to the ClfA's document Standards and Guidance for Archaeological Watching Brief (2014) and will be kept under constant review during the project, in order to see how far it is meeting the terms of the aims and objectives, and in order to adopt any new questions which may arise.

Curatorial monitoring of the archaeological work on behalf of the Council will be carried out by the GAPS Development Control Archaeologist. To facilitate the curatorial monitoring, the officer shall be provided with a minimum of two weeks' notice of the start of the archaeological work.

A suitably qualified and experienced archaeologist(s) from Aeon Archaeology will be commissioned for the maintenance of the watching brief. On arrival on site, the archaeologist(s) will report to the site manager and conform to the arrangements for notification of entering and leaving site. The archaeologist(s) will keep a record of the date, time and duration of all attendances at site, the names and numbers of archaeologists deployed and any actions taken. The archaeologist will be provided with a Health & Safety Induction by the construction contractor and wear a safety helmet, safety footwear and high visibility jacket/vest at all times.

If deposits and or artefacts are exposed during excavations for the development which require recording and recovery, it may be necessary to delay works whilst the proper investigation and recording takes place. Watching brief recording can often be undertaken without delay to groundworks, depending upon the specific circumstances and flexibility of all the staff on site.

Within the constraints of the terms of the watching brief work, the archaeologist will not cause unreasonable disruption to the maintenance of the work schedules of other contractors on site. In the event of archaeological discoveries the treatment of which (either arising from the volume/quantity of material and/or the complexity/importance of the material) is beyond the resources deployed the Client will be notified and a site meeting/telephone consultation arranged with the GAPS Development Control Archaeologist. The aim of the meeting will be to confirm that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard and identify measures which would be sufficient to support treatment to a satisfactory and proper standard prior to destruction of the material in question.

Any archaeological deposits, features and structures identified which can be investigated and recorded under the terms of the watching brief will be excavated manually in a controlled and stratigraphic manner sufficient to address the aims and objectives of the project – subject to the limitations on site access.

It may not be necessary to excavate the complete stratigraphic sequence to geologically lain deposits but the inter-relationships between archaeological deposits, features and structures will be investigated sufficient to address the aims and objectives of the project and the complete stratigraphic sequence to geologically lain deposits will be investigated where practicable.



The method of recording will follow the normal principles of stratigraphic excavation and the stratigraphy will be recorded in written descriptions even where no archaeological deposits have been identified. The archaeologist will record archaeological deposits using proformae recording forms and locate them on a large-scale site plan related to the Ordnance Survey National Grid and Datum references.

The groundworks excavations shall be undertaken using a mechanical excavator fitted with a toothless ditching bucket.

The drawn record will comprise plans at scale 1:20 and sections at scale 1:10; propriety electronic hardware and software to prepare site drawings may be used as appropriate.

The photographic record will be maintained throughout using a digital SLR camera (Canon 600D) set to maximum resolution (72 dpi) and all archaeological features will be recorded photographically with photographs taken in RAW format and later converted to TIFF format for long-term storage and JPEG format for presentation and inclusion in the archive. The standards for the digital archive will adhere to those set out in '*Guidelines for Digital Archaeological Archives*' (RCAHMMW, 2015).

The archive produced will be held at Aeon Archaeology under the project code **A0217.1**.

## **5.2 Watching brief report**

### **5.2.1 Post-excavation Assessment**

A report on the results of the watching brief, in accordance with the recommendations in *Management of Research Projects in the Historic Environment Project Manager's Guide* (English Heritage 2006; 2015), and in the Chartered Institute for Archaeologists *Standard and Guidance for an archaeological watching brief* (2014) will be required to be produced upon conclusion of the archaeological fieldwork. The report will be completed within a maximum of two months of completion of work on site and may include examination and quantification leading to the identification of function, form, date, method of manufacture, material/fabric type, source, parallels, attributes and condition of artefacts; of the exploitation of wild or domesticated resources; the reconstruction of environments; and the nature of human populations.

Full analysis of the results of the project, including: dating and interpretation of excavated features; pottery and other finds analysis; analysis of industrial residues by an appropriate specialist or specialists; analysis of samples for environmental data (including pollen, plant macrofossils and beetles) by an appropriate specialist or specialists; radiocarbon dating; discussion of the results in their local, regional and national context, including relating the excavated features and palaeoenvironmental data to evidence from nearby sites, and discussion of the results in their local, regional and national context may be required.

The scope of post-excavation assessment will subject to a specification for approval by the GAPS Development Control Archaeologist, upon the conclusion of the fieldwork project and preliminary report.

### 5.2.2 Post-excavation Report

Following completion of the stages outlined above, a report will be produced that will include:

- A non-technical summary.
- A table of contents.
- An introduction with acknowledgements, including a list of all those involved in the project and the location and description of the site.
- A statement of the project aims.
- An account of the project methodology undertaken, with an assessment of the same to include a statement on preservation bias and the means of data collection and sampling strategies.
- A factual summary of the history, development and use of the site.
- A statement setting out the nature, quantity and condition of the material archive (artefacts and ecofacts) including commentary on any bias observed due to collection and sampling strategies and commentary on long-term storage requirements.
- A statement setting out the nature and quantity of the documentary archive (notes, photographs, drawings, digital data).
- A general site plan indicating the position and size of the areas subject to watching brief and the locations of archaeological deposits identified and recorded during the works.
- Plans and sections at appropriate scales, augmented with appropriate photographs. All plans and sections will be related to the Ordnance Survey datum levels and to the National Grid.
- Other maps, plans, drawings, stratigraphic matrices and photographs as appropriate.
- Summary assessment reports on the artefact, bio-archaeological, dating and other assessments/analyses.
- A discussion of the location, extent, date, nature, condition, quality and significance of any archaeological deposits and finds identified during the project.
- A discussion of any research implications arising from the archaeological work.
- Notes on consultations with conservators and the nominated archive repository related to the immediate and long-term conservation and storage requirements for the data held in the site archive and recommendations of retention/discard of artefacts and ecofacts.
- A bibliography of sources consulted.
- Appendices to the report will include artefact catalogues, reports on assessments/analyses and an index to the project archive and a statement on its location/proposed repository.
- In addition the post-excavation report will summarise and draw together the findings of all of the phases of work.

Illustrations will include plans of the location of the study area and archaeological sites. Historical maps, when appropriate and if copyright permissions allow, will be included. Photographs of relevant sites and of the study area where appropriate will be included.

A draft copy of the report will be sent to the GAPS Development Control Archaeologist and to the client for comment and approval prior to production of the final report.

## **6.0 FURTHER ARCHAEOLOGICAL WORKS DESIGNS (FAWDs)**

The discovery of substantial archaeological remains and/or features during the archaeological works may result in the requirement for an extended programme of archaeological mitigation. This may require the submission of revised quotes to the client as well as a new specification which will be required to be approved by the GAPS Development Control Archaeologist prior to implementation.

## **7.0 ENVIRONMENTAL SAMPLES**

Relevant archaeological deposits will be sampled by taking bulk samples (a minimum of 10.0 litres and maximum of 30.0 litres) for flotation of charred plant remains. Bulk samples will be taken from waterlogged deposits for macroscopic plant remains. Other bulk samples, for example from middens, may be taken for small animal bones and small artefacts.

Bulk environmental samples will also be taken from any fills, deposits or structures which yield archaeological artefacts, charcoal flecks/ fragments, bone, or any other historic remains.

Advice and guidance regarding environmental samples and their suitability for radiocarbon dating, as well as the analysis of macrofossils (charcoal and wood), pollen, animal bones and molluscs will be obtained from Oxford Archaeology.

For guidance purposes the following volume criteria represent the minimum feature sampling requirements:

- 50% of each discrete feature (e.g. pits and postholes)
- 25% of the exposed areas of each linear feature and all terminals/intersections
- 50% of structural features (e.g. beamslots, ring-ditches)
- 50%-100% of domestic/industrial working features (e.g. hearths and ovens)

## **8.0 HUMAN REMAINS**

Any finds of human remains will be left *in-situ*, covered and protected, and both the coroner and the GAPS Development Control Archaeologist informed. If removal is necessary it will take place under appropriate regulations and with due regard for health and safety issues. In order to excavate human remains, a licence is required under Section 25 of the Burials Act 1857 for the removal of any body or remains of any body from any place of burial. This will be applied for should human remains need to be investigated or moved.

## **9.0 ARTEFACTS**

All artefacts and ecofacts will be retrieved for identification and recording and will be treated in accordance with ClfA 2008 Guidelines for the collection, documentation, conservation and research of archaeological materials (Chartered Institute for Archaeologists, 2014).

All artefacts are the property of the landowner but it is recommended that finds are deposited with the rest of the project archive within an appropriate museum. Furthermore, the client agrees to granting access to all artefacts recovered by Aeon Archaeology for analysis, study and publication as necessary. All finds would be treated according to advice provided within *First Aid for Finds* (Rescue



1999). Aeon Archaeology staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants.

The recovery policy for archaeological finds will be kept under review throughout the archaeological works. Any changes in recovery priorities will be under guidance from an appropriate specialist and agreed with the GAPS Development Control Archaeologist. There will be a presumption against the disposal of archaeological finds regardless of their apparent age or condition.

All finds will be collected and processed including those found within spoil tips. Their location and height will be plotted; finds numbers attributed, bagged and labelled as well any preliminary identification taking place on site. Where specialist advice is required provision will be made to do so at the earliest possible convenience.

After processing, artefacts which are suitable will be cleaned and conserved in-house. Artefacts requiring specialist cleaning and conservation will be sent to the relevant specialist. All artefacts will then be sent to a specialist for analysis, the results of which will then be assessed to ascertain the potential of the finds assemblage to meet the research aims of the project. The value of the finds will also be assessed in terms of the wider educational and academic contributions.

Depending upon the material of the remains the following experts will be consulted regarding the conservation of waterlogged material:

- Organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)
- Non-organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)

Depending upon the material of the remains the following experts will be consulted regarding the conservation and analysis of artefacts:

- Bone: Nora Bermingham
- Glass: Hilary Cool, Barbican Research Associates.
- Metal artefacts: Phil Parkes, Cardiff Conservation Services, Cardiff.
- Slag, burnt clay, hammerscale: Dr. Tim Young, Geoarch, Cardiff.
- Stone artefacts: George Smith, Gwynedd Archaeological Trust, Bangor.
- Wood artefacts: Jane Foley, Foley Conservation, Builth Wells.
- Leather: Quita Mould, Barbican Research Associates.
- Environmental Material: Dr Mike Allen, Allen Environmental Archaeology.
- Numismatics: Peter Guest, Barbican Research Associates.
- Ceramics: Leigh Dodd

If well preserved materials are found it may be necessary to employ additional staff. Furthermore, it may be necessary to suspend work within a specific region of the site, or across the whole site, while conservation and excavation/recording takes place. Aeon Archaeology accepts no responsibility for any costs incurred from delays as a result of unexpected archaeological finds.

## 10.0 UNEXPECTED DISCOVERIES: TREASURE TROVE

Treasure Trove law has been amended by the Treasure Act 1996. The following are Treasure under the Act:

- *Objects other than coins* any object other than a coin provided that it contains at least 10% gold or silver and is at least 300 years old when found.
- *Coins* all coins from the same find provided they are at least 300 years old when found (if the coins contain less than 10% gold or silver there must be at least 10. Any object or coin is part of the same find as another object or coin, if it is found in the same place as, or had previously been left together with, the other object. Finds may have become scattered since they were originally deposited in the ground. Single coin finds of gold or silver are not classed as treasure under the 1996 Treasure Act.
- *Associated objects* any object whatever it is made of, that is found in the same place as, or that had previously been together with, another object that is treasure.
- *Objects that would have been treasure trove* any object that would previously have been treasure trove, but does not fall within the specific categories given above. These objects have to be made substantially of gold or silver, they have to be buried with the intention of recovery and their owner or his heirs cannot be traced.

The following types of finds are not treasure:

- Objects whose owners can be traced.
- Unworked natural objects, including human and animal remains, even if they are found in association with treasure.
- Objects from the foreshore which are not wreck.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown.

The British Museum will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

## 11.0 ARCHIVING

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. All plans, photographs and descriptions will be labelled, and cross-referenced, and lodged with the National Monument Record, RCAHMS within six months of the completion of the project.

A draft copy of the report will be produced within six months of the completion of the fieldwork and sent to the Client and the GAPS Development Control Archaeologist for comment prior to finalisation of the report and dissemination. Bound copies of the report and an archive CD will be sent to the regional HER, the GAPS Development Control Archaeologist and to National Monument Record, of the Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW) for long term archiving. Furthermore, a summary of the project will be sent to *Archaeology in Wales* for publication. Copies of all digital files (inc. photos, report as PDF and Word, spreadsheets, databases, survey data etc) to be presented to each of above on optical disc (ie DVD).

The project report and archive will adhere to the Welsh Trusts' and Cadw's *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (2018) including the translation of a non-technical summary into the medium of Welsh.

## **12.0 PERSONNEL**

The work will be managed by Richard Cooke BA MA MCIfA, Archaeological Contractor and Consultant at Aeon Archaeology.

## **13.0 MONITORING AND LIAISON**

Regular liaison and site monitoring meetings will take place during all stages of work. The GAPS Development Control Archaeologist will be informed of the start date and of discreet subsequent stages.

## **14.0 HEALTH AND SAFETY**

Aeon Archaeology has a Health and Safety Policy Statement which can be supplied upon request. Furthermore, site-specific Risk Assessments and Method Statements are compiled and distributed to every member of staff involved with the project prior to the commencement of works.

## **15.0 INSURANCE**

Liability Insurance – Insignia Underwriting Policy 347002

Employers' Liability: Limit of Indemnity £10m in any one occurrence

Public Liability: Limit of Indemnity £2m in any one occurrence

Legal Defence Costs (Health and Safety at Work Act): £250,000

The current period expires 07/09/19

Professional Indemnity Insurance – Insignia Underwriting Policy 347002

Limit of Indemnity £500,000 any one claim

The current period expires 07/09/19



