

**Land west of Mount Road,
Rhigos, CF44 9YS
BESS
Historic Environment
Desk-based Assessment**

Date: March 2025
By: Rhiannon Pettitt
Client: REWE 11
Project Code: RR1458



**Red River
Archaeology**

**Land west of Mount Road,
Rhigos, CF44 9YS
BESS
Historic Environment Desk-based Assessment**

Client REWE 11

Project Code RR1458

Prepared By Rhiannon Pettitt

Field Visit By Rhiannon Pettitt and

Issica Baron

Illustrated By Matthew Smithson-Shaw

Rev Number	Description	Undertaken	Approved	Date
1.0	Draft	RP	RM-J	28/11/2024
1.1	Final	RM-J	RM-J	03/03/2025

CONTENTS

SUMMARY.....	1
1. INTRODUCTION.....	4
1.1 Project Background	4
1.2 Site Location and Description.....	4
2. AIMS AND OBJECTIVES	5
2.1 Aims	5
2.2 Objectives	5
2.3 Planning Background	5
2.4 Desk-based Assessment	10
2.5 Field Visit	10
2.6 Assessment of Significance.....	11
2.7 Potential Impact of Proposed Works.....	11
2.8 Reporting & Archiving.....	11
3. SUMMARY OF RESULTS.....	13
3.1 Historic Baseline Data.....	13
3.2 Previous Archaeological Works (Events).....	18
3.3 Cartographic Evidence.....	20
3.4 Aerial Photograph Consultation.....	23
3.5 LiDAR Consultation	23
3.6 Natural Resources Wales Consultation.....	23
3.7 Site Visit.....	25
3.8 Setting of Heritage Assets.....	27
3.9 Significance of Heritage Assets	28
4. POTENTIAL IMPACT OF PROPOSED DEVELOPMENT	29
4.1 Archaeological Potential.....	29
4.2 Archaeological Impact.....	29

4.3	Built Heritage Impact.....	30
4.4	Setting Impact.....	30
4.5	Potential Mitigation.....	30
5.	CONCLUSIONS.....	31
6.	REFERENCES.....	33

APPENDICES

Appendix 1	Table 1 Heritage Assets (HER and NMR)
	Table 2 Heritage Assets identified through this study
	Table 3 Previous Archaeological Events

FIGURES

Figure 1	Site location
Figure 2	Heritage Assets within the study area (1km)
Figure 3	Events within the study area (1km)
Figure 4	NRW Land Map: Historic Landscape areas within the study area (1km)
Figure 5	NRW Land Map: Cultural Landscape Services areas within the study area (1km)
Figure 6	Ordnance Survey 25-inch map. Glamorgan X.3. Surveyed: 1875 to 1876, Published: 1878.
Figure 7	1 st edition Ordnance Survey, 6-inch. Glamorgan Sheet X, Surveyed 1875 to 1877, Published: 1884
Figure 8	2 nd edition Ordnance Survey, 6-inch. Brecknockshire Sheet XLIX.NE Surveyed: 1875 to 1877, Published: 1888
Figure 9	Ordnance Survey 6-inch map. Brecknockshire Sheet XLIX.3, Brecknockshire Sheet XLIX.4 and Glamorgan X.7. All revised: 1914, Published: 1918.
Figure 10	Cefn Farm Initial Design - 200MW provided by REWE 11
Figure 11	Photo location plan, based on "Site Location Plan" figure provided by REWE 11

PLATES

Plate 1	View of Site access from Mount Road, facing SW.
Plate 2	View of area adjacent to Site entrance, possible site of Mount Pleasant Farm (demolished), facing NW.
Plate 3	Access route from Cefn Farm (E-W), facing W.
Plate 4	Historic field boundary parallel to access route, facing E.
Plate 5	Bank with drystone walling (N-S), facing NW.
Plate 6	Platform in use as a storage area. Possible location of Cefn-ry-goes farm, facing NE.
Plate 7	Stone slabs on bank with drystone walling (N-S), facing S
Plate 8	Platform with pond in foreground, facing NW.
Plate 9	Historic field boundary (N-S) along access route to the south of the Site, facing SE.
Plate 10	Ditch along southern (E-W) Site boundary, south of the boundary fence line, facing E.
Plate 11	Dressed stone slab along E side of the causeway leading into the Site, facing NE.
Plate 12	Two ditches running E-W either side of a bank and fence along the southern boundary of the Site, facing W.
Plate 13	Access gate and causeway into the SW area of the Site, facing SW.
Plate 14	Western Site boundary ditch, bank and fence-line, facing N.
Plate 15	Large stones close to the western most Site boundary, facing W.
Plate 16	Upcast material from field drainage, facing W.
Plate 17	Western field drain in foreground, central field drains and associated banks in background, facing E.
Plate 18	Central field drain and associated bank running N-S, facing N.
Plate 19	The southernmost end of a bank running NNW-SSE within the centre of the Site, facing N.
Plate 20	Back running N-S within centre of the Site, facing NW.
Plate 21	Denuded bank running N-S within centre of the Site, facing NE
Plate 22	View across the Site from the NE corner, facing W
Plate 23	Bank running N-S within the centre of the Site, facing NE

Plate 24	Obscured views from Craig y Ddinas Hillfort (GGAT01107m, NPRN301695, BR178), facing SW.
Plate 25	Craig y Ddinas Hillfort (GGAT01107m, NPRN301695, BR178) earthworks, facing SW
Plate 26	Dinas Silica Mine entrance (PRN 01472m; NPRN 275634) (BR229), facing E
Plate 27	View from Dinas Silica Mine (PRN 01472m; NPRN 275634) (BR229), facing S

SUMMARY

This report presents the results of a historic environment desk-based assessment in relation to a proposed Battery Energy Storage System (BESS) at Land west of Mount Road, Rhigos, CF44 9YS. The historic environment desk-based assessment was carried out by Red River Archaeology Ltd. during October/November for Lighthouse Development Consulting on behalf of REWE 11. This report has been carried out to inform future decisions about what further work may be required in order to mitigate the impact to the heritage resource from the proposed works.

The 1km study area from the red-line site boundary contained 77 known heritage assets. No World Heritage Sites, Conservation Areas, Registered battlefields, or Registered Parks and Gardens or listed buildings are located within the study area, and the study area lies outside the Merthyr Tydfil Historic Landscape.

Two heritage assets were identified within the site and access route during the course of this assessment. These are the Cefn-rys-groes farmstead (HA 1) along the access route and Cefn Rhigos historic field boundaries (HA 2) within the site itself. Three scheduled monuments are present within the study area: the Glynneath gunpowder works (GGAT10311g, NPRN439) (BR230); Craig y Ddinas Hillfort (GGAT01107m, NPRN301695, BR178); and the Dinas Silica Mine (PRN 01472m; NPRN 275634, BR229). Cartographical research and aerial photographs have identified 15 heritage assets (HA 1-15) which were not previously recorded. These comprise agricultural and industrial features, including possible medieval ridge and furrow, post-medieval farmsteads, low-level industry and a mine.

Within the 1km study area 24 separate events were recorded. These largely comprise fields visits contributing to regional archaeological surveys, field surveys, desk-based assessments and impact assessments. A single watching brief and a single excavation were also performed, neither of which fell within the site boundary. As part of the pre-application works for the proposed development, an Archaeological Magnetic Gradiometry Survey was undertaken by Terra Dat on 4 October 2024 within the site.

Seven Natural Resources Wales (NRW) Historic Landscape areas were identified within the 1km study area, of which 6 are designated overall as areas of outstanding importance, while the Cwn Wyrfa area (CYNONHL772), within which the site is situated, is designated as of moderate value.

The three scheduled monuments lie at the northern edge of the 1km study area and will not be directly impacted upon nor are intervisible with the site. The general erosion of the local rural landscape will have a minor impact on the historic landscape within which the scheduled monuments and undesignated assets are situated, however, the overall impact on their

significance will be negligible. Screening will be incorporated which will minimise any impacts on the setting of the undesignated assets within the 1km area, primarily the Cefn Rhigos Cairns. No other built heritage assets are located within the study area.

The potential for buried archaeological remains was determined as low to moderate for the prehistoric period due to the identification of possible pits during the geophysical survey and vicinity of the Rhigos-Hirwaun cairnfields, and high for post-medieval remains related to agricultural activity, specifically historic field boundaries, drainage and a former farmstead. The potential for remains from other periods was determined to be low. Mitigation could take the form of a condition for archaeological monitoring and recording of the groundworks during construction to identify and record any buried archaeological remains, however, the final decision rests with the Stewardship Officer at Heneb-GGA. The preservation of historic field boundaries in the majority of site will maintain the historic rural setting.

CRYNODEB

Mae'r adroddiad hwn yn cyflwyno canlyniadau asesiad pen desg o'r amgylchedd hanesyddol mewn perthynas â System Storio Ynni Batri (BESS) yn Land west of Mount Road, Rhigos, CF44 9YS. Cynhaliwyd yr asesiad pen deg o'r amgylchedd hanesyddol gan Red River Archaeology Ltd. yn ystod mis Hydref/Tachwedd i Lighthouse Development Consulting ar ran REWE 11. Mae'r adroddiad hwn wedi cael ei gynnal i lywio penderfyniadau yn y dyfodol ynghylch pa waith pellach y bydd ei angen o bosibl i liniaru'r effaith ar yr adnodd treftadaeth o ganlyniad i'r gwaith arfaethedig.

Roedd ardal 1km yr astudiaeth o ffin llinell goch y safle yn cynnwys 77 o asedau treftadaeth hysbys. Nid oes unrhyw Safleoedd Treftadaeth y Byd, Ardaloedd Cadwraeth, meysydd brwydrau cofrestredig, Parciau a Gerddi cofrestredig nac adeiladau rhestredig yn ardal yr astudiaeth, sydd wedi'i lleoli y tu allan i Dirwedd Hanesyddol Merthyr Tudful.

Nodwyd dau ased treftadaeth o fewn ffiniau'r safle a'r llwybr mynediad yn ystod yr asesiad hwn, sef fferm Cefn-rys-groes (HA 1) ar hyd y llwybr mynediad a ffiniau maes hanesyddol Cefn-Rhigos (HA 2) yn y safle ei hun. Ceir tair heneb gofrestredig yn ardal yr astudiaeth: gwaith powdwr gwn Glyn-nedd (GGAT10311g, NPRN439) (BR230); Bryngaer Craig y Ddinas (GGAT01107m, NPRN301695, BR178); a Chloddfa Dinas Silica (PRN 01472m; NPRN 275634, BR229). Drwy'r ymchwiliad gartograffig a'r lluniau o'r awyr nodwyd 15 o asedau treftadaeth (HA 1-15) nas cofnodwyd o'r blaen. Mae'r rhain yn cynnwys nodweddion amaethyddol a diwydiannol, gan gynnwys olion grwn a rych canoloesol o bosibl, ffermydd ôl-ganoloesol, diwydiant lefel isel a chloddfa.

O fewn ardal 1km yr astudiaeth, cofnodwyd 24 o ddigwyddiadau gwahanol. Roedd y rhain yn cynnwys ymweliadau maes a oedd yn cyfrannu at arolygon archaeolegol rhanbarthol,

arolygon maes, asesiadau pen desg ac asesiadau efffaith yn bennaf. Cyflawnwyd un gorchwyl gwyllo ac un cloddiad hefyd, nad oedd y naill na'r llall o fewn ffiniau'r safle. Fel rhan o'r gwaith cyn ymgeisio ar gyfer y datblygiad arfaethedig, cynhaliwyd Arolwg Mesurydd Graddiant Magnetig Archaeolegol gan TerraDat ar 4 Hydref 2024 ar y safle.

Nodwyd saith ardal Tirwedd Hanesyddol Cyfoeth Naturiol Cymru yn yr ardal 1km, yr gyda chwech ohonynt wedi'u dynodi'n gyffredinol yn ardaloedd o bwysigrwydd eithriadol, ac mae ardal Cwn Wyrfa (CYNONHL772), y mae'r safle oddi mewn iddi, wedi'i dynodi'n safle o werth cymedrol.

Ni fydd efffaith uniongyrchol ar y tair heneb gofrestredig o fewn ardal 1km yr astudiaeth ac ni fydd modd eu gweld o'r safle nac fel arall. Fodd bynnag, bydd erydiad cyffredinol o'r dirwedd wledig leol yn cael rhywfaint o efffaith ar y dirwedd hanesyddol y saif yr henebion cofrestredig a'r asedau heb eu dynodi ynddi. Os na fydd sgrinio yn parhau neu os bydd yn annigonol, mae'n bosibl y bydd unrhyw ddatblygiad posibl yn cael ychydig o efffaith ar leoliad rhai o'r asedau heb eu dynodi o fewn yr ardal 1km, yn bennaf Carneddau Cefn Rhigos.

O ran y potensial am olion archaeolegol claddedig pennwyd bod hynny'n isel i gymedrol ar gyfer y cyfnod cynhanesyddol, yn uchel ar gyfer olion ôl-ganoloesol mewn ardaloedd penodol ac yn isel ar gyfer cyfnodau eraill. Y Swyddog Stiwardiaeth yn Heneb-Ymddiriedolaeth Archeolegol Morgannwg-Gwent sy'n gyfrifol am y penderfyniad terfynol ynglŷn ag unrhyw gamau lliniaru, ond gallai'r rhain fod ar ffurf amod i fonitro a chofnodi'r gwaith i baratoi'r tir yn archaeolegol yn ystod y cam adeiladu er mwyn nodi a chofnodi unrhyw olion archaeolegol claddedig. Argymhellir y dylid gwarchod ffiniau meysydd hanesyddol lle y bo modd er mwyn cynnal y lleoliad gwledig hanesyddol.

1. INTRODUCTION

1.1 Project Background

- 1.1.1. This report details the heritage assets that need to be considered in respect of the proposed Battery Energy Storage System (BESS) and associated infrastructure at Land west of Mount Road, Rhigos, CF44 9YS (centred on NGR SN 91210 06997) (Fig. 1).
- 1.1.2. This report will determine the impact of proposed BESS and associated infrastructure on the site and on any heritage assets identified within the study area.

1.2 Site Location and Description

- 1.2.1. The Site is an irregular shaped agricultural field bounded by Mount Road to the east, Rhigos Road to the north and agricultural fields to the west and south (Figure 1). The east and north sides are tree-lined and the west and south are bounded by intermittent hedgerows and fencing with occasional mature trees. The site is crossed by several drainage or former field boundary ditches.
- 1.2.2. The underlying solid geology is South Wales Lower Coal Measures Formation - Mudstone, siltstone and sandstone. Sedimentary bedrock formed between 319 and 318 million years ago during the Carboniferous period. For the majority of site superficial deposits are recorded as Till, Devensian - Diamicton. Sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period. Along the southeast border superficial deposits are recorded as Peat - Peat. Sedimentary superficial deposit formed between 2.588 million years ago and the present during the Quaternary period (BGS, 2024). The predominant soil type on this site is Soilscape 19, which is a slowly permeable wet very acid upland soil with a peaty surface (LandIS, 2024).

2. AIMS AND OBJECTIVES

2.1 Aims

- 2.1.1. The aims of the historic environment desk-based assessment are to provide a detailed assessment of the archaeological and historic parameters of the proposed development area and to assess the potential impact of the proposed development, either directly, indirectly or on the setting of any heritage assets identified. Heritage assets within the study area will also be assessed to determine their overall significance and, where necessary, provide a strategy to mitigate potential impacts from the proposed development on any assets identified, where this is deemed relevant and appropriate.

2.2 Objectives

- 2.2.1. The objective of this report was to assess the archaeological and historic parameters of the site at Land west of Mount Road, Rhigos, CF44 9YS and to identify any heritage assets in the study area through a desk-based assessment of relevant sources and records. A field visit was undertaken to assess the archaeological and historic character of the site and surrounding area. Appropriate records of any findings were made.
- 2.2.2. The significance of any heritage assets identified were assessed along with the potential impact of the proposed development on the assets and their setting. A strategy for further evaluation of potential heritage assets has been formulated where required and mitigation strategies to conserve any heritage assets identified have been devised where this is considered relevant.

2.3 Planning Background

- 2.3.1. The proposed development consists of full planning permission for a Battery Energy Storage System (BESS) and associated infrastructure at Land west of Mount Road, Rhigos, CF44 9YS (centred on NGR SN 91210 06997).
- 2.3.2. The proposed development includes the installation of battery energy storage system (BESS), together with high voltage substation compound, transformer stations, inverters, site access, internal access tracks, security measures, access gates, other ancillary infrastructure, landscaping and biodiversity enhancements on land at Land west of Mount Road, Rhigos, Aberdare, CF44 9YS.
- 2.3.3. A Written Scheme of Investigation (WSI) for a Heritage Desk-based Assessment was submitted and approved by the Stewardship Officer at Heneb-GGA in October 2024 (Red River Archaeology Ltd 2024).
- 2.3.4. Relevant legislation, policy and guidance is set out below:

Historic Environment (Wales) Act 2023

- 2.3.5. The Historic Environment (Wales) Bill was introduced into Senedd 4 July 2022, was given Royal assent 14 June 2023 and mostly came into force on 4 November 2024. This Act provides the legislative framework for managing the historic environment in Wales. The Act consolidates and replaces:
- Historic Buildings and Ancient Monuments Act 1953, as it applies in Wales;
 - Ancient Monuments and Archaeological Areas Act 1979, as it applies in Wales;
 - Parts 14 and 15 of the Town and Country Planning Act 1990 (c. 8);
 - Planning (Listed Buildings and Conservation Areas) Act 1990, as it applies in Wales;
 - Part 5 of the Planning and Compulsory Purchase Act 2004 (c. 5);
 - Historic Environment (Wales) Act 2016.
- 2.3.6. **Part 2** of this Act makes provision about the conservation of monuments of special historic interest (Scheduled Monuments), including protecting the fabric of the monuments but does not afford statutory protection to their settings. Works carried out to the fabric or within the scheduled area require Scheduled Monument Consent.
- 2.3.7. **Part 3** makes provision about the conservation of buildings of architectural or historic interest, including provision for the control of works affecting listed buildings.
- 2.3.8. **Part 4** makes provision about conservation areas. Section 160 (1) states that *“In exercising a planning function in relation to a building or other land in a conservation area, a person must have special regard to the desirability of preserving or enhancing the character or appearance of that area”*. The Act does not make specific provision with regard to the setting of a Conservation Area, that is provided by the policy framework outlines below.

Town and Country Planning Act (1990)

- 2.3.9. Section 314A (1) states that *“In considering whether to grant planning permission for development which affects a listed building or its setting, the Welsh Ministers or a local planning authority in Wales must have special regard to the desirability of preserving –*
- a) the listed building,*
 - b) the setting of the building, or*
 - c) any features of special architectural or historic interest the building possesses.”*

Planning Policy Wales

- 2.3.1 The Welsh Government has published Planning Policy Wales (PPW), currently updated to Version 12 from February 2024. This sets out the land use planning policies of the Welsh

Government. It is supplemented by a series of Technical Advice Notes (TANs). Procedural advice is given in circulars and policy clarification letters.

2.3.2 Section 6.1 of PPW, entitled 'The Historic Environment', provides policy for planning authorities, property owners, developers and others on the conservation and investigation of Heritage Assets. Section 6.1 sets out the Welsh Government's specific objectives for the historic environment as seeking to:

- Protect the Outstanding Universal Value of the World Heritage Sites;
- Conserve archaeological remains, both for their own sake and for their role in education, leisure and the economy;
- Safeguard the character of historic buildings and manage change so that their special architectural and historic interest is preserved;
- Preserve or enhance the character or appearance of conservation areas, whilst the same time helping them remain vibrant and prosperous;
- Preserve the special interest of sites on the register of historic parks and gardens; and
- Protect areas on the register of historic landscapes in Wales.

2.3.3 The historic environment comprises all the surviving physical elements of previous human activity and illustrates how past generations have shaped the world around us.

2.3.4 Planning policy recognises the Historic Environment and its Assets are finite and *"looks to protect, conserve and enhance the significance of historic assets. This will include consideration of the setting of an historic asset which might extend beyond its curtilage. Any change that impacts on an historic asset or its setting should be managed in a sensitive and sustainable way"* (para. 6.1.7). The effect of any development proposal on an asset or setting is a material consideration for Listed Buildings, Conservation Areas, Historic Parks and Gardens, World Heritage Sites and Archaeological Remains. Assessment of the effect on Registered Historic Landscapes may be required if development is within the landscape or its setting.

Technical Advice Note (TAN) 24: The Historic Environment (2017)

2.3.5 The purpose of the TAN is to provide guidance on how the planning system considers the historic environment during development plan preparation and decision making on planning and Listed Building applications. This TAN provides specific guidance on how the following aspects of the historic environment should be considered:

- World Heritage Sites;
- Scheduled Monuments;

- Archaeological Remains;
- Listed Buildings;
- Conservation Areas;
- Historic Parks and Gardens;
- Historic Landscapes; and
- Historic assets of special local interest.

2.3.6 The following relevant aspects which are covered in detail include:

Archaeological Remains

- 2.3.7 The conservation of archaeological remains is a material consideration in determining a planning application. When considering development proposals that affect Scheduled Monuments or other nationally important archaeological remains, there should be a presumption in favour of their physical preservation in situ. 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.
- 2.3.8 Where development might reveal, disturb, or destroy archaeological remains, including palaeoenvironmental evidence, it is important that the opportunities to record archaeological evidence are taken and that archaeological remains are not needlessly destroyed. The ability to record such evidence should not be a factor in deciding whether controlled removal should be permitted.
- 2.3.9 When considering planning applications that affect known or potential archaeological remains, the local planning authority should consult with their archaeological advisor, about the impact including the potential scale and harm, of the development on archaeological remains, and/or the adequacy of the mitigation of what has been proposed. These two factors are material considerations in determining the planning applications. Where a planning application directly affects a Scheduled Monument and its setting, then the local planning authority is required to consult the Welsh Ministers through Cadw.
- 2.3.10 The case for the preservation of archaeological remains that are not considered to meet the criteria for national importance, must be assessed on the individual merits of each case. The local planning authority must consider relevant policies and material considerations and will need to weigh the significance of the remains against the benefits of and need for the proposed development.

Conservation Principles for the Sustainable Management of the Historic Environment in Wales 2011

2.3.11 This document provides the basis upon which Cadw discharges certain statutory duties on behalf of the Welsh Ministers. Conservation principles should be used by others (including owners, developed and other public bodies) to assess the potential impacts of a development proposal on the significance of any historic asset/s and to assist in decision making where the historic environment is affected by the planning process.

2.3.12 There are six principles:

- Historic assets will be managed to sustain their values;
- Understanding the significance of historic assets is vital;
- The historic environment is a shared resource;
- Everyone will be able to participate in sustaining the historic environment;
- Decisions about change must be reasonable, transparent, and consistent; and
- Documenting and learning from decisions is essential.

2.3.13 In considering any planning application for development, the planning authority will be mindful of the framework set by government policy, by current Development Plan Policy and by other material considerations.

Local Planning Policy

2.3.10. Rhondda Cynon Taf Local Development Plan up to 2021 was adopted March 2011. The Heritage policy is outlined in Policy AW 7.

2.3.11. Policy AW 7 summary - Protection and Enhancement of the Built Environment Development proposals which impact upon sites of architectural and or historical merit and sites of archaeological importance will only be permitted where it can be demonstrated that the proposal would preserve or enhance the character and appearance of the site. Development proposals which affect areas of public open space, allotments, public rights of way, bridleways and cycle tracks will only be permitted where it can be demonstrated that :-

1. There is a surplus of such facilities in the locality, or;
2. The loss can be replaced with an equivalent or greater provision in the immediate locality;
or
3. The development enhances the existing facility

2.4 Desk-based Assessment

2.4.1. The historic environment desk-based assessment was undertaken in accordance with current best practice and the Chartered Institute for Archaeologists Standard and Guidance for Desk-Based Assessment (CIfA 2020). The study area for non-designated heritage assets, Listed Buildings, Scheduled Monuments, World Heritage Sites, Registered Historic Landscapes, Registered Battlefields and Registered Parks and Gardens is defined as a zone 1km from the boundary of the proposed development area (Fig. 1). The study area was agreed with the Stewardship Officer at Heneb-GGA.

2.4.2. The principal sources of information which were consulted to provide information about heritage assets within the study area were the Historic Environment Record (HER) for southeast Wales maintained by Heneb-GGA, and the National Monuments Record for Wales (NMR) held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW). The Central Register of Air Photography for Wales held by the National Archives was also consulted. Further relevant information was researched from a variety of additional sources including:

- Cadw
- National Museum of Wales (NMW)
- Portable Antiquities Scheme (PAS)
- Natural Resources Wales
- Glamorgan Record Office
- Google maps and satellite images
- LiDAR data
- Where identified, local archaeologists/historians and other archaeological organizations for unpublished information and/or specialist local knowledge
- Any other relevant sources identified

2.5 Field Visit

2.5.1. A field visit to assess the archaeological and historical significance of the site and to assess the setting of any identified assets was undertaken on 13th November 2024 and a written and photographic record was produced. This identified heritage assets and landscape features, current land use, areas of disturbance, areas of potential colluvial or alluvial deposits etc. The setting of the site within the surrounding landscape was also noted regarding any archaeological assets identified in the desk-based assessment.

- 2.5.2. A photographic record of the Site was made, which consisted of digital photographs taken at high resolution (12 megapixels and above). The photographic record included photographs of archaeological features, appropriate groups of features and structures. Photographs included an appropriate scale. Any archaeological remains identified were located on appropriate scale site plans, with TBMs and OSBMs indicated when possible. All levels were reduced to ordnance datum.

2.6 Assessment of Significance

- 2.6.1. In assessing the significance of any archaeological assets identified within the study area and its environs the archaeological, historic, architectural and artistic interests pertaining to the assets were considered. The likelihood of the presence of unknown archaeological assets within the area of the proposed development site was also considered. This was based on the review of the character and distribution of known archaeological assets in the surrounding area and the characteristics of the study area.

2.7 Potential Impact of Proposed Works

- 2.7.1. The potential impact of the proposed works was considered in relation to the proposed development with reference to the known heritage assets and their setting in the study area. If deemed necessary, potential mitigation strategies for these impacts were suggested along with recommendations for possible further archaeological work if required.

2.8 Reporting & Archiving

- 2.8.1. The results of the work will form the basis of a full archive to professional standards, in accordance with current National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales (National Panel for Archaeological Archives in Wales 2017) and comply with RCAHMW guidelines of Wales (RCAHMW, 2015), the Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) (2022) and the ADS digital records (archaeologydataservice.ac.uk/advice).
- 2.8.2. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the CIfA in that organisation's Code of Conduct (CIfA, 2022) and this will be adhered to in relation to the current project.
- 2.8.3. Digital archives will be submitted to the RCAHMW. The project archive, which will include photographs, plans, elevations and site notes, will be deposited with the relevant Museum or other agreed body. It will be integrated into the archive of any subsequent fieldwork.

- 2.8.4. A copy of the final report will be submitted to the regional HER in accordance with the guidelines set out in the *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (2022).

3. SUMMARY OF RESULTS

3.1 Historic Baseline Data

- 3.1.1. The HER recorded 33 heritage assets (prefixed with 'GGAT' within the text) and RCAHMW recorded 59 heritage assets (prefixed with 'NPRN' within the text). Excluding duplicate entries, this totals 77 heritage assets within the 1km study area (Figures 2.1 and 2.2, Table 1). The summary presented below is derived from information held by the Heneb Historic Environment Record Data, Enquiry Number: 9075 © The Heneb HER Charitable Trust [and database right] [2024] and the Royal Commission on the Ancient and Historical Monuments of Wales which contains public sector information licensed under Open Government Licence v3.0. No known heritage assets were recorded within the site boundary. There are three scheduled monuments within the study area: the Glynneath gunpowder works (GGAT10311g, NPRN439, BR230) c. 990m north of the site boundary, Craig y Ddinas Hillfort (GGAT01107m, NPRN301695, BR178) c. 750m north of the site boundary, and the Dinas Silica Mine (PRN 01472m; NPRN 275634, BR229) c. 850m northeast of the site boundary, all of which lie at its northernmost extent. The study area contained no World Heritage Sites, Conservation Areas, Registered battlefields, or Registered Parks and Gardens or listed buildings are located within the study area, and the study area lies outside the Merthyr Tydful Historic Landscape.
- 3.1.2. In addition, historic map regression has identified two farmsteads and field boundaries within the site, and a total of fifteen heritage assets (HA 1-15) within the 1km area which are not within the HER and RCAHMW databases (Section 3.3 below, Figure 2.1, Table 2).

Prehistoric Period (up to AD 43)

- 3.1.3. No prehistoric heritage assets were identified within the Site. Within the 1km study area there are two cairn fields; Cefn Rhigos Cairnfield or Barrow Cemetery (GGAT04523m) c. 160m to the north-east of the Site and Coed Garn Y Gist Cairnfield (GGAT00004m) c. 730m to the north-east of the Site. There are four cairns recorded within the HER as part of the Cefn Rhigos cairn group (GGAT04523m); Cefn Rhigos 1 (GGAT00001m, NPRN 224836), Cefn Rhigos 2 (GGAT00002m, NPRN 305636) Cefn Rhigos 3 (GGAT00003m, NPRN 305637) and an outlying cairn, Rhigos Cairn (GGAT00010m, NPRN 305638). These cairns are recorded as grass covered circular or oval mounds and their composition is unknown. An additional cairn named Rhigos Cairn (GGAT10276g) is situated to the north-west of the Site.
- 3.1.4. Cefn Rhigos 1 (GGAT00001m) is recorded as possibly part of the cross trenching by Aileen Fox and Leslie Murry Threipland. Fox and Threipland (1942) published report detailing their excavations of two cairn cemeteries in the area of Hirwaen. The closer of the two sites was 100-200m to the east of the Site boundary. They do not detail the excavation of the cairns at Cefn Rhigos; however, it is possible that it was excavated as a part of this series of excavations. Those

cairns detailed were typically composed of small stones, some with large boulders around the edge. Three have 'scoop' burials beneath them and one a square pit. Many were 100% excavated although cross trenching was also employed.

- 3.1.5. Coed Garn Y Gist Cairnfield (GGAT00004m) consists of a group of cairns, of which 14 are recorded as remaining extant. This group is reported to have been bigger before the widening of the Heads of the Valleys Road. Coed Garn Y Gist Possible Round Barrow (GGAT04524m) is believed to be composed of sandstone rubble and considered to be the 'only cairn with a possible funerary function' within the HER record.
- 3.1.6. A stray find of a Bronze axe was found at Glynneath (GGAT02248w).
- 3.1.7. To the north of the Site, the Scheduled Monument of Craig-y-Ddinas Hillfort, Hirwaun (GGAT01107m, NPRN 301695, BR178) comprises a large polygonal promontory hillfort on a long narrow limestone ridge. It is stone walled and measured some 90m NE/SW by 40m NW/SE externally, with outworks extending 14m to the north-east. It has extensive entrance works to the east where stone clearance and walling for an approach trackway can be traced for about 80-100m. There is a prehistoric roundhouse settlement below the entrance to the east (NPRN 89033).

Roman Period (AD 43 - 410)

- 3.1.8. No Roman heritage assets were identified within the site or within the study area.

Early Medieval Period (AD 410 – 1065)

- 3.1.9. No early medieval heritage assets were identified within the site or within the study area.

Medieval Period (AD 1066 - 1540)

- 3.1.10. No medieval heritage assets are known from the site. Within the 1km area are two medieval assets: Glynneath Ford (GGAT00011m); and the Craig-y-Ddinas Settlement (NPRN 86809). The latter is a probable deserted agricultural settlement. Low ruins of two stone buildings with associated irregular field boundaries have been noted, and fields to the west contain ridge and furrow. Records also suggest that the location may be a mis-location of Clwyd-rhyd-fan (NPRN 402123), 275m to the east. The Inventory of Historic Battlefields in Wales shows an entry outside of the 1km area on Hirwaun Common named 'Hirwaun Wrgan' dating to 1088. However this is disputed and attributed to a 1790s forgery by Iolo Morganwg (RCAHMW accessed 22/11/24).

Post-Medieval Period (1540-1900)

- 3.1.11. There are no records of post-medieval heritage assets identified within the site boundary. However, historic map regression had demonstrated the survival of historic field boundaries, some of which predate 1814, and the position of the original Cefn Rhigos farm buildings, first shown on the 1847 Tithe map as 'Cefn-rys-groes' (see section 3.3 below).

- 3.1.12. The site is situated within the industrial landscape of the Heads of the Valleys, largely associated with the iron and coal industries. There are numerous heritage assets from these industries within the 1km study area, including tramways, railways, powder works and a colliery trial level. Investigation of the study area by historic map regression has identified a number of additional heritage assets, (see section 3.3 below). These include the Cwmirwrelach Mineworks (SN 90080 06755), a Lime works, and numerous farmsteads identified within the Aberdare 1814 map, and the 'New Inn' depicted on 1st edition Ordnance Survey (OS) maps 25" (1878). Two heritage assets from the post-medieval period are Scheduled Monuments: Dinas Silica mine (PRN 01472m; NPRN 275634; BR229) and the Glynneath Gunpowder Works (GGAT10311g; NPRN439; BR230)
- 3.1.13. Dinas Silica mine (PRN 01472m; NPRN 275634) is a scheduled monument (BR229) and is a rare and impressive example of a surviving silica mine, with associated quarries and mine entrances (GGAT02583m and PRN 1472), a silica processing plant, tramroads, an aerial ropeway, and a powder store (PRN 2598m). The rock was discovered in the 1780s and exploited thereafter, and by 1807 a tramroad (NPRN 405056) (Dr Bevan's) was built to take the product to the Neath Canal. It was closed in 1964.
- 3.1.14. The Glynneath Gunpowder Works (GGAT10311g, NPRN439) is a scheduled monument (BR230). The works were established in 1857 by the Vale of Neath Powder Co. for the manufacture of blasting powder (black powder) for use in the South Wales coalmining industry. The works are largely distributed along the northern side of the Avon Mellte. In 1862/3 Glynneath Gunpowder Works was taken over by Curtis's and Harvey and later merged into Nobel's Explosive Co. which became part of Imperial Chemical Industries in 1926. The factory was closed in 1940. The Nobel Powder Works (GGAT01682m; CPAT site 5310), is recorded as a series of buildings relating to the Nobel black powder factory within the same area, along the northern side of the Avon Mellte.
- 3.1.15. At least 30 heritage assets can be associated with the Glynneath Gunpowder Works. Eighteen can be related directly to production and storage: Saltpetre Store (NPRN 405058); a chemical storage facility erected by 1904, Smithy and Wheelwrights Shop (NPRN 405062), Saltpetre Refinery (NPRN 405064) built before 1877 and now demolished, Charcoal Store (NPRN 405070) built before 1877, possible disused by 1927 and now demolished, Sulphur Store (NPRN 405071) built before 1877 and now demolished, Charge Barrel Store (NPRN 405072) built before 1877 and now demolished, Ground Charcoal Store (NPRN 405073), Grinding and Charge Mixing House (NPRN 405074) built before 1877 and now demolished, Sudan Incorporating Mills (NPRN 405075) a group of three crushing mills built in 1898. These are now demolished although footings were noted as visible. Incorporating Mills (NPRN 405076) group of eight crushing mills built by 1877. These are now demolished although footings and a pit were noted

as visible. Steam Engine (NPRN 405079), Charge Magazine (NPRN 405080) shown on the 1st edition OS 1904 map, Cake Press House (NPRN 405084), Hydraulic Pump House (NPRN 405085), Cake Press House (NPRN 405086) built before 1877, Lower Leat (NPRN 405092) ran south of the Mills (NPRN 405076) serving the turbine and, after 1898, the waterwheel and turbine of the Sudan Mills (NPRN 405075) before discharging into the river, Hydraulic Pellet Press House (NPRN 405095) built before 1877 and noted as intact; the Aqueduct (NPRN 405097) carrying the Lower Leat (NPRN 405092) across the Afon Mellt, and a Building at Pontneddfechan Powder Works (NPRN 41103), a stone-built powder mill with a date-stone "C & H 1868" may also relate to these works.

- 3.1.16. There are nine additional buildings in provision of the Glynneath Gunpowder Works. These comprise; the Entrance Gates and Lodge (NPRN 405057); a Search House (NPRN 405059), Fitters and Coopers Shop (NPRN 405061); Carpenters Shop and Saltpetre Stores (NPRN 405063), Cart Shed and Stable (NPRN 405066), Hay Shed (NPRN 405068), Watch House and Wash House (NPRN 405077), Harness Room (NPRN 405067) and Fire Engine House (NPRN 405078). There are also three houses associated with the Glyn Neath Black Powder Works; Holybush Cottage an Engineers Cottage (PRN 405060), the General Office and Stableman's House (PRN 405065), built prior to 19877 and Rose Cottage, Foremans House (PRN 405069) build prior to 1877.
- 3.1.17. Nedd Fechan Mill (NPRN 24642) stood on the right bank of the Nedd Fechan, mid-way between the village and the Pyrddin confluence. It was in a ruined state by 1925 but retained the mill wheel and grinding stones.
- 3.1.18. Heritage assets related to tramways are recorded in nine locations, largely serving the area's mines and processing sites: Old Tramway, Glynneath (GGAT07703w) is shown on the 1st edition OS map 25" (1878); the Rhigos tramline (GGAT10320g and GGAT10321g) is shown on the 1st edition OS 25" map (1878), 2nd edition (1900) and 3rd edition (1919) OS maps; Pontwalby Power Operated 2 Stage Incline (GGAT01039.1m), a tramway incline that runs 800m west from Deri Hir was built as part of the Cefn Rhigos Tramroad in 1803-5, with the objective to connect the ironworks at Aberdare with the Neath Canal and used by a high-pressure steam-engine; Tappenden's Tramroad West (GGAT03225.1m) was opened 1805. The tramroad was built in two sections; the first by the Neath Canal Company commenced in 1802 from the canal head at Glyn Neath to Wyfra bridge, the second by Homfray, Birch and the Tappendens eastwards from the bridge to the ironworks. The Causeway, Tappenden's Tramroad West (GGAT03225.3m) is also on this line. This line is also recorded as Cefn Rhigos Tramroad (PRN 96187) which includes the Glynneath Incline and Pont Walby Incline and shows the line extending from Glynneath to Hirwaun. This is the second oldest steam-powered incline known to have been built in the United Kingdom (NRW, accessed 7/11/24) An additional dismantled

tramway at Nant Llywyn-y-gwin, Glynneath (GGAT07058w) is shown on 1st edition OS maps 25" (NPRN 1878). Craig-y-Ddinas/Dinas, Inclined Plane (NPRN 33462, GGAT01126m and GGAT01354m), is noted as possibly serving a coalmine and is situated on the south side of the River Mellte, opposite the powder works. The Pont Walby E, Tramroad (NPRN 86951) was located to the east of Pont Walby. (NPRN 405056). Dr Bevans Tramroad, Glyn Neath (NPRN 405056) travelled between Dinas Silica mine (PRN 01472m; NPRN 275634; BR229) and the Neath canal. Dinas Silica Mine Tramroad (NPRN 411296) also served the silica mine.

- 3.1.19. There are seven heritage assets related to railways. The Vale of Neath Railway (GGAT02500.3m) and the Loading Bay (GGAT02500.0m) which was served by a balance incline on the Vale of Neath Railway, was built and used between 1858-1930s. The Hirwaun Common Mineral Railway (GGAT03220m), was marked as a tramroad on the tithe map of c.1840 and a conventional locomotive-operated railway on the OS map of c.1880. The Signal Box 276, Tir Mawr Farm, (GGAT04774m) shown on the OS 1st Edition map 25" (1878) and the Pen Cae Drain Railway Tunnel (GGAT02500.2m, NPRN 34846) which serves the Vale of Neath Railway (GWR) and appears on the 1st edition OS 25" map (1878), 2nd edition (1900) and 3rd edition (1919) OS maps.
- 3.1.20. The Avan Vale Colliery Trial Level III (GGAT04523w) is shown noted on the 1900 OS 6" 2nd edition map.
- 3.1.21. The Dinas Rock Brick Works, Pontneddfechan (NPRN 405050) (alt. Dinas Bridge Fire Brick Works) of Fredericks and Jenner was opened in 1820. The works produced silica refractory bricks and became internationally well-known; the Russian word for refractory brick is 'Dinas'. The OS 1/2500 map dated 1877 shows at least four circular kilns at this site, and sand pits to the east at SN 9113 0799. The flooded pits are still visible, between the road and the river. The works were closed by 1904.
- 3.1.22. In Pontneddfechan, Dinas Terrace (405049), consists of a row of seven terraced houses built before 1877, probably for workers at the adjacent Dinas Rock Brick Works (NPRN 405050) or the nearby Glyn Neath Black Powder Mills (NPRN 439).
- 3.1.23. Additional domestic and agricultural assets include: Hendre-fawr (GGAT01554mr, PRN 18943), a post-medieval house, with fireplace stairs; Llwyn-y-gwin farmstead (GGAT09499w), a potential historic farmstead identified as part of GGAT and Cadw Historic Farmsteads project and visible on Second Edition OS 6" mapping (1900); the early eighteenth-century house of Gwrrangon Isaf (NPRN 18906); the two storied house of Ynys Cambwll (NPRN 28114). A settlement complex of at least two structures is recorded at Clwyd-Rhyd-Fan (NPRN 402123) which were disused in 1904 and are in a much-ruined state. Within Cefn Rhigos (NPRN 423083) the 'New Inn' is depicted on the 1st edition OS 25" map (1878).

- 3.1.24. There were three chapels, one in Rhigos, Calfaria Independent Chapel, Maesygarreg (PRN 10196), one in Cefn Rhigos, Bethel Wesleyan Methodist Chapel, Mount Road (PRN 10197) and one in Pontneddfechan, Ebenezer Calvinistic Methodist Chapel (PRN 9526).
- 3.1.25. Pont Nedd Fechan (NPRN 24139) is a single-span stone-built bridge over the River Neath.
- 3.1.26. Roadside Crag, Pontneddfechan (NPRN 422101). An old quarry face at the foot of Craig y Ddinas, was located in woodland to the north-east of Pontneddfechan near Glynneath.

Modern Period (1901-present)

- 3.1.27. No modern heritage assets are recorded within the site, and one modern heritage asset is recorded from the study area. This is Cefn Rhigos (NPRN 423083) which appears to consist mostly of relatively new-built houses apart from the aforementioned 'New Inn'.

Undated

- 3.1.28. No undated heritage assets are recorded within the site. Within the 1km study area, an undated platform (GGAT10300g) was recorded on the 2nd Edition 25-inch OS map (1900). No detail is provided for the Coed Wernhir, Rejected Mounds (24460), although it is located within the line of the Vale of Neath Railway. Pontneddfechan village (PRN 423085) is shown as a well-established village of approximately 14 buildings on the 1814 Aberdare map. (see section 3.3.2)

3.2 Previous Archaeological Works (Events)

- 3.2.1. Within the 1km study area there were 24 separate events recorded within the HER (Table 3, Figure 3). Twelve of these events comprised visits to individual sites during the High Status Settlement in Glamorgan and Gwent project and have been summarised within that one project (Table 3). The majority of events comprised field visits contributing to regional archaeological surveys, field surveys, desk-based assessments and impact assessments. Although the regional projects encompass the area of the site, it is not detailed within the HER whether site visits were undertaken within the site boundary for those regional projects. These events included a desk-based assessment and impact assessment at 'land at Cefn Farm, Rhigos' which was centred 10m to the south of the Site boundary (E007234 and E007236). Additional events comprise a single watching brief and a single excavation, neither of which fell within the site boundary.
- 3.2.2. In 1941 an excavation was undertaken at Cefn Rhigos Cairn 1 (GGATE000510). It was excavated by means of cross-trenching and was probably part of the excavations in 1941 by Aileen Fox and Murray Threipland.
- 3.2.3. In 1980 a field survey was undertaken at Dinas Incline Plane by H. Owen-John. A possible Bronze Age ring Cairn was noted. No further information was available.

- 3.2.4. In 2005 the Glamorgan-Gwent Archaeological Trust (GGAT) performed site visits identifying the condition of the Tappenden's Tramroad East and West. Approximately 20% of the entire tramroad survives with numerous features were found to be in situ. Two field visits were undertaken within the study area.
- 3.2.5. Between 2004 and 2010, the Glamorgan-Gwent Archaeological Trust (GGAT) carried out a project named the Southeast Wales Industrial Ironworks Project (GGATE000954) with grant aid from Cadw, to study the industrial landscapes of the northern coalfield rim, specifically the Heads of the Valleys area, associated with the coke-fired iron industry. This project was instigated in response to the ongoing threats faced by industrial remains of Southeast Wales. The aim of the project was to assess the current state of survival/preservation of ironworks landscape in the area of the northern coalfield rim to inform conservation, protection and management of these monuments and their associated landscapes. Year 6 of the Southeast Wales Industrial Ironworks project focused on the Aberdare-Hirwaun-Penderyn Corridor and Eastern Valley (GGATE007395) and is recorded within the HER as a desk-based assessment. As part of this study, the Cynon with the Dare and Aman area was shown to be an extractive valley landscape, including extractive features at Rhigos and Hirwaun to the east of the study Area. No sites within the 1km study area were visited as part of that study.
- 3.2.6. In 2010 the Glamorgan-Gwent Archaeological Trust, on behalf of Cadw, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be or potentially to be of National Significance, 19 of which were already Scheduled Monuments. Nine sites were considered to be at least of Regional Significance. Of the twelve heritage assets provided within the HER event data none are within the 1km study area.
- 3.2.7. In 2009 Dyfed Archaeological Trust Field Services were commissioned by The Environment Agency, to undertake an archaeological watching brief during the site preparation works associated with refurbishment of the Pontneddfechan Weir at Glyn neath, Neath. The groundworks were undertaken within the site of the former Pontneddfechan Powder Works. The watching brief identified a length of the front wall of the former sulphur store during topsoil stripping of the construction compound. Site stripping also revealed the remains of ballast and sub-ballast associated with the former tramway which were known to exist in close proximity from map evidence. During the relocation of the black-stone, a stone and brick lined shaft capped with railway sleepers was revealed. No corresponding feature was evident from surviving map evidence, although it is known it lay in close proximity to two of the incorporating mills within the powder works. Rubble spread relating to the demolition of the incorporating mills was also revealed (Ratty, 2009)

- 3.2.8. In 2014 Southwest Archaeology was commissioned to undertake a desk-based assessment (E007234) and visual impact assessment (E007236) of land at Cefn Farm, Rhigos, Rhondda Cynon Taf, to identify the potential effects of the installation of a single 500kw wind turbine. It was concluded that the likelihood of encountering buried archaeological remains during development was slight, however should they be present, groundworks could result in permanent and irreversible loss. The overall visual impact was assessed as negative/moderate. A field visit (E007235) was undertaken as part of the desk-based assessment (E007234). This work was centred 10m to the south of the Site boundary.
- 3.2.9. In August 2019 Archaeology Wales was commissioned by Tower Regeneration Ltd. to conduct an archaeological desk-based assessment and site visit (E008220) to determine the archaeological potential of land adjacent to the former Tower Colliery, Hirwaun, Rhondda Cynon Taf, ahead of mixed development. Two non-designated heritage assets lay within the boundary of the development; Hirwaun Common Rifle Range (07928m) and Bute Colliery and Hirwaun Tramway (02498.0m). The assessment determined would both potentially be directly impacted by the proposed works, although previous non-intrusive archaeological work was unable to establish any physical remains of the rifle range.
- 3.2.10. In December 2021 Abrams Archaeology carried out a site visit as part of a heritage impact assessment in relation to a proposed development of a solar farm and ancillary structures, grid connection/s and associated access routes, known as Bryngolwg Solar Farm (GGATE007886). The assessment determined the Hughes Patches area (08636m, 08637m, 01795m, and 08638m) was the only remaining part of the site within which archaeological remains either above or below ground were likely to survive in the form of extraction pits, reservoirs, former tramways, and other industrial period remains. The remainder of the site had been subject to open cast coal mining and subsequent reinstatement, thus removing the potential for buried remains.
- 3.2.11. In addition, a geophysical survey has been undertaken on the site as part of the planning application for this proposed development. The survey identified no certain archaeological features, with several diffuse linear anomalies which may represent historical drainage and numerous scattered anomalies which may represent pits or could also be glacial boulders. The survey also identified a likely infilled tributary to a palaeochannel in the northeast corner of site and a likely modern dump of hardcore to the south of site (TerraDat 2025).

3.3 Cartographic Evidence

Beau, Joan. Glamorganensis Comitatus; Vulgo Glamorganshire. Published 1644.

- 3.3.1. The Bleau 1644 map shows that the area occupied by the site as hills. A church is shown named 'Aberpirgum', situated south of the neath river, close to the existing village of Pontneddfechan,

although on the opposite side of the Neath river. The church at Penederyn is also annotated to the north and the river of Ogmore to the east of the Site.

Aberdare Sheet 192. 2 inches to one mile. Published 1814

- 3.3.2. The Aberdare 1814 map shows the Site divided into five fields. The site is boarded by further fields to the west, Rhigoes road to the north of the Site, running east-west, Mount road to the east side of the site running north-south and the river Nant Llwyn-y-Gwin is shown running east-west to the southwest of the site where it terminates. Beyond the area of the site, within the 1km area, the land was largely occupied by fields and wooded areas. A tram annotated as the 'Aberdare Tram Road' ran east-west c.100m to the south of the site and correlates in position with the Tappenden's Tramroad West (GGAT03225.1m). The Cwmirwrelach Mineworks (SN 90080 06755) lay to the south-west of the Site, and to the east were Lime works and farmsteads including Llywn-y-arwyn, Hendre, Rhyd, Rhyd-groes, Clynrhydfaen, Cwmmgwrangron, Werfa, Garngist, Pen-y-cae-druin, Tylemorgrug and the village of Pontneddfuchan. An unnamed farmstead was also to the south of the site and another within the area of the Werfa farmstead. Cefn Rhigos farm is not marked.

Tithe Map Plan of the parish of Ystradyfodwg in the County of Glamorgan. Surveyed by J.T. Williams. Published 1847.

- 3.3.3. The 1847 Tithe map shows the area divided into eight fields, of which those to the north survive today, and those to the south survive in part. Therefore, the hedgerows and treelines seen today are historic. Two small fields in the north-western area of site are annotated as 951 and 953. They were both in use as pasture, occupied by Edward Williams and owned by the Marquis of Bute. Field 952 was named 'Part of Cefn Cae' and field 951 named 'Llaun fach'. The remaining fields were occupied by Rees Rees Morgan and Morgan John Morgan and owned by De Winton Walter and named as 'Part of Cefn Rdyn' except for the larger northern field, which was numbered 1007 and named Twyn nant Garw. The south-western field 1002, was in use as pasture, field 1006 was 'pasture and arable' and fields 1003, 1004 and 1005 were meadow. Field 1004 contained a building and enclosure in the position of Cefn-rys-groes farm. Beyond the site, within the 1km area, Clynrhydfaen to the north of the area and a croft to the south of Werfa farm are no longer marked and a building to the west of Werfa farm at the side of Rhigos road is now marked. Cwmirwrelach Mineworks (SN9008006755) and the Lime works are not shown.

Ordnance Survey 25-inch map. Glamorgan X.3, 7. Surveyed: 1875 to 1876, Published: 1878 (Figure 6).

- 3.3.4. The 1879 OS map depicts the same fields as the Tithe map of 1847, with the additional division of the northern tithe field (1007) into field '91' and '101' and one of the south-western fields

(tithe field no. 1003) divided into fields '97' and '98'. Cefn-rhyd-groes farm is shown between fields '98', '97' and '96' to the southwest within the site. It is shown as four larger buildings and three smaller buildings with several small, enclosed areas to the north and south and trees along the field boundary in the vicinity of the farm. Foot paths are depicted leading to the south to a well and to the east. The east running footpath divides, running to towards Mound Pleasant Farm and a well and to the southeast towards Mount Road where it meets Nant Y Fforch river. Nant Y Fforch river is shown running along the southern boundary of field '115', which is the most southeasterly field within the Site. Mount Pleasant farm is enclosed with a separate garden or yard to the north and at least two buildings. The field marked '97' to the southeast of the Cefn-rhyd-groes farm is shown as marsh land. A linear feature which does not meet adjacent field boundaries is marked with one of the north-western fields, field '91' and was located during the site visit.

- 3.3.5. Within the 1km study area, an 'Old Tramway' is shown leading east from the Cwmirwrelach Mineworks. Old levels for coal and ironworks are also marked in this area. The Vale of Neath railway section (G.W.R.) and a tramway are shown, largely running through the Coed Y Frynau woods on a southwest-northeast trajectory to the northwest of the site. Along the railway route is Pen-cae-drain tunnel, Pen-Y-Waun farm and Waun-gwm Place. The New Inn farm and Wyrfa-isaf are shown to the east of the site along Rhigoes road. Two tumuli are shown within Coed Carn-Y-Gyst, a wooded area.

1st edition Ordnance Survey, 6-inch. Glamorgan X.3 Surveyed: 1875 to 1876, Published: 1878 ,

1st edition Ordnance Survey, 6-inch. Glamorgan Sheet X, Surveyed 1875 to 1877, published 1884 (Figure 7),

2nd edition Ordnance Survey, 6-inch. Brecknockshire Sheet XLIX.NE Surveyed: 1875 to 1877, Published: 1888 (Figure 8),

2nd edition Ordnance Survey, 6-inch Glamorgan Sheet X.NE Revised: 1897, Published: 1900, and Ordnance Survey 6-inch map. Brecknockshire Sheet XLIX.3, Brecknockshire Sheet XLIX.4 and Glamorgan X.7, Revised: 1914, Published: 1918 (Figure 9)

- 3.3.6. Within the site there is little change from the OS 25-inch (1878) map within subsequent OS maps (1884, 1888, 1900, 1953), apart from an additional enclosure to the south of Cefn Rhigos farm. Beyond the site within the study area, the villages now known as Rhigos and Hirwaen Industrial estate remained small, but did see a low level of expansion between 1884 and 1953. The Brickyard on Mount road is disused by 1953.

3.4 Aerial Photograph Consultation

- 3.4.1. The Central Register of Air Photography for Wales was consulted and a total of 20 aerial photographs held were examined. The earliest aerial photographic image held was from 1945 and the latest from 2017. Current satellite imagery was also studied using Bing Maps (2024). Those aerial photographs described below show developments within the site or study area.
- 3.4.2. Photograph '1945 4561 RAF3GTUD_T19 5081' from 1945 shows the extant buildings Mount Pleasant (HA 3) and Cefn-rys-groes farm (HA 1) and associated enclosures. Possible ridge and furrows (SN 91310 06545) (HA 15) are visible within south-western corner of the site and do not appear to follow the modern field boundaries. A linear feature at SN 91142 07004, which appears to be a denuded field boundary, travels south from Rhigos road. Variable depths of colour across the separate field may represent some variation in field use and possibly areas of scrub land.
- 3.4.3. Photograph '1947 4709 RAFCPEUK1997 2383' shows an additional irregular old field boundary at SN9115906900 in 1947.
- 3.4.4. Photograph '1977 7707 ADAS 667 2033' shows Mount Pleasant farm (HA 3) as no longer extant in 1977.
- 3.4.5. Photograph '1991 Geonex14991 008' shows the Cefn-rys-groes farm (HA 1) is no longer extant in 1991.
- 3.4.6. Within the site, satellite imagery (Bing 2024) shows the remaining historic field boundaries as identified within the cartographic evidence, as hedgerows and stone walls. A linear feature, disconnected from the surrounding field boundaries appears to be a historic wall which is also marked on the 25-inch OS map (1878) as a disconnected linear feature.

3.5 LiDAR Consultation

- 3.5.1. LiDAR imaging was available at a resolution of 1m and shows original field divisions as shown within the cartographic evidence (Data Map Wales: Lidar viewer 2024). In addition, anomalies likely representing field divisions not shown on the available historic mapping are shown. These anomalies largely occupy the northern area of the site within the Option Area (HA 2). Additionally, there are some anomalies within the position of Cefn-rys-groes farm (HA 1).

3.6 Natural Resources Wales Consultation

- 3.6.1. The 1km study area includes seven separate Natural Resources Wales (NRW) Character areas (Figure 4), for which their NRW historic landscape status is noted and excerpts from the NRW landmap portal are provided concerning the evaluation of their historic landscape value.

- 3.6.2. The site lies within the **Cwm Wyrfa (CYNONHL772)** area, evaluated as Moderate overall. 'An extensive tract of enclosed upland common influenced by early industrial activities; the pattern of rectilinear field enclosure has remained essentially unchanged from that shown on the OS 1st edition map of 1885. The moderate value assigned to this area reflects the limited nature of the archaeological record and the encroachment on its eastern edge by opencast mining activity.' (NRW Landmap portal, accessed 06/11/24)
- 3.6.3. **Pontneddfechan (ref. BRCKNHL830)**: Evaluated as Outstanding overall. 'An important, multi-period landscape with significant evidence of prehistoric funerary activity/field clearance incorporated into a later medieval/post medieval fieldscape, with substantial remains of 18th-20th century industrial activity superimposed onto this landscape' (NRW Landmap portal, accessed 06/11/24).
- 3.6.4. **Moel Penderyn (CYNONHL150)**: Evaluated as Outstanding overall. 'The outstanding value assigned to this landscape lies primarily in the rich industrial heritage which it contains, in particular the extensive remains of the Glyn Neath Gunpowder works on the western edge of the aspect area, which represent a unique survival within the Caerphilly/RCT historic landscape and further to the E, the 18th - 19th century quarries and associated tramroad network on Moel Penderyn.' (NRW Landmap portal, accessed 06/11/24).
- 3.6.5. **Penderyn, (CYNONHL176)**: Evaluated as Outstanding overall. 'An important, multi-period landscape with significant evidence of prehistoric funerary activity/field clearance incorporated into a later medieval/post medieval fieldscape, with substantial remains of 18th-20th century industrial activity superimposed onto this landscape.' (NRW Landmap portal, accessed 06/11/24).
- 3.6.6. **Cynon Valley Corridor (CYNONHL117)**: Evaluated as Outstanding overall. 'An area of outstanding historic importance, based on the fact that it contains some of the best-preserved industrial monuments surviving not only within the Caerphilly/RCT historic landscape, but in South Wales generally.' (NRW Landmap portal, accessed 06/11/24).
- 3.6.7. **Vale of Neath (southern valley side (ref.NPThL039))**: Evaluated as Outstanding overall: 'This area presents some problems in assessment; while the appearance of the heavily wooded valley may well superficially resemble that captured by late 18th-early 19th century landscape painters such as Hornor, it should be emphasised that much of the existing woodland represents modern coniferous plantation, not the ancient and semi-natural woodland which is shown on the OS 1st edition map. Much of the irregular fieldscape and pattern of dispersed settlement shown in this area on historic maps has survived; however, there has been limited loss of field boundaries and some farmsteads are in a ruined, derelict state or have completely vanished. However, while taking this serious loss of coherence into account, it has been decided to categorise this area as being of overall outstanding importance, in view of the

presence of industrial remains of exceptional rarity and national importance, in particular the remains of the early ironworking site at Melincwrt and the remarkably well preserved remains of the Glynneath inclined plane on the Cefn Rhigos Tramroad, the second oldest steam-powered incline known to have been built in the United Kingdom'. (NRW Landmap portal, accessed 06/11/24).

3.6.8. **Neath Valley Bottom (NPTHL043).** Evaluated as Outstanding overall. 'This area has been assessed as being of outstanding overall value as an historically important industrial communications corridor with key components, such as the Neath Canal and the Vale of Neath Railway, surviving in generally well-preserved condition, including some individual monuments of exceptional importance (e.g. the 10-arched Aberdulais Aqueduct and Basin).' (NRW Landmap portal, accessed 06/11/24).

3.6.9. The site is also within the NRW Cultural Landscape of Penderyn (CYNONCLS104) comprised of hills, lower plateau and scarp slopes and of moderate value for all criteria (Figure 5).

3.7 Site Visit

3.7.1. A field visit was undertaken on 13 November 2024 in sunny dry weather with high visibility (Plates 1-27, Figure 11). The site covers an area of c.0.13 km² within an agricultural landscape of enclosed fields to the south of Rhigos Road and west of Mount Road. Access to the site was to the south of Cefn Farm (Plate 1).

3.7.2. To the north of the entrance just outside the site boundary was an area which may have been occupied by the now destroyed Mount Pleasant Farm (Plate 2). This area is now flat and covered by vegetation, with no visible remains. It measured c.40m x 30m and sloped gently down to the north. The area to the north of this running along the eastern edge of the site along Mount road was wooded, densely overgrown and inaccessible.

3.7.3. The access route ran west from Mount road and comprised a flat grassy gravel track, slightly raised from the surrounding ground, with gentle slopes to fields either side (Plate 3). A barbed wire fence ran in-line with the track to the south. After c.180m the access route turned to the north running for a further c.150m, terminating at the entrance to the site (north field). A historical field boundary was c.45m to the north of the track and ran E-W in parallel to it (Plates 4 and 9). At its western end it met the northern return of the track and continued for a further c.40m north along the eastern side of the track, its eastern end terminated at Cefn Farm. The boundary comprised a 1.5m wide irregular and intermittent bank with small mature deciduous trees and partial modern fencing.

3.7.4. Besides the access route, at the change of trajectory of the track and historic field boundary, the approximate location of the Cefn rhy goes farm (HA 1) was investigated. Here there was a low grass covered raised platform, orientated N-S, measuring c. 45m long, c.15m wide and c.0.7m

high (Plate 6). It was roughly rectangular and was currently being used for the storage of concrete piping. To the east of the platform there was a small pond, with grass covered upcast to its north (Plate 8). To the east there was a N-S boundary comprised of a c.2m wide, c.0.6m high bank and embedded drystone wall with sparse brick repair work (Plate 5). Upon the top of the wall there were three dressed stone slabs and small mature deciduous trees (Plate 7). The boundary and platform formed a 2.5m wide channel where they ran in parallel.

- 3.7.5. The site comprised rough pasture with large boggy areas and high grasses around the edge and a central area of low grass. The southern area of the site was a gently rounded crest of a hill which became a moderately steep slope down to the north where it met Rhigos road. At the entrance to the site there was a culverted causeway which crossed two ditches (Plate 10). There was a dressed stone slab on the edge of the causeway (Plate 11). The ditches formed the southern boundary of the site and ran E-W either side of the site boundary (Plate 12). The northern of the two appeared the less maintained and was largely silted up to the east. A bank ran in parallel between the two ditches and small mature deciduous trees and a barbed wire fence line ran along the top of the bank. The northern of the two banks was shored up in places with rubble consisting of concreted 'ABC' frogged red bricks. A slightly raised grassy track ran along the north side of the northern ditch and terminated at a gate in the southwest of the site along the southern boundary (Plate 13). The western boundary comprised of a bank and ditch and a barbed wire fence line upon the bank, with the addition of small mature deciduous trees to the north (Plate 14). The southern boundary ran along Rhigos road and comprised large mixed species deciduous trees. The eastern boundary comprised large mature conifer trees and wire fencing.
- 3.7.6. Along the western boundary there was a large boulder and a mound of stone and earth, the latter derived from drainage management (Plates 15 and 16). There were numerous large field drains consisting of a large ditch and bank which ran along and crossed the northern slope of the site as shown in Figure 11 (Plates 17 and 18). The ditches typically measured c. 2-3m wide and c. 1-1.5m deep and the banks c. 0.60m-1m in height and c. 2-3.5m wide. Within the central area there were two banks without a visible ditch. The western of the two ran NNE-SSE, measuring c. 128m in length, c. 0.30-0.40m in height and 0.2m wide (Plate 19). The eastern c. 230m in length, c. 0.20-0.70m in height and c. 1.5-2m wide (Plate 20). The western bank has a large mature oak tree growing from a denuded portion of the bank (Plate 21). Erosion showed the bank to be comprised of earth and stone. A pile of stones set upon this boundary was likely a product of relatively modern field clearance.
- 3.7.7. From the centre of the site there were clear views of the skyline in all directions with views of Brycheiniog, including Moel Penderyn and Pen Y Fan and Corn Ddu to the north-east and views of the Maesgwyn Windfarm to the west.

- 3.7.8. There are three scheduled monuments within the 1km study area Glynneath gunpowder works (GGAT10311g, NPRN439) (BR230), Craig y Ddinas Hillfort (GGAT01107m, NPRN301695, BR178) and the Dinas Silica Mine (PRN 01472m; NPRN 275634) (BR229). Access was restricted to Glynneath gunpowder works due to landslides along the foot path, however the topology of the surrounding area showed that there was clearly no intervisibility with the site from this monument. The summit of Craig y Ddinas Hillfort was visited, and views of the surrounding landscape were found to be obscured by trees and any views of the site were obscured by the topography (Plate 24 and 25). The Dinas Silica Mine (NPRN 275634) entrance was visited and again any views of the site from the monument were prevented due to the topography (Plate 26 and 27).
- 3.7.9. It was not possible to access the Cefn Rhigos cairns due to their location on private land and was not possible to see the cairns from the northern end of Mount road. Currently it is unlikely that the cairns are intervisible with the site due to the height of the conifer trees along the eastern boundary of the Site, however, this cannot be said with certainty.

3.8 Setting of Heritage Assets

- 3.8.1. Setting contributes to the significance of a heritage asset, often extending into a broader landscape context and can include intangible as well as physical factors (CADW 2017).
- 3.8.2. The land within the proposed development area, currently contributes to the local agricultural hinterland and rural setting, as set within the Cwn Wyrfa area (CYNONHL772) Historic Landscape. It also contributes to the significance and setting of the undesignated and designated assets within the study area as the site itself contributes to a historic agricultural landscape, largely unchanged from at least the early 1800s.
- 3.8.3. The Craig-y-Ddinas Hillfort Scheduled Monument (GGAT01107m, NPRN301695, BR178) is set on a limestone ridge between the Afon Hepste valley to the north and the Afon Sychryd valley to the south. Both valleys are wooded with mature trees also extending across the hillfort itself. These woods extend south beyond the Heads of the Valleys Road after which the landscape gradually changes to one of scrubland and rough pasture.
- 3.8.4. The Dinas Silica Mine Scheduled Monument (PRN 01472m; NPRN 275634; BR229) is located to the immediate southeast of the Craig-y-Ddinas Hillfort beside the Afon Sychryd. It is largely within the wooded area although it appears to extend into scrubland to the northeast, however these remains could be subterranean.
- 3.8.5. The Glynneath gunpowder works Scheduled Monument (GGAT10311g; NPRN439; BR230) are situated on the north side of the Afon Hepste valley beside the Coed-y-Rhaidyr road. Only the southwestern-most c. 25m of the scheduled area extends in the study area for the proposed

development. As with the silica mine, the gunpowder works extend along the Afon Hepste within a wooded valley.

- 3.8.6. The undesignated Cefn Rhigos Cairnfield or Barrow Cemetery (GGAT04523m) c. 160m to the northeast of site is situated on the brow of a hill with views over the countryside to the north. These landmarks would have been visible to the north, east and south when constructed, although views to the west may have been obscured by the local topography. The setting is currently one of a patchwork of agricultural fields to which the site contributes.

3.9 Significance of Heritage Assets

- 3.9.1. Of the seven NRW Historic Landscape areas identified within the 1km each area, 6 are designated overall as areas of outstanding importance, while the Cwn Wyrfa area (CYNONHL772), within which the site is situated, is designated as of **moderate** value.
- 3.9.2. The three scheduled monuments within the study area: the Glynneath gunpowder works (GGAT10311g, NPRN439) (BR230); Craig y Ddinas Hillfort (GGAT01107m, NPRN301695, BR178); and the Dinas Silica Mine (PRN 01472m; NPRN 275634) (BR229) are all of **national** significance.
- 3.9.3. The Cefn Rhigos cairns are undesignated and considered of **moderate local** significance. It should be noted that as part of the Rhigos-Hirwaun cairnfields, they represent the remains of a once expansive area of Bronze Age activity, now no longer extant due to archaeological excavation in the 1940s and expansion of the industrial and modern built environment.
- 3.9.4. The undesignated asset of Cwmirwrelach Mineworks (SN 90080 06755) (HA 5) represents part of the early industrial activity within the area, possibly serving the scheduled monument of Hirwaun Iron works (NPRN 85173-85176; BR157) to the east of the study area, via the undesignated asset of Tappenden's Tramroad West (GGAT03225.1m). Whilst undesignated they contribute to the wider understanding of the early industrial historic landscape of Cwn Wyrfa area (CYNONHL772) and the scheduled monument of Hirwaun Iron works (NPRN 85173-85176; BR157) and are of **low to moderate local** significance.
- 3.9.5. The remaining undesignated heritage assets are of **low local** significance. A small number of assets represent Medieval settlement and low intensity agriculture within the area and are of local significance. The remaining assets largely date from the 1800s onwards and are of local significance, either contributing to the agricultural or industrial heritage of the local area. Of those previously unrecorded heritage assets, 16 form a part of the general agricultural and domestic landscape of the 1800s and are of **local** significance (HAs 1-4, 6-14). This includes Cefn-rys-groes farm (HA 1), Mount Pleasant farm (HA 3) and the Cefn Rhigos historic field boundaries (HA 2) which represent the only known possible heritage assets within the site boundary.

4. POTENTIAL IMPACT OF PROPOSED DEVELOPMENT

4.1 Archaeological Potential

- 4.1.1. In consideration of the possible pits identified during the geophysical survey (see separate report) and the close vicinity of the Rhigos-Hirwaun cairnfields within a similar topographical setting to the site, the potential for prehistoric activity is determined as low to moderate. There is low potential of Roman or medieval remains being encountered. There is high potential for post-medieval remains related to agricultural activity such as historic field boundaries and drainage within development area and a high potential of the remains of farmstead of Cefn-rys-groes (HA 1) within the access route.

4.2 Archaeological Impact

- 4.2.1. The proposed development includes the installation of battery energy storage system (BESS), together with high voltage substation compound, transformer stations, inverters, site access, internal access tracks, security measures, access gates, other ancillary infrastructure, landscaping and biodiversity enhancements on land at Land west of Mount Road, Rhigos, Aberdare, CF44 9YS.
- 4.2.2. Any groundworks as a part of this development will directly impact on any unknown archaeological remains within the site including the possible pits identified through the geophysical survey. The proposed access route passes through the area likely occupied by the original farmstead of Cefn-rys-groes (HA 1). The access route will remain as existing so there will be no impact on any surviving below ground remains in this area.
- 4.2.3. The proposed development would also directly impact upon part of the extant and former historic boundaries that divide the fields (HA 2) (Figure 10). Two of the historic field boundaries in the southern half of site are extant as upstanding earthwork banks. The southern extents of these fall within the proposed development area and will be directly impacted by the proposed works. Historic mapping shows the north-south aligned field boundary formerly extended south to the edge of site and could therefore also be present within the development area as buried archaeological remains, although no associated anomalies were identified in the geophysical survey (TerraDat 2025). A further historic field boundary runs along the eastern side of the access track and could be impacted were the track to need alteration or consolidation. The historic field boundary which bounds the site to the northeast will be partly directly impacted by the location of the 400kV cable. The majority of the historic field boundaries are located in the northwest quadrant of site and would not be directly impacted by the proposed development.

4.3 Built Heritage Impact

- 4.3.1. The proposed development would have **no direct impact** on the built heritage assets within the study area.

4.4 Setting Impact

- 4.4.1. The development will have a **negligible** effect on the significance of the scheduled monuments within the 1km study area through impacts on their settings. These comprised the Glynneath gunpowder works (GGAT10311g, NPRN439) (BR230), Craig y Ddinas Hillfort (GGAT01107m, NPRN301695, BR178) and the Dinas Silica Mine (PRN 01472m; NPRN 275634) (BR229). There was no intervisibility between the site and the monuments due to the local topography and distance between the site and the monuments. Any impact of the proposed development upon the setting of these monuments is restricted to the general erosion of the overall rural setting within the surrounding historic landscape areas and is therefore **minor**, with a **negligible** impact on significance due to the small contribution of their setting to the significance of these monuments. Maintaining the historic field boundaries within the site where practicable would reduce the potential impact on the setting.

- 4.4.2. Undesignated assets of local significance within the 1km area would similarly be impacted to a **minor** degree in the general erosion of the rural setting, with a **negligible** impact on their significance due to the small contribution of their setting to the significance of these monuments.

4.5 Potential Mitigation

- 4.5.1. In order to establish the presence or absence of buried archaeological remains within the site, a programme of archaeological monitoring and recording could be undertaken during groundworks for the proposed development. Were any assets of significance to be identified during these works this may require further liaison with the Stewardship Officer at Heneb-GGA and/or Cadw.
- 4.5.2. Principally, historic hedgerows and treelines surrounding the site will be retained to preserve the ability to 'read' the landscape and continue to protect the setting of the historic landscape. Conifers along the eastern boundary of the site currently provide screening of the site from heritage assets to the east. These will be retained and enhanced for screening purposes, or the development could seek to enhance the natural and historic setting by replacing the current conifers with native trees along the eastern boundary.
- 4.5.3. The proposed mitigation will ensure the proposed development would have no significant impact on the built heritage or buried archaeological remains within the site, however, the final decision for any mitigation strategy rests with the Stewardship Officer at Heneb-GGA.

5. CONCLUSIONS

- 5.1.1. A total of 77 known heritage assets were recorded within the study area which includes three scheduled monuments: the Glynneath gunpowder works (GGAT10311g, NPRN439) (BR230); Craig y Ddinas Hillfort (GGAT01107m, NPRN301695, BR178); and the Dinas Silica Mine (PRN 01472m; NPRN 275634) (BR229). No known designated or undesignated heritage assets were present within the site, however two assets were identified within the site and access route during the course of this assessment. These are the Cefn-rys-groes farmstead (HA 1) along the access route and Cefn Rhigos historic field boundaries (HA 2) within the site.
- 5.1.2. Within the 1km area, cartographical research and examination of aerial photographs has identified 15 additional heritage assets (HA 1-15) which were not previously recorded. This includes possible ridge and furrow (HA 15) outside the development boundary but within SE of the land within ownership, and Mount Pleasant Farm (HA 3) directly adjacent to the site to the east. Additionally, the Cwmirwrelach Mineworks (HA 5), a Lime works (HA 7), the New Inn (HA 4) and a Brickyard (HA 6) and 9 additional farmsteads (HA 8-14) were identified within the 1km study area. They are each likely to be of **local/low significance**, with the exception of the Cwmirwrelach Mineworks which is of possible **low-medium** significance.
- 5.1.3. Of the seven NRW Historic Landscape areas identified within the 1km each area, 6 are designated overall as areas of **outstanding** importance, while the Cwn Wyrfa area (CYNONHL772), within which the site is situated, is designated as of **moderate** value.
- 5.1.4. Within the 1km study area were 24 separate events which largely comprise fields visits contributing to regional archaeological surveys, field surveys, desk-based assessments and impact assessments. A single watching brief and a single excavation were also recorded, neither of which fell within the site boundary.
- 5.1.5. The area to the north-east of the site within the 1km study area, forms part of a low lying saddle of land which links the uplands of Brycheiniog to central Glamorgan in the Hirwaun-Rhigos area. This area was an important foci of Bronze Age activity and attracted the attention of Aileen Fox, a prominent archaeologist of the 1940-60s. Together with Leslie Threipland, they identified at least three cairn cemeteries within the Hirwaun-Rhigos area and excavated a high proportion of them. The Iron Age is represented to the north of the Site, where the scheduled ancient monument of Craig-y-Ddinas Hillfort, Hirwaun (GGAT01107m, NPRN301695) (BR178) is situated, comprising a large polygonal promontory hillfort and associated with a prehistoric roundhouse settlement below the entrance to the east (NPRN 89033). Due to the close vicinity and topographical similarity of the site to that occupied by the Bronze Age cairn cemeteries, and the possible scattered pits identified from the geophysical survey there is a **low to medium** potential for prehistoric activity within the site boundary.

-
- 5.1.6. No Roman heritage assets and only three medieval Sites are recorded within the 1km area, indicating a low level of occupation during these periods up until the post-medieval period and a **low** potential for surviving remains.
- 5.1.7. Historic maps also show an agricultural presence with recorded and unrecorded farmsteads and signs of early industrialisation such as at Cwmirwrelach Mineworks (SN9008006755) by the early 1800s. There was great expansion of the industrial landscape within the Heads of the Valleys from the 1850s, largely associated with the iron and coal industries. The numerous heritage assets within the 1km study area attest to this and they include powder works, tramways, railways, and a colliery trial level within the 1km area. No post-medieval heritage assets were previously known within the site boundary, however historic mapping had demonstrated the survival of historic field boundaries (HA 2), some of which predate 1814 and the location of 'Cefn-rys-groes' farmstead (HA 1), first shown on the 1847 Tithe maps (SN91106 06728). There is therefore a **high** potential for **locally** significant post-medieval remains to be encountered within the site.
- 5.1.8. While there would be **no direct impact** on the scheduled monuments of Glynneath gunpowder works (GGAT10311g, NPRN439) (BR230), Craig y Ddinas Hillfort (GGAT01107m, NPRN301695, BR178) and the Dinas Silica Mine (PRN 01472m; NPRN 275634) (BR229), the background setting of each would be impacted to a **minor** degree by the proposed development due to the gradual erosion what is left of the rural setting, and therefore have a **negligible** impact on their significance. Maintaining the historic field boundaries within the site would reduce the potential impact on the setting.
- 5.1.9. Due to the presence of historic field boundaries within the development site it is recommended that these are retained where practicable to preserve the historic rural landscape. Possible pits which were identified through the geophysical survey could represent activity associated with the Cefn Rhigos Cairnfield or Barrow Cemetery c.160m to the northeast of site. This potential archaeological resource is proposed to be mitigated through a programme of archaeological monitoring and recording during construction to establish the presence and character of any buried archaeological remains.
- 5.1.10. The impact of the proposed development on the significance of the scheduled monuments within the study area is deemed to be negligible and it is not anticipated that any below ground archaeological remains would be present within the site as to cause a constraint to development, compliant with the policies and guidance as outlined in Section 2 above. Any such remains could be dealt with through the proposed mitigation, however, were any assets of significance to be identified during these works this may require further liaison with the Stewardship Officer at Heneb-GGA and/or Cadw. The final decision for mitigation strategies for the archaeological resource rests with the Stewardship Officer at Heneb-GGA.
-

6. REFERENCES

Cadw 2017 *Setting of Historic Assets in Wales*. Cadw

Chartered Institute for Archaeologists 2022 *Code of Conduct*

Chartered Institute for Archaeologists 2020 *Standard and guidance for desk-based assessments*

Fox, Aileen and Threipland, Leslie. 1942. The excavation of two cairn cemeteries near Hirwaun, Glamorgan. *Archaeologia Cambrensis* vo.97 pp77-92.

Historic England 2008 *Conservation Principles*. Historic England

Rhondda Cynon Taf County Borough Council Heritage Strategy 2024-2030

RCAHMW 2015 *Guidelines for Digital Archaeological Archives*

TerraDat 202d Geophysical Survey Report: Archaeological Magnetic Gradiometry Survey. Cefn Rhigos, Rhondda Cynon Taf.

Welsh Archaeological Trusts 2022 *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)*

Web Sources

Archaeological Data Service. <https://archaeologydataservice.ac.uk/advice.xhtml>

British Geological Survey Geology Viewer. <https://geologyviewer.bgs.ac.uk> (accessed 24/10/2024)

LandIS Soilscales Viewer. <http://www.landis.org.uk/> (accessed 24/10/2024)

Data Map Wales, Lidar viewer. <https://datamap.gov.wales/maps/lidar-viewer/view#/> (accessed 05/11/2024)

Natural Resources Wales – <https://landmap-portal.naturalresources.wales> (accessed 06/11/2024)

RCAHMW. The Inventory of Historic Battlefields in Wales.-

<https://battlefields.wales/collections/getrecord/545111> (accessed 22/11/2024)

Maps

Beau, Joan. Glamorganensis Comitatus; Vulgo Glamorganshire. Published 1644.

Aberdare Sheet 192. 2 inches to one mile. Published 1814

Tithe Map Plan of the parish of Ystradyfodwg in the County of Glamorgan. Surveyed by J.T. Williams. Published 1847.

Ordnance Survey 25-inch map. Glamorgan X.3, 7. Surveyed: 1875 to 1876, Published: 1878.

1st edition Ordnance Survey, 6-inch. Glamorgan X.3 Surveyed: 1875 to 1876, Published: 1878,

1st edition Ordnance Survey, 6-inch. Glamorgan Sheet X, Surveyed 1875 to 1877, published 1884,

2nd edition Ordnance Survey, 6-inch. Brecknockshire Sheet XLIX.NE Surveyed: 1875 to 1877, Published: 1888,

2nd edition Ordnance Survey, 6-inch Glamorgan Sheet X.NE Revised: 1897, Published: 1900,

1st edition Ordnance Survey map. 25-inch. Brecknockshire XLIV.16 Revised: 1903, Published: 1904 and Ordnance Survey 6-inch map. Brecknockshire Sheet XLIX.NE, Revised: 1948, Published: 1953.

APPENDIX 1

Table 1. Heritage Assets (HER and NMR)

RCAHMW/HER Ref.	Name	Community	Site	Period
NMRW NPRN 405097	Aqueduct, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Aqueduct	Post Medieval
NMRW NPRN 405050	Dinas Rock Brick Works, Pontneddfechan	Ystradfellte	Brickworks	Post Medieval
NMRW NPRN 24139	Pont Nedd Fechan	Glynneath	Bridge	Post Medieval
NMRW NPRN 224836, GGAT00001m	Cefn Rhigos Cairn I, Hirwaun	Rhigos	Cairn	Bronze Age
NMRW NPRN 305636, GGAT00002m	Cefn Rhigos Cairn II, Hirwaun	Rhigos	Cairn	Bronze Age
NMRW NPRN 305637, GGAT00003m	Cefn Rhigos Cairn III, Hirwaun	Rhigos	Cairn	Bronze Age
NMRW NPRN 405063	Carpenters Shop and Saltpetre Stores, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Carpenters Workshop	Post Medieval
NMRW NPRN 405077	Watch House and Wash House, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Changing Rooms	Post Medieval
NMRW NPRN 10197	Bethel Wesleyan Methodist Chapel, Mount Road, Cefn Rhigos	Rhigos	Chapel	Post Medieval
NMRW NPRN 10196	Calfaria Independent Chapel, Maesgarreg, Cwm Issace, Rhigos	Rhigos	Chapel	Post Medieval
NMRW NPRN 9526	Ebenezer Calvinistic Methodist Chapel, Pontneddfechan, Nedd Uchaf; Pontneathvaughan, Neath Higher	Glynneath	Chapel	Post Medieval
NMRW NPRN 405074	Grinding and Charge Mixing House, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Chemical Production Site	Post Medieval
NMRW NPRN 405064	Saltpetre Refinery, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Chemical Production Site	Post Medieval
NMRW NPRN 405070	Charcoal Store, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Chemical Store	Post Medieval

NMRW NPRN 405073	Ground Charcoal Store, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Chemical Store	Post Medieval
NMRW NPRN 405058	Saltpetre Store, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Chemical Store	Post Medieval
NMRW NPRN 405071	Sulphur Store, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Chemical Store	Post Medieval
NMRW NPRN 24642	Nedd Fechan Mill	Glynneath	Corn Mill	Post Medieval
NMRW NPRN 405076	Incorporating Mills, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Crushing Mill	Post Medieval
NMRW NPRN 405075	Sudan Incorporating Mills, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Crushing Mill	Post Medieval
NMRW NPRN 405065	General Office and Stableman's House, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Dwelling	Post Medieval
NMRW NPRN 18906	Gwragon Isaf	Rhigos	Dwelling	Post Medieval
NMRW NPRN 405060	Holybush Cottage; Engineers Cottage, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Dwelling	Post Medieval
NMRW NPRN 405069	Rose Cottage ;Foremans House, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Dwelling	Post Medieval
NMRW NPRN 405059	Search House, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Employee Search House	Post Medieval
NMRW NPRN 405078	Fire Engine House, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Fire Engine House	Post Medieval
NMRW NPRN 405061	Fitters and Coopers Shop, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Fitters Workshop	Post Medieval
NMRW NPRN 405057	Entrance Gates and Lodge, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Gateway	Post Medieval
NMRW NPRN 405084	Cake Press House, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Gunpowder Press House	Post Medieval
NMRW NPRN 405086	Cake Press House, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Gunpowder Press House	Post Medieval

NMRW NPRN 405095	Hydraulic Pellet Press House, Glyn Neath Black Powder Works, Pontneddfechan	Hirwaun	Gunpowder Press House	Post Medieval
NMRW NPRN 41103	Pontneddfechan Powder Works, Building At	Ystradfellte	Gunpowder Works	Post Medieval
NMRW NPRN 423083	Cefn Rhigos	Rhigos	Hamlet	21st Century
NMRW NPRN 405068	Hay Shed, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Hay Barn	Post Medieval
NMRW NPRN 301695, GGAT01107m	Craig-y-Ddinas, Promontory Fort, Pontneddfechan	Ystradfellte	Hillfort	Iron Age
NMRW NPRN 18943, GGAT01554m	Hendre-Fawr	Rhigos	House	Post Medieval
NMRW NPRN 28114	Ynys Cambwll;Ynys-Carnbwl	Rhigos	House	Post Medieval
NMRW NPRN 405085	Hydraulic Pump House, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Hydraulic Power Site	Post Medieval
NMRW NPRN 405092	Lower Leat, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Leat System	Post Medieval
NMRW NPRN 275634	Dinas Silica Mine	Hirwaun	Mine	Modern
NMRW NPRN 24460	Coed Wernhir, Rejected Mounds	Glynneath	Non Antiquity	Unknown
NMRW NPRN 405080	Charge Magazine, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Powder Magazine	Post Medieval
NMRW NPRN 422101	Roadside Crag, Pontneddfechan	Hirwaun	Quarry	Post Medieval
NMRW NPRN 305638, GGAT00010m	Cefn Rhigos, Barrow	Rhigos	Round Barrow	Unknown [Bronze Age?]
NMRW NPRN 402123	Clwyd-Rhyd-Fan	Hirwaun	Settlement	Post Medieval
NMRW NPRN 86809	Craig-y-Ddinas, Settlement	Hirwaun	Settlement	Medieval
NMRW NPRN 405066	Cart Shed and Stable, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Stable	Post Medieval
NMRW NPRN 405079	Steam Engine, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Steam Engine	Post Medieval
NMRW NPRN 405072	Charge Barrel Store, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Storehouse	Post Medieval

NMRW NPRN 405067	Harness Room; Tack Room, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Tack Room	Post Medieval
NMRW NPRN 405049	Dinas Terrace, Pontneddfechan	Ystradfellte	Terraced House	Post Medieval
NMRW NPRN 96187	Cefn Rhigos Tramroad: Glynneath Incline; Pont Walby Incline	Rhigos	Tramway	19th Century
NMRW NPRN 33462, GGAT01126m and GGAT01354m),	Craig-y-Ddinas, Inclined Plane (NMRW), Dinas Incline Plate (GGAT)	Hirwaun	Tramway	Post Medieval
NMRW NPRN 411296	Dinas Silica Mine Tramroad	Hirwaun	Tramway	Post Medieval
NMRW NPRN 405056	Dr Bevans Tramroad, Glyn Neath	Glynneath	Tramway	Post Medieval
NMRW NPRN 86951	Pont Walby E, Tramroad	Rhigos	Tramway	Post Medieval
NMRW NPRN 34846, GGAT02500.2m	Pencaedrain Tunnel	Rhigos	Tunnel	Post Medieval
NMRW NPRN 423085	Pontneddfechan	Glynneath	Village	Unknown
NMRW NPRN 405062	Smithy and Wheelwrights Shop, Glyn Neath Black Powder Works, Pontneddfechan	Ystradfellte	Wheelwrights Workshop	Post Medieval
GGAT00011m	Ford, Glynneath	Glynneath	Ford	Medieval
GGAT00011m	Ford, Glynneath	Glynneath	Ford	Medieval
GGAT10300g	Platform	Ystradfellte	-	-
GGAT02500.3m	Loading Bay, Vale of Neath Railway	Rhigos	Inclined Plane	Post Medieval
GGAT02597m	Dinas Limekiln	Hirwaun	Lime Kiln	Post Medieval
GGAT02500.0m	Linear Feature, Vale of Neath Railway	Glynneath	Railway	Post Medieval
GGAT03220m	276 The Hirwaun Common Mineral Railway	Hirwaun	Railway	Post Medieval
GGAT04774m	Signal Box, Tir Mawr Farm, Llwyncoed	Llwydcoed	Railway Signal Box	Post Medieval
GGAT02583m	Dinas Silica Mine II	Hirwaun	Sand And Gravel Extraction Site	Post Medieval
GGAT01039.1m	Pontwalby Power Operated 2 Stage Incline	Hirwaun	Tramway	Post Medieval
GGAT10320g	Tramline, Rhigos	Rhigos	Tramway	Post Medieval
GGAT10321g	Tramline, Rhigos	Rhigos	Tramway	Post Medieval

GGAT09499w	Llwyn-y-gwin Farmstead	Glynneath	Farmstead	Post Medieval
GGAT07703w	Old Tramway, Glynneath	Glynneath	Tramroad	Post Medieval
GGAT03225.1m	Tappenden's Tramroad West	Glynneath	Tramway	POST MEDIEVAL
GGAT07058w	Dismantled tramway- Nant Llywyn-y-gwin, Glynneath	Glynneath	Tramway	Post Medieval
GGAT01682m	Nobel Powder Works	Ystradfellte	Gunpowder Works	Post Medieval
GGAT00004m, GGAT04524m	Coed Garn Y Gist Cairnfield	Rhigos	Cairnfield	Bronze Age
GGAT04523m	Cefn Rhigos Cairnfield or Barrow Cemetery	Rhigos	Round Barrow Cemetery	Bronze Age
GGAT10276g	Cairn, Rhigos	Rhigos	Cairn	Unknown [Bronze Age?]
GGAT10311g	Glynneath Gunpowder Works	Ystradfellte	Powder Works	Post Medieval
GGAT03225.3m	Causeway, Tappenden's Tramroad West	Rhigos	Causeway	POST MEDIEVAL
GGAT04523w	Avan Vale Colliery Trial Level III	Glyncorrwg	Colliery	POST MEDIEVAL
GGAT02248w	Findspot, Glynneath	Glynneath	Findspot	Bronze Age

Table 2. Heritage Assets Identified through this study

Heritage Asset (HA) No.	Name	Source	Site type	Grid Reference
1	Cefn-rys-groes	Tithe map 1847	Farmstead	SN9114306995
2	Cefn Rhigoes, Field Boundaries,	Aberdare 1814 map, Tithe map 1847, OS 25" 1878, Satellite imagery, Bing 2024	Historic Field boundaries	SN9110506727
3	Mound Pleasant Farm	OS 25" 1878	Farmstead	SN91453 06683
4	New Inn	1st edition OS maps "25 (1878).	Public House	SN9166606765
5	The Cwmirwrelach Mineworks	Aberdare 1814 map	Mine	SN9008006755
6	Brickyard, Mount road, Rhigos	OS 25" 1878	Brickyard	SN9142006040
7	Lime works	Aberdare 1814 map	Lime works	SN9234605943
8	Rhyd, Rhyd-groes,	Aberdare 1814 map	Farmstead	SN9208305781
9	Cwwmgwranron,	Aberdare 1814 map	Farmstead	SN9210906345
10	Werfa,	Aberdare 1814 map	Farmsteads	SN9223806007
11	Garnygist, P	Aberdare 1814 map	Farmstead	SN9252407073
12	Pen-y-cae-drain	Aberdare 1814 map	Farmstead	SN9155207719

13	Pen-Y-Waun	OS 25" 1878	Farmstead	SN9139106375
14	Waun-gwm Place	OS 25" 1878	Farmstead	SN9133406255
15	Possible rig and furrows, Cefn Rhigos farm	CRAPW Ariel photograph: 1945 4561 RAF3GTUD_T19 5081	Rig and Furrow	SN9131006545

Table 3. Events within the study area (1km)

PRN	Name	Summary	Event Type	Year	NGR
GGATE007886	Bryngolwg Solar Farm, Rhigos Road	In December 2021 Abrams Archaeology carried out a site visit as part of a heritage impact assessment in relation to a proposed development of a solar farm and ancillary structures, grid connection/s and associated access routes, known as Bryngolwg Solar Farm.	HERITAGE ASSESSMENT	2022	SN 92940 05739

GGATE000954	Southeast Wales Industrial Ironworks Project	This project was instigated in response to the ongoing threats faced by industrial remains of Southeast Wales. The aim of the project was to assess the current state of survival/preservation of ironworks landscape in the area of the northern coalfield rim to inform conservation, protection and management of these monuments and their associated landscapes.	Project	2005-2010	SO0965205462
GGATE007395	Southeast Wales Industrial Ironworks Landscapes - Aberdare-Hirwaun-Penderyn	Year 6 of the Southeast Wales Industrial Ironworks project. The study focused on the Aberdare-Hirwaun-Penderyn Corridor and Eastern Valley. This GGAT project was instigated in response to the ongoing threats faced by industrial remains of Southeast Wales. The aim of the project was to assess the current state of survival/preservation of ironworks landscape in the area of the northern coalfield rim to inform conservation, protection and management of these monuments and their associated landscapes.	DESK BASED ASSESSMENT	2010	SO1714809163
GGATE007242	High Status Settlement in Glamorgan and Gwent	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be/potentially be of National Significance, 19 of which	DESK BASED ASSESSMENT	2010	ST137722

		are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.			
GGATE007242	High Status Settlement in Glamorgan and Gwent	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be/potentially be of National Significance, 19 of which are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.	DESK BASED ASSESSMENT	2010	ST28549207
GGATE007242	High Status Settlement in Glamorgan and Gwent	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be/potentially be of National Significance, 19 of which are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.	DESK BASED ASSESSMENT	2010	SS45968900
GGATE007242	High Status Settlement in Glamorgan and Gwent	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed,	DESK BASED ASSESSMENT	2010	ST37008824

		following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be/potentially be of National Significance, 19 of which are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.			
GGATE007242	High Status Settlement in Glamorgan and Gwent	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be/potentially be of National Significance, 19 of which are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.	DESK BASED ASSESSMENT	2010	SS93107412
GGATE007242	High Status Settlement in Glamorgan and Gwent	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be/potentially be of National Significance, 19 of which are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.	DESK BASED ASSESSMENT	2010	ST46508795

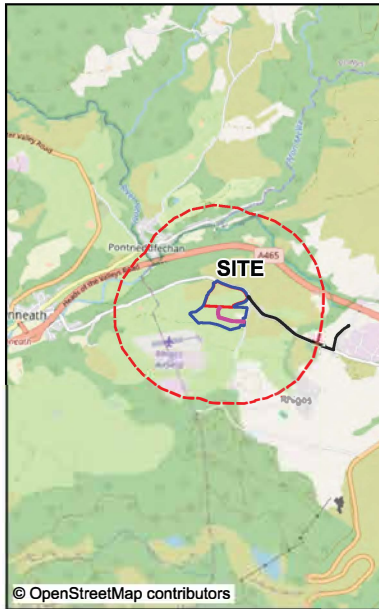
GGATE007242	High Status Settlement in Glamorgan and Gwent	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be/potentially be of National Significance, 19 of which are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.	DESK BASED ASSESSMENT	2010	ST02896807
GGATE007242	High Status Settlement in Glamorgan and Gwent	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be/potentially be of National Significance, 19 of which are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.	DESK BASED ASSESSMENT	2010	ST14556926
GGATE007242	High Status Settlement in Glamorgan and Gwent	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered	DESK BASED ASSESSMENT	2010	ST17666893

		to be/potentially be of National Significance, 19 of which are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.			
GGATE007242	High Status Settlement in Glamorgan and Gwent	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be/potentially be of National Significance, 19 of which are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.	DESK BASED ASSESSMENT	2010	ST05628086
GGATE007242	High Status Settlement in Glamorgan and Gwent	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277 medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be/potentially be of National Significance, 19 of which are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.	DESK BASED ASSESSMENT	2010	ST23058637
GGATE007242	High Status Settlement in	Glamorgan-Gwent Archaeological Trust, on behalf of CADW, carried out a project examining high status settlement in Glamorgan and Gwent. A total of 277	DESK BASED ASSESSMENT	2010	SO39881504

	Glamorgan and Gwent	medieval/post-medieval sites were initially assessed, following which 58 continued to a more detailed assessment. Of those, between 33 and 37 were considered to be/potentially be of National Significance, 19 of which are already Scheduled Ancient Monuments. Nine sites were considered to be at least of Regional Significance.			
GGATE001996	Tappenden's Tramroad East and West	Field visit undertaken. Approximately 20% of the entire tramroad survives with numerous features in situ.	Field visit	2005	SN8871206736
GGATE001996	Tappenden's Tramroad East and West	Field visit undertaken. Approximately 20% of the entire tramroad survives with numerous features in situ.	Field visit	2005	SO0151001930
GGATE006719	Tower Colliery, Hirwaun, Rhondda Cynon Taf	In August 2019 Archaeology Wales was commissioned by Tower Regeneration Ltd. to conduct an archaeological desk-based assessment and site visit (E008220) to determine the archaeological potential of land adjacent to the former Tower Colliery, Hirwaun, Rhondda Cynon Taf, ahead of mixed development. 2 non-designated site lies within the boundary of the development; Hirwaun Common Rifle Range (07928m) and Bute Colliery and Hirwaun Tramway (02498.0m). These would both potentially be directly impacted by the proposed works, although previous non-intrusive archaeological work was unable to establish any physical remains of the rifle range;	DESK BASED ASSESSMENT	2019	SN 94746 05273

		if there are physical remains of the rifle range, then the development would have a Major impact. The route of the tramway is preserved to the east of the development and if physical remains of the trackway exist in the development area, then then it would have a Minor impact.			
GGATE000510	Cefn Rhigos 1	An excavation was undertaken at Cefn Rhigos Cairn 1 in 1941. It was excavated by means of cross-trenching and could possibly have been part of the excavations in 1941 by Fox and Murray Threipland.	Excavation	1941	SN9196006948
GGATE000552	Dinas Incline Plane	A field survey was undertaken at Dinas Incline Plane by H. Owen-John in 1980. A possible Bronze Age ring Cairn was noted. No further information available.	FIELD SURVEY	1980	SN9130107999
GGATE003521	Pontneddfechan Gunpowder Works, Glyn-neath	Dyfed Archaeological Trust Field Services were commissioned by The Environment Agency, to undertake an archaeological watching brief during the site preparation works associated with refurbishment of the Pontneddfechan Weir at Glyn neath, Neath.	Watching Brief	2009	SN912080
GGATE007234	Land at Cefn Rhigos, Rhondda Cynon Taf	Southwest Archaeology was commissioned to undertake a desk-based assessment and visual impact assessment (E007236) of land at Cefn Farm, Rhigos, Rhondda Cynon Taf, to identify the potential effects of the installation of a single 500kw wind turbine. The likelihood of encountering buried archaeological remains during development was	DESK BASED ASSESSMENT	2014	SN9095106617

		slight, however should they be present, groundworks could result in permanent and irreversible lost. The overall visual impact was assessed as negative/moderate.			
GGATE007235	Land at Cefn Rhigos, Rhondda Cynon Taf	A field visit undertaken as part of a desk-based assessment (E007234).	FIELD VISIT	2014	SN9095106617
GGATE007236	Land at Cefn Rhigos, Rhondda Cynon Taf	Southwest Archaeology was commissioned to undertake visual impact assessment and an archaeological desk-based assessment (E007234) of land at Cefn Farm, Rhigos, Rhondda Cynon Taf, to identify the potential effects of the installation of a single 500kw wind turbine. The likelihood of encountering buried archaeological remains during development was slight, however should they be present, groundworks could result in permanent and irreversible loss. The overall visual impact was assessed as negative/moderate.	VISUAL IMPACT ASSESSMENT	2014	SN9095106617



Legend

- Access
- Ownership
- Cable route
- Option Area

Project Code: RR1458

Project Name: Cefn Farm BESS DBA

Status: DBA

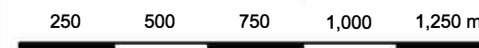
Revision: 1.0

Prepared by: M. Smithson

Approved by: R.Morgan-James

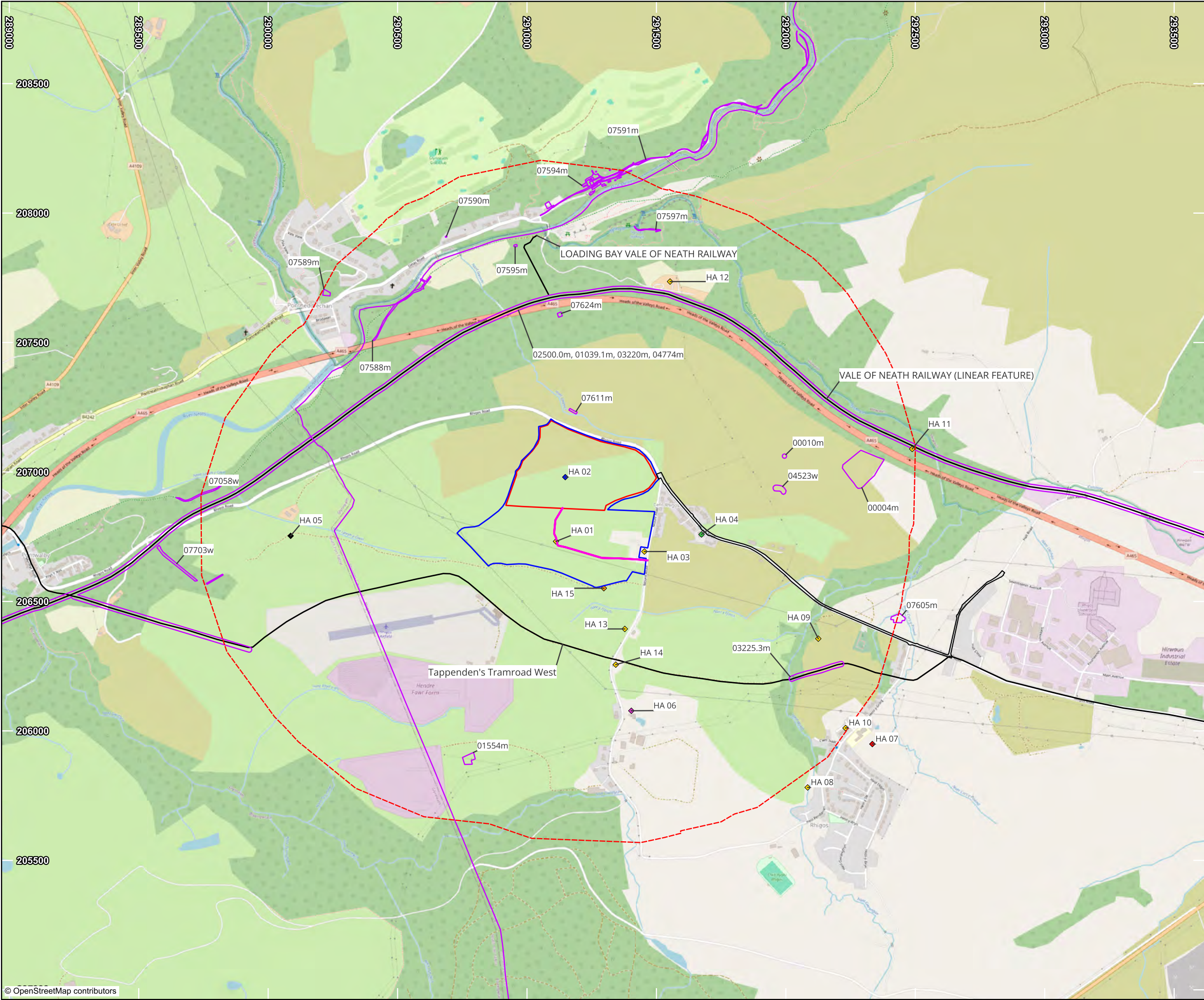
Date: 22.10.2024

Scale: 1:20,000 @ A4



**Red River
Archaeology**

Figure 1 - Location plan & study area (1km)



Legend

HER Data

- HER Tram & Rail Lines
- HER Polygons

Heritage Assets identified from Historic Maps & Aerial Photography

- Brickyard
- Farmstead
- Historic Field Boundary
- Lime Works
- Mine
- Public House
- Rig & Furrow

Site layout

- Study area (1km)
- Access
- Option Area
- Ownership
- Cable route

Project: RR1458 -
Cefn Farm DBA

Prepared by: M.Smithson

Approved by: R.Pettitt

Status: DBA

Date: 03/03/2025

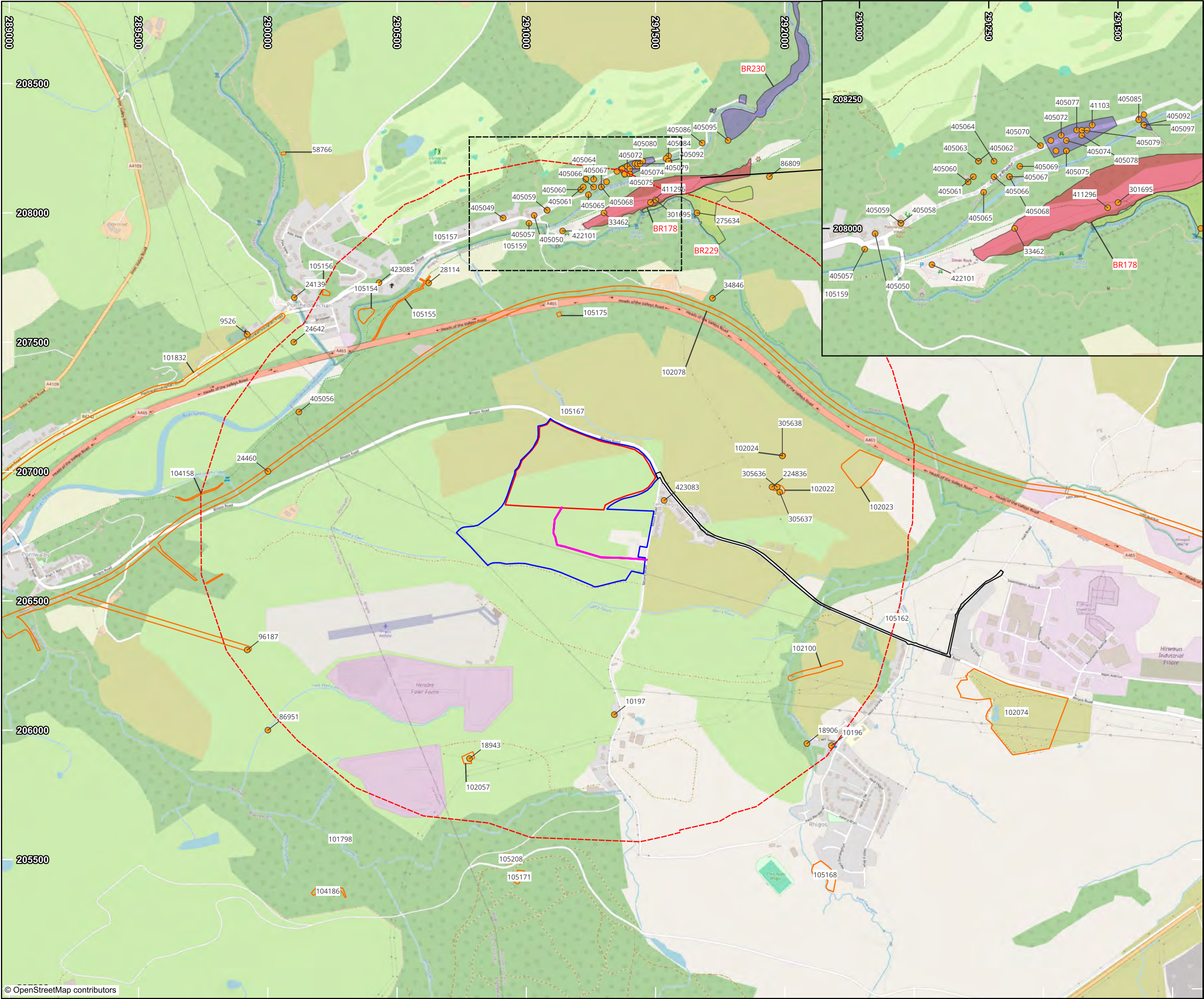
Draft: 1.0

Scale: 1:10,000 @ A3

100 200 300 400 500 m



Figure 2.1 - Heritage Assets identified within Study Area (1km) (HER & Additional assets).



Legend

CADW Data

- NMRW site points
- Historic Environment Polygon

Cadw AM

- Defence
- Industrial
- Transport

Site layout

- Access
- Option Area
- Ownership
- Cable route
- Study area (1km)

Project: RR1458 - Cefn Farm DBA	Prepared by: M.Smithson Approved by: R.Pettitt
Status: DBA Draft: 1.0	Date: 03/03/2025 Scale: 1:10,000 @ A3

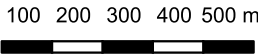
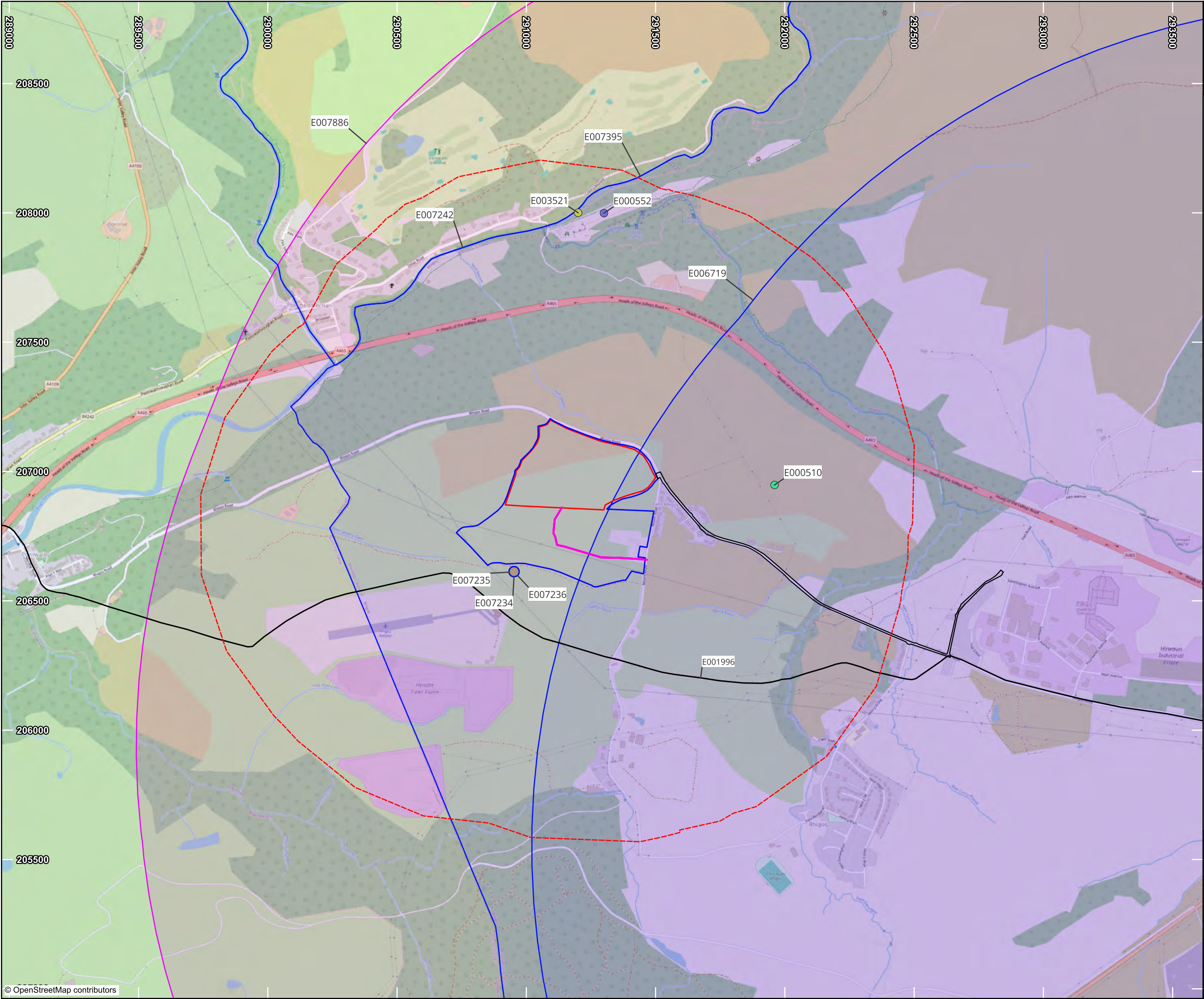


Figure 2.2 - Heritage Assets identified within Study Area (1km) (CADW).





Red River Archaeology

Legend

Event Point

- Survey
- Unspecified excavation
- Watching Brief

Event Polygon

- DESK BASED ASSESSMENT
- FIELD VISIT
- HERITAGE ASSESSMENT
- VISUAL IMPACT ASSESSMENT

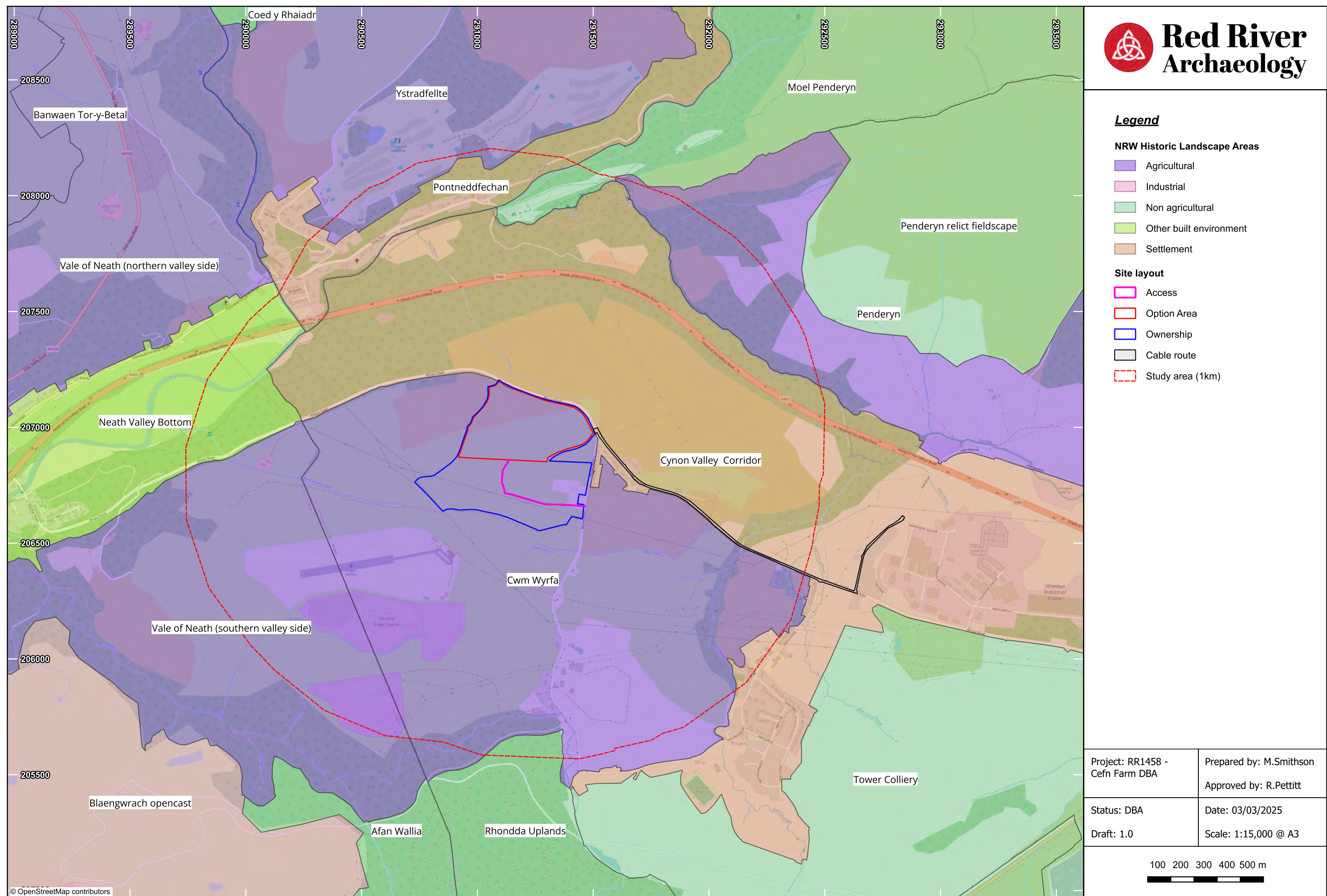
Site layout

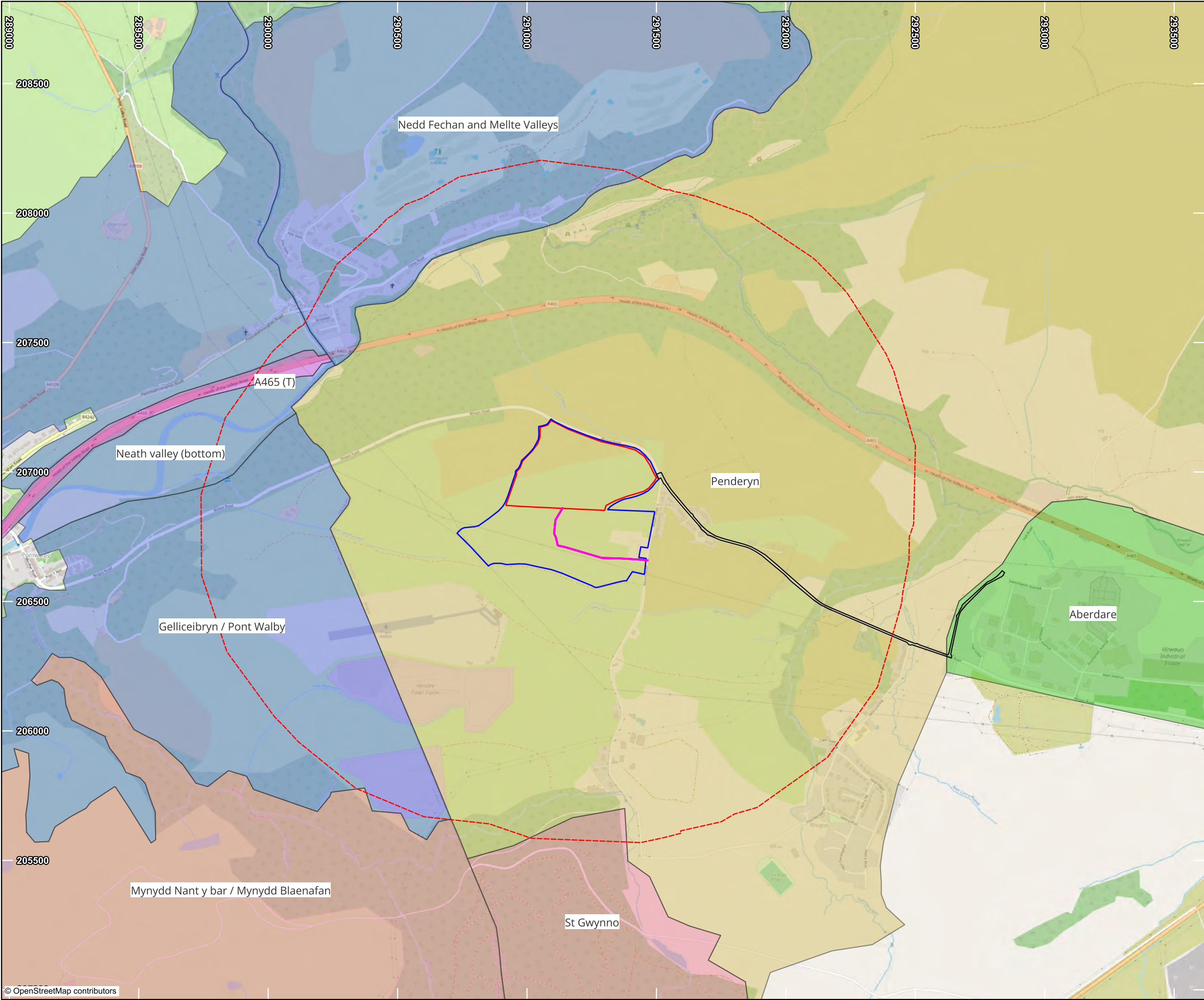
- Study area (1km)
- Access
- Option Area
- Ownership
- Cable route

Project: RR1458 - Cefn Farm DBA	Prepared by: M.Smithson Approved by: R.Pettitt
Status: DBA Draft: 1.0	Date: 03/03/2025 Scale: 1:10,000 @ A3

100 200 300 400 500 m

Figure 3 - Events within the study area (1km)





Legend

NRW Cultural Landscape Services

- Built Land
- Developed Unbuilt Land
- Exposed Upland/Plateau
- Hills, Lower Plateau & Scarp Slopes
- Upland Valleys

Site layout

- Access
- Option Area
- Ownership
- Cable route
- Study area (1km)

Project: RR1458 -
Cefn Farm DBA

Prepared by: M.Smithson

Approved by: R.Pettitt

Status: DBA

Date: 03/03/2025

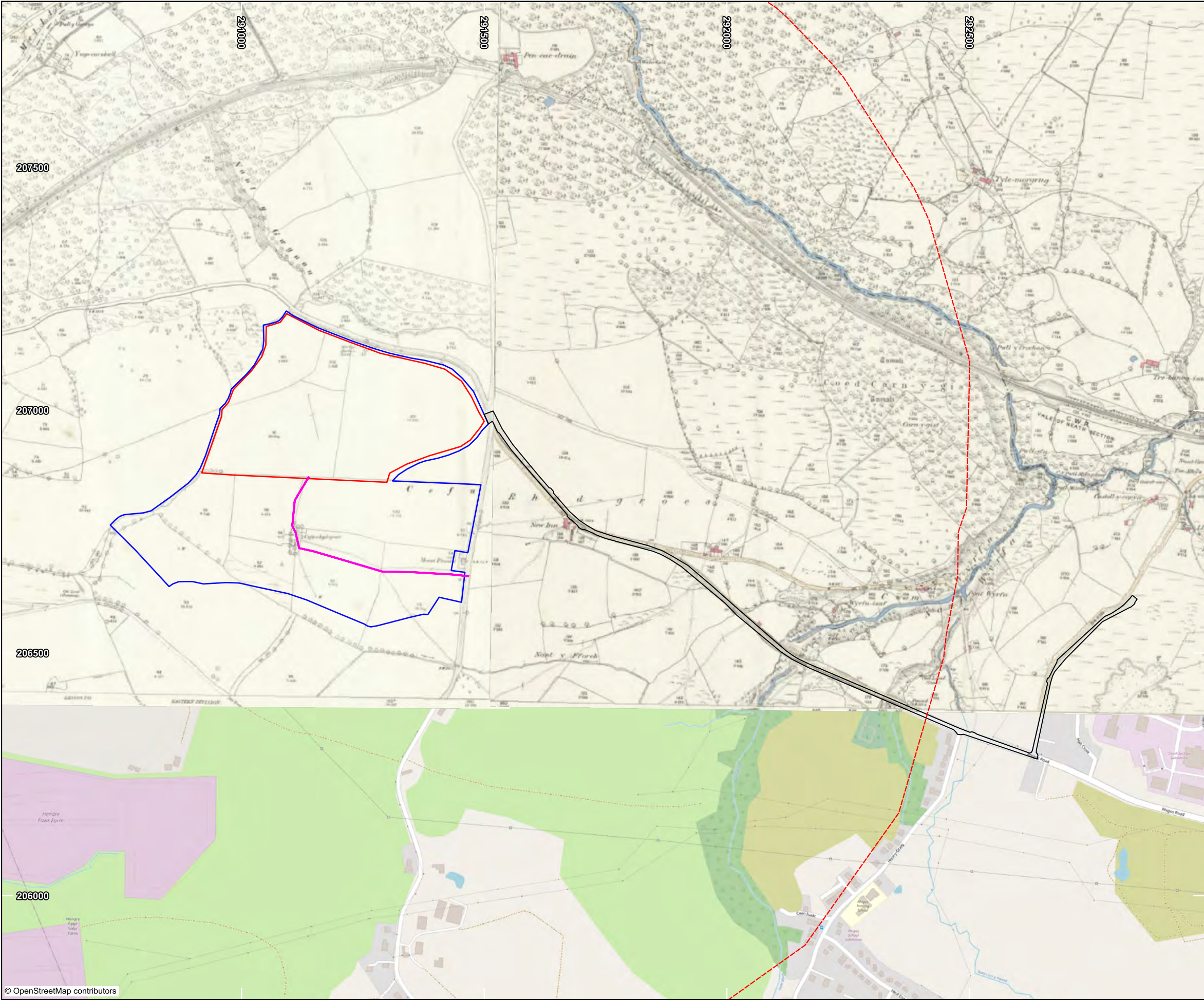
Draft: 1.0

Scale: 1:15,000 @ A3

100 200 300 400 500 m



Figure 5 - NRW Land Map: Cultural Landscape Services areas within the study area (1km)





Red River Archaeology

Legend

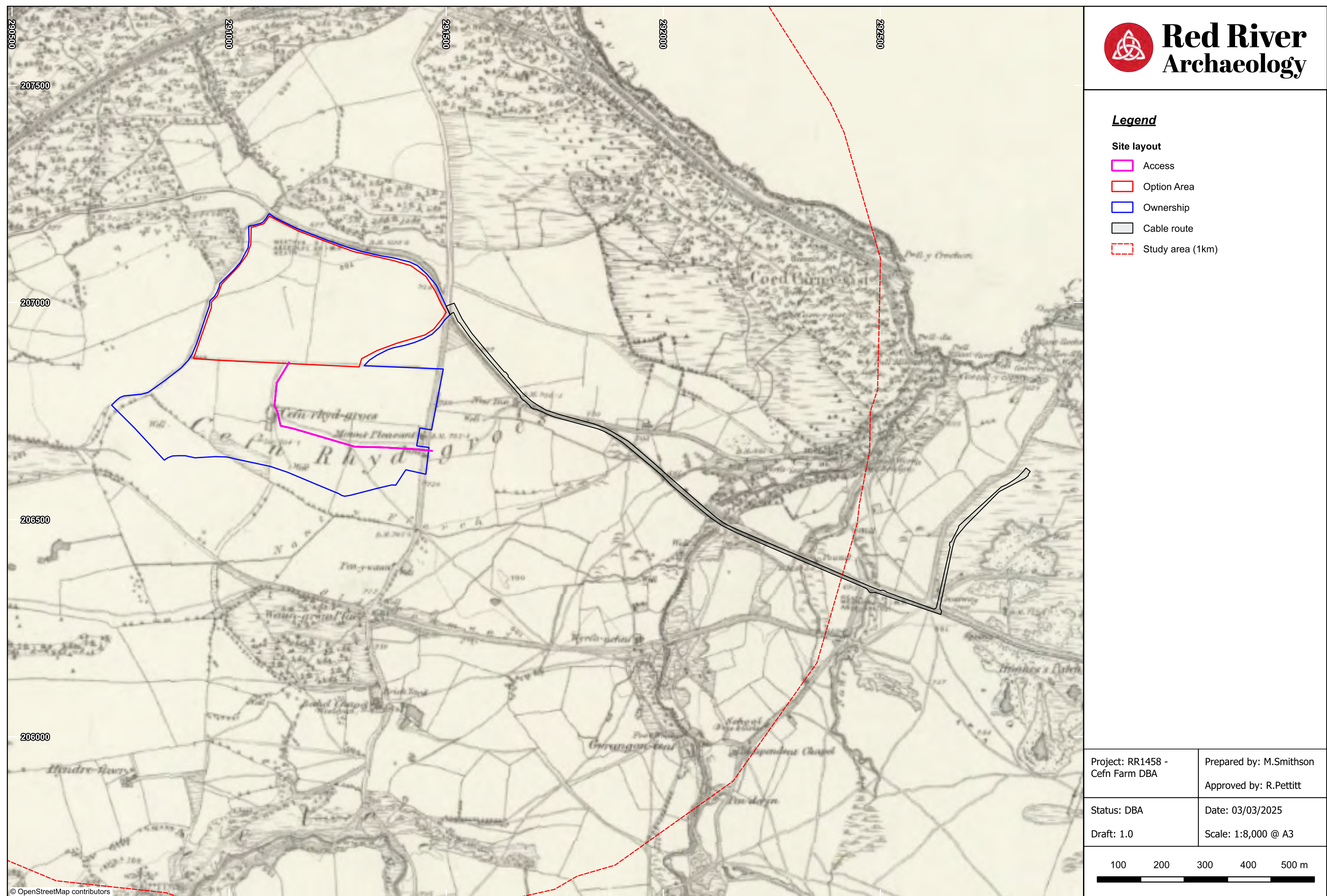
Site layout

- Access
- Option Area
- Ownership
- Cable route
- Study area (1km)

Project: RR1458 - Cefn Farm DBA	Prepared by: M.Smithson Approved by: R.Pettitt
Status: DBA Draft: 1.0	Date: 03/03/2025 Scale: 1:8,000 @ A3

100200300400500 m

Figure 6 - Site study area overlaid with Ordnance Survey 25-inch map. Glamorgan X.3 & X.4. Surveyed: 1875 to 1876, Published 1878. Reproduced with the permission of the National Library of Scotland.



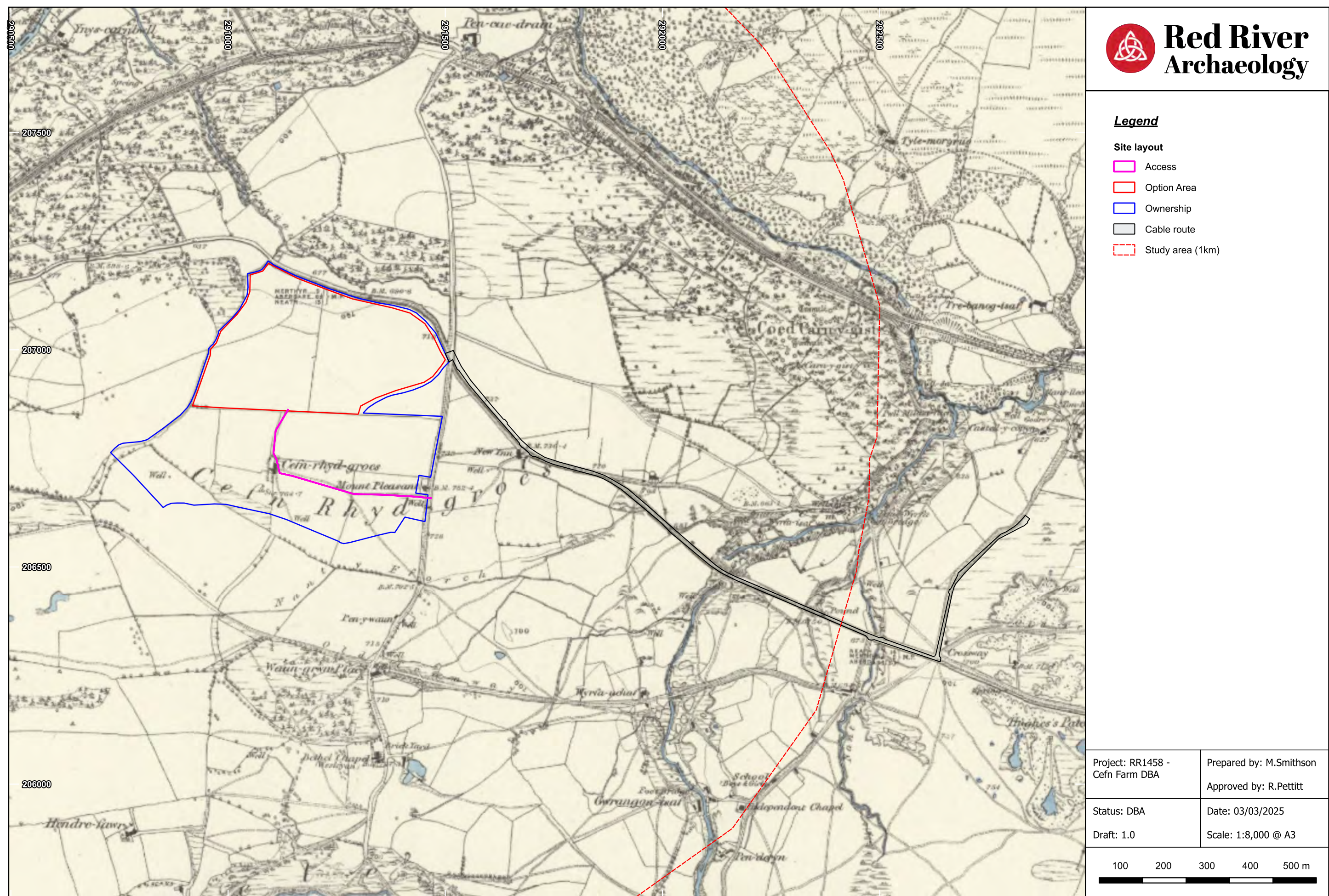
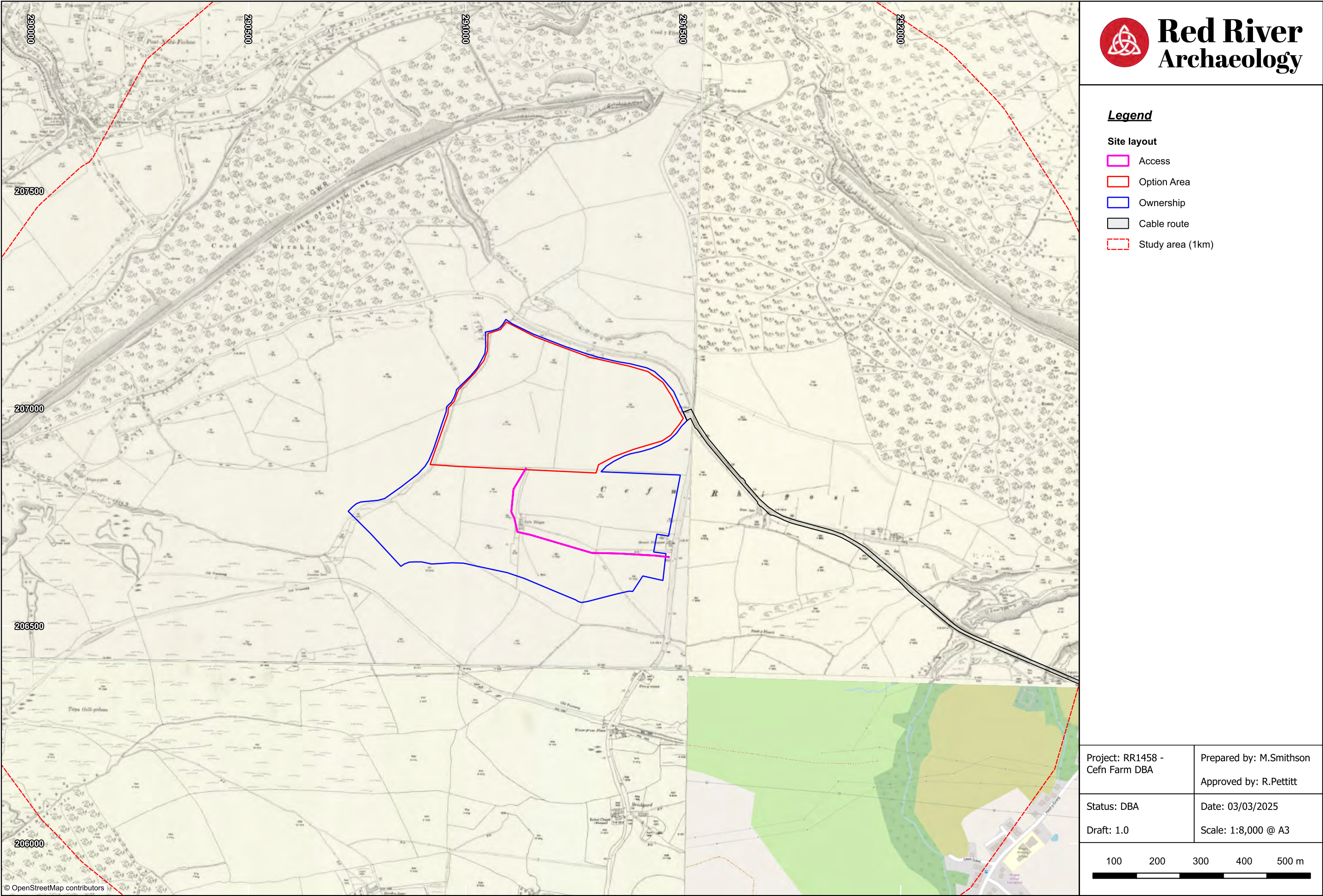


Figure 8 - Site study area overlaid with 2nd edition Ordnance Survey, 6 inch. Brecknockshire Sheet XLIX.NE Surveyed: 1875 to 1877, Published: 1888. Reproduced with the permission of the National Library of Scotland.



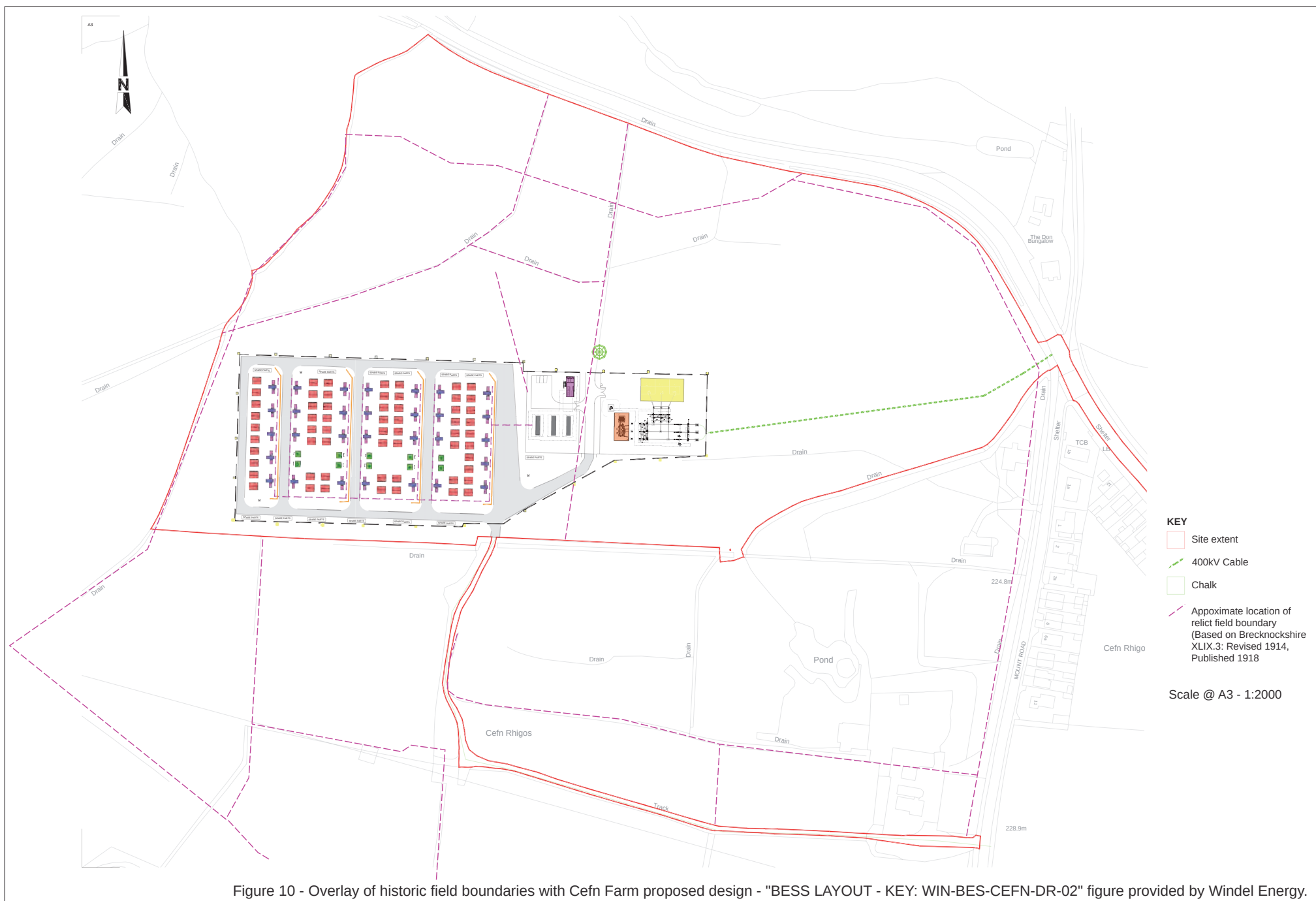


Figure 10 - Overlay of historic field boundaries with Cefn Farm proposed design - "BESS LAYOUT - KEY: WIN-BES-CEFN-DR-02" figure provided by Windel Energy.

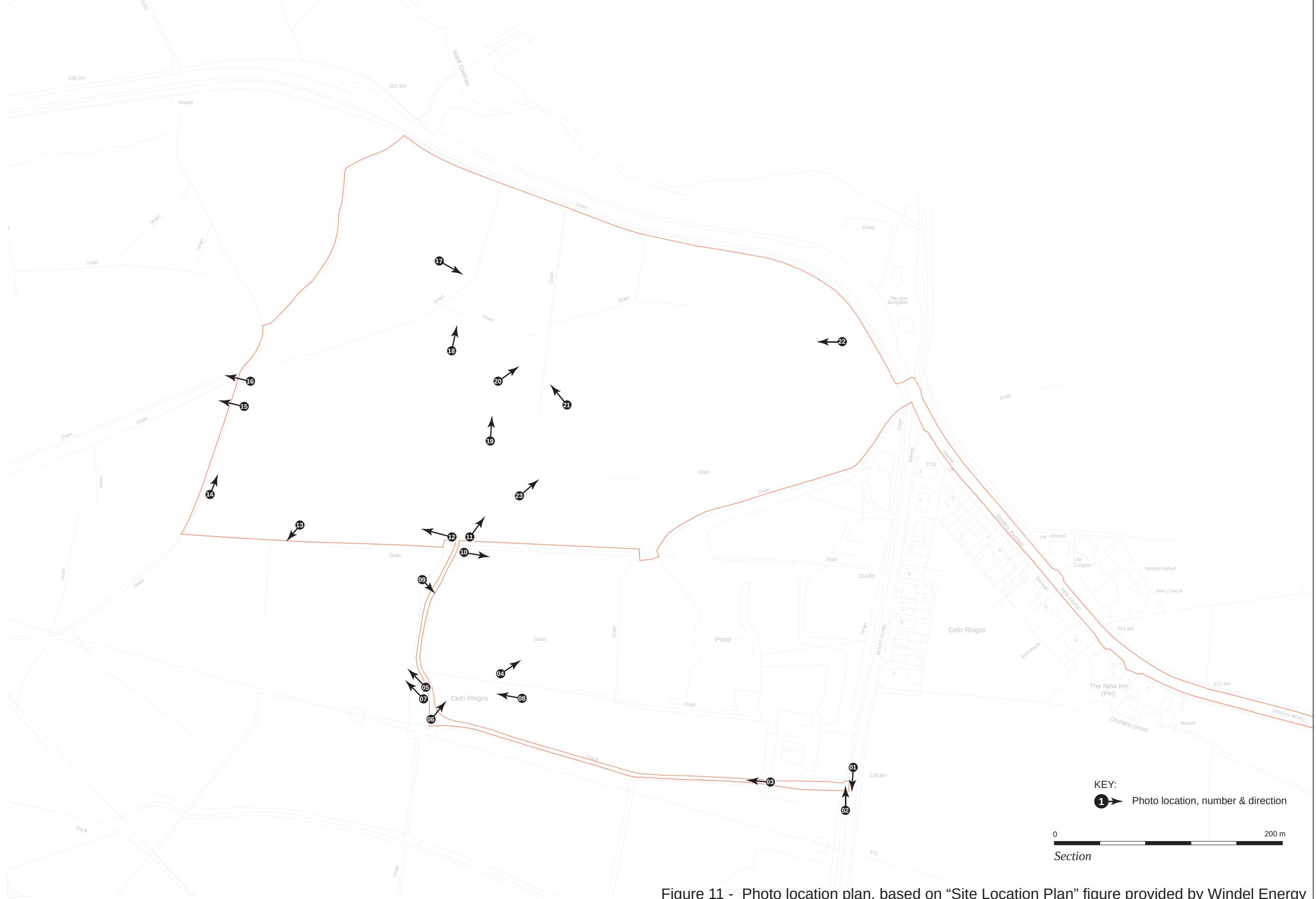


Figure 11 - Photo location plan, based on “Site Location Plan” figure provided by Windel Energy



Plate 1 - View of Site access from Mount road. Camera facing SW.



Plate 2 - View of area adjacent to Site entrance, possible site of Mount Pleasant Farm (demolished).
Camera facing NW.



Plate 3 - Access route from Cefn Farm (E-W). Camera facing W.



Plate 4 - Historic field boundary parallel to access route. Camera facing E.



Plate 5 - Bank with drystone walling (N-S). Camera facing NW.



Plate 6 - Platform in use as a storage area. Possible location of Cefn-ry-goes farm. Camera facing NE.



Plate 7 - Stone slabs on bank with drystone walling (N-S). Camera facing S



Plate 8 - Platform with pond in foreground. Camera facing NW.



Plate 9 - Historic field boundary (N-S) along access route to the south of the Site. Camera facing SE.



Plate 10 - Ditch along southern (E-W) Site boundary, south of the boundary fence line. Camera facing E.



Plate 11 - Dressed stone slab along E side of the causeway leading into the Site. Camera facing NE.



Plate 12 - Two ditches running E-W either side of a bank and fence along the southern boundary of the Site. Camera facing W.



Plate 13 - Access gate and causeway into the SW area of the Site. Camera facing SW.



Plate 14 - Western Site boundary ditch, bank and fence-line. Camera facing N.



Plate 15 - Large stones close to the western most Site boundary . Camera facing W.



Plate 16 - Upcast material from field drainage. Camera facing W.



Plate 17 - Western field drain in foreground, central field drains and associated banks in background. Camera facing E.



Plate 18 - Central field drain and associated bank running N-S. Camera facing N.



Plate 19 - The southernmost end of a bank running NNW-SSE within the centre of the Site. Camera facing N.



Plate 20 - Bank running N-S within centre of the Site. Camera facing NW.



Plate 21 - Denuded bank running N-S within centre of the Site. Camera facing NE.



Plate 22 - View across the Site from the NE corner. Camera facing W



Plate 23 - Bank running N-S within the centre of the Site. Camera facing NE



Plate 24 - Obscured views from Craig y Ddinas Hillfort (GGAT01107m, NPRN301695, BR178). Camera facing SW.



Plate 25 - Craig y Ddinas Hillfort (GGAT01107m, NPRN301695, BR178) earthworks. Camera facing SW



Plate 26 - Dinas Silica Mine entrance (PRN 01472m; NPRN 275634) (BR229). Camera facing E



Plate 27 - View from Dinas Silica Mine (PRN 01472m; NPRN 275634) (BR229). Camera facing S