



Chapter 10: Cultural Heritage and Archaeology

Glyn Taff Solar Farm - Environmental Statement

27/02/2025



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10. INTRODUCTION

- 10.1. A Cultural Heritage and Archaeology Chapter has been included within this EIA to identify and evaluate the potential direct and indirect effects on archaeological and built heritage resources during the operational, construction, and decommissioning phases of the proposed solar farm (the “Proposed Development”) on lands at Bryntail Farm, Bryntail Lane, Pontypridd (the “Application Site”).
- 10.2. In order to assess the potential effects of the Proposed Development, this report identifies the current baseline characteristics of the Application Site and the surrounding area, as well as the predicted direct and indirect impacts. This allows for the identification of potential archaeology and heritage effects as a result of the proposal and a recommendation of mitigation measures where appropriate.

Development Description

- 10.3. Installation, operation and subsequent decommissioning of a renewable energy scheme comprising ground mounted photovoltaic solar arrays together with substation compound, transformer stations, internal access track, landscaping, biodiversity measures, boundary fencing, security measures, CCTV posts, monitoring house, storage containers access improvement and ancillary infrastructure. The solar arrays will have a combined capacity of up to 39.9MW.

Site description & Receiving Environment

- 10.4. The area of the Proposed Development lies at an elevation of approximately 140m – 330m AOD and covers a total area of c. 70.7 hectares. It is centred around Bryntail Farm at approximate National Grid Reference (NGR) E 309333, N 189800. It is south of Eglwysilan Road. The site extends west of Bryntail Farm and east of the Bryn Tail Road. The site is within the administrative area of Rhondda Cynon Taf Council.
- 10.5. The site comprises 38 agricultural fields that are currently in use for livestock farming. It is on the east side of the Taff Valley c. 1.6 km east of Ynysangharad War Memorial Park. Access will be gained from the Bryn Tail Road.
- 10.6. The site is adjacent to the Twyn Hywel Energy Park a consented wind farm including 14 turbines (DNS/3272053).

Geology

- 10.7. Geology for the site comprises four bands of bedrock, which are from northeast to southwest:
- Hughes Member - Mudstone, siltstone and sandstone;

- Hughes Member – Sandstone;
- Brithdir Member – Mudstone, siltstone and sandstone; and
- Brithdir Member – Sandstone.

10.8. Superficial geology is mostly unmapped within the site, but an area of diamicton till is present within the eastern and southern extents.

Figures and Appendices

10.9. The report is supported by the following Figures and Technical Appendices, contained within **Volume 4**:

- Appendix 10A: Figures
 - Figure 10.1 – Statutory Heritage Assets
 - Figure 10.2 – Listed Buildings and CAs
 - Figure 10.3 – Non-designated Heritage Assets
 - Figure 10.4 – Heritage Assets in Close Proximity
 - Figure 10.5 – Tithe Apportionment Map (1839)
 - Figure 10.6 – OS 1885 Map
 - Figure 10.7 – OS 1901 Map
 - Figure 10.8 – Lidar Data
 - Figure 10.9 – Aerial Imagery 1969 (CRAPW)
- Appendix 10B: Tables of Heritage Assets
- Appendix 10C: Photographic Register
- Appendix 10D: Geophysical Survey Report

Statement of Authority

10.10. The assessment has been conducted by archaeologists registered with the Chartered Institute for Archaeologists (CIfA), of Associate (ACIfA) level or above. The assessment has been conducted in accordance with the appropriate professional guidance outlined in the Code of

Conduct¹ and Standards and Guidance for Desk-based Assessment² from the Chartered Institute for Archaeologists (CIfA).

- 10.11. Michael Briggs BSc (Hons) MSc ACIfA MIAI was the primary author; he has undertaken a large number of cultural heritage and archaeological impact assessments for developments across the UK and Ireland, with a particular focus on renewable energy projects and especially solar farms. He has over 13 years of professional experience, including assessments for the initial stages of feasibility and heritage impacts through to a wide variety of fieldwork and mitigation measures.
- 10.12. Gavin Donaghy MSC (Hons) MCIfA MIAI was the primary editor of the assessment. He has undertaken many cultural heritage and archaeological impact assessments for developments across Ireland. He has taken assessments from the initial stages of feasibility and heritage impacts through to complete programmes of archaeological works and discharge of conditions. He is an experienced licence holder with over 22 years of experience within Northern Ireland and the Republic of Ireland, running projects all types across large scale infrastructure projects as well as residential, commercial and renewable energy sectors.
- 10.13. Paul Neary BA H.Dip MA MSc MEnvSc MIAI ACIFA CEnv had the final sign-off for the report. Paul is dual-qualified as a Chartered Environmentalist and archaeologist. Paul has over 18 years of archaeology and heritage experience, the majority of which relates to Ireland. Paul has worked on large road projects, EIA developments and energy projects across Ireland and the UK. He is licensed to direct archaeology work in the Republic of Ireland and has also held archaeology director licenses in Northern Ireland.

Professional Guidance

- 10.14. The assessment will be conducted in accordance with the appropriate professional guidance:
- Code of Conduct, Chartered Institute of Field Archaeologists (CIfA) (2014, Revised 2022)³
 - Standards and Guidance for Archaeological Desk Based Assessment, CIfA (2014, Updated 2020)⁴
 - National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales (NPAAW 2017)⁵

¹ CIfA (2014) *Code of Conduct*. Chartered Institute for Archaeologists.

² CIfA (2014) *Standards and Guidance for desk-based assessment*. Chartered Institute for Archaeologists.

³ CIfA (2014) *Code of Conduct*. Chartered Institute for Archaeologists.

⁴ CIfA (2014) *Standards and Guidance for desk-based assessment*. Chartered Institute for Archaeologists.

⁵ <https://www.welshmuseumsfederation.org/en/news-archive/resources-landing/Collections/national-standard-and-guidance-for-collecting-and-depositing-archaeological-archives-in-wales-2017.html>

- Standards and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives, ClfA (2014, Revised 2020)⁶
- RCAHMW Guidelines for Digital Archives (2015)⁷
- Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) (2018)⁸

CONSULTATION

10.15. Pre-application consultation was undertaken primarily as part of the pre-application process and has been ongoing since December 2023, including with Rhondda Cynon Taf County Borough Council, Cadw and Heneb. A summary of their comments is contained in **Table 10-1**.

Table 10-1: Table of Consultation

Consultee	Key Comments	Actions
<p>Gareth Davies (Rhondda Cynon Taf Borough Council)</p> <p>Team Leader Development Management</p> <p>12/01/2024</p> <p>Pre-application response/email consultation</p>	<p><i>Whilst the site is not a site of historical, cultural or archaeological significance, it must be noted that there are a number of important designations in the immediate and wider vicinity which must be fully considered in the proposals to ensure no adverse impact:</i></p> <ul style="list-style-type: none"> • <i>Scheduled Ancient Monuments: Ynysangharad War Memorial Park, Coedpenmaen Common, Y Garreg Siglo Bardic Complex.</i> • <i>Historic Parks and Gardens: Ynysangharad War Memorial Park</i> • <i>Listed Buildings: Nearest being Glamorgan Centre for Art and Design, St. Mary's Church and The Round Houses on Graig yr Helfa Road. Further Listed Buildings can be found in the surrounding area.</i> 	<p>Indirect effects upon the settings of designated heritage assets have been carefully assessed within this chapter, including those mentioned in particular.</p>

⁶ ClfA (2014) Standards and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives, Chartered Institute for Archaeologists.

⁷ <https://rcahmw.gov.uk/wp-content/uploads/2016/09/RCAHMW-Guidelines-for-Digital-Archives.pdf> last accessed 03/02/25

⁸ Welsh Archaeological Trusts (2018) *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)*. Welsh Archaeological Trusts (CPAT, Dyfed, GGAT, GAT, Cadw).

<p>Rob Dunning (Heneb)</p> <p>Archaeological Planning Officer</p> <p>27/08/2024</p> <p>Pre-application response/email consultation</p>	<p><i>The information in the Historic Environment Record (HER) curated by this Trust shows that the application is located in an area of archaeological potential. There are several Scheduled Monuments in the vicinity, including the Cross Ridge Dyke and Earthwork on Cefn Eglwysilan (Cadw ref. GM452), the Ring Cairn and Two Standing Stones on Coedpenmaen Common (Cadw ref. GM510) as well as burial cairns such as Carneddi Llywydion (Cadw ref. GM302). Other remains include elements of medieval settlement.</i></p> <p><i>As a result there is the potential to encounter archaeologically significant remains during the proposed works.</i></p> <p><i>In order to ascertain the impact that the development will have on the archaeological resource, a suitably qualified archaeologist should initially prepare an archaeological desk-based assessment of the current knowledge of the archaeological resource in the application area in order for the impact of the proposed development to be determined and to allow informed mitigation measures to be proposed. It should be noted that the desk-based assessment is the first phase of archaeological work and, depending on the results, additional mitigation measures may be required, pre or post-determination as appropriate.</i></p> <p><i>The assessment should be prepared in accordance with the Chartered Institute for Archaeologists (CIfA) Standard and Guidance for Historic Environment Desk-based Assessment (2020) and to an agreed methodology set out in a Written Scheme of Investigation (WSI).</i></p>	<p>This heritage chapter incorporates the desk-based assessment undertaken as a first-stage approach. This has been produced in line with a WSI agreed with Rob Dunning of Heneb following this consultation (ref. RCT0581).</p> <p>It is agreed that the site lies within an area of archaeological potential and the results of the desk-based assessment and other methods have informed the overall potential for impacts upon the archaeological resource and the possible requirement for archaeological mitigation.</p>
<p>Neil Maylan (Cadw)</p> <p>Senior Historic Environment Planning Officer</p> <p>31/01/2025</p>	<p><i>I note you have proposed a study zone of 5km for heritage assets of national significance, 2km for heritage assets of regional/local significance and 1km for HER data: However, in many EIA's grade II designated historic assets are considered to be of regional significance, which is contrary to current legislation which does not include any grading for listed building or registered historic parks and</i></p>	<p>A 5km study area has been used for all designated heritage assets.</p> <p>Methodology includes the use of the stages 1 – 4 appraisals mentioned. Stage 1 has been implemented via</p>

<p>Email consultation</p>	<p><i>gardens. Consequently, we would expect all designated historic assets to be included in your 5km study zone (it should also be noted that in Wales Registered Historic Park and Gardens are a now a statutory designation).</i></p> <p><i>We expect that the impact of the proposed solar farm on all of these designated historic assets will be assessed in accordance with the Welsh Government guidance given in the document “The Setting of Historic Assets in Wales”. We would expect a stage 1 assessment to be carried out for all of the above designated historic assets, which will determine the need, if necessary, for stages 2 to 4 to be carried out for specific historic assets. The results of the stage 1 assessment should be included in the EIA, possibly as an appendix.</i></p> <p><i>A full assessment of the National Wales 1 metre DTM and DSM Lidar datasets should be carried out prior to any site walkover. Any new sites located on the Lidar must be verified on the ground by the archaeological team and mapped, described, photographed and interpreted with images and an accompanying gazetteer of sites included in the report. All sites should be categorized for their importance and the significance of impact stated in the EIA.</i></p> <p><i>The need for geophysical survey or evaluation trenching will need to be considered once the DBA has been completed. This review is essential and the Heneb: The Trust for Welsh Archaeology should be consulted on it and the need for geophysical survey after the DBA and walkover survey reports have been presented to them for comment. If geophysical anomalies are located but are not diagnostic enough to allow informed opinions on dating, function, level of preservation and importance then additional intervention by targeted evaluation trenching may also be required within the pre-determination assessment stage and in accordance with Planning Policy Wales and TAN24.</i></p>	<p>the maps and tables in Appendix 10A: Figures 3.1 – 3.3 & Appendix 10B attached to this document and the use of the calculated Zone of Theoretical Visibility.</p> <p>The DSM and DTM lidar datasets were consulted prior to the site walkover survey and geophysical survey undertaken. The imagery for the 1m DSM lidar data of the site is contained within Appendix 10A: Figure 3.8.</p> <p>A geophysical survey, walkover survey and abridged DBA have been sent to Heneb for comment once these were completed. We are currently awaiting a response. The geophysical survey did not identify any anomalies likely to indicate archaeological features of interest. Discussion on potential ‘next steps’ for any investigative or mitigative work will be undertaken once a response is received.</p> <p>Reference and consultation with The Historic Environment (Wales) Act 2023 have been included within the chapter.</p>
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	<p><i>A realistic time period should be set aside to complete the archaeological assessment, reporting and mitigation discussion before the application is formally submitted for examination and in accordance with guidance on pre-determination archaeological evaluation set out in Technical Advice Note 24 (May 2017): Paragraph 4.7 and Planning Policy Wales (Feb 2021): Paragraph 6.1.26. Failure to complete the appropriate surveys may result in delays at the examination stage if additional information is required. The applicant should therefore adjust their application submission dates if necessary to ensure these surveys are fully completed.</i></p> <p><i>Finally, The Historic Environment (Wales) Act 2023 will be enacted before the EIA is produced. This will replace The Ancient Monuments and Archaeological Areas Act 1979; The Historic Environment (Wales) Act 2016 and The Planning (Listed Building and Conservation Areas) Act 1990. The enactment of the Act will also lead to revisions to Technical Advice Note 24: The Historic Environment 2017 and other guidance notes. The Act is a Consolidation Act and should not alter legislation, but references to the various parts of the Acts that have been consolidated will need to be changed to refer to the 2023 Act. The most important change is that section 66 (1) of the Listed Building and Conservation Act 1990 will become section 314A of the Town and Country Planning Act 1990.</i></p>	
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LEGISLATION, POLICY & GUIDANCE

10.16. This EIA chapter has been considered with regard to all relevant legislation, policy and guidance documents at each of the international, national, regional and local levels:

- Future Wales: The National Plan 2040 (Future Wales, 2021)⁹;

⁹ Welsh Assembly Government (2021) *Future Wales. The National Plan 2040*. Welsh Assembly Government. Cardiff

- Planning Policy Wales (12th Edition, 2024)¹⁰,
- Planning Policy Wales (Technical Advice Note 24: The Historic Environment) (2017)¹¹;
- The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017, Part 4¹²;
- Well-being of Future Generations (Wales) Act 2015 (Updated 2024)¹³;
- Historic Environment Wales, Act 2023¹⁴;
- Historic Buildings and Ancient Monuments Act 1953¹⁵;
- Historic Environment and Climate Change in Wales (2023)¹⁶;
- The Setting of Heritage Assets in Wales (2017)¹⁷;
- Understanding Scheduling in Wales (2019)¹⁸;
- Conservation Principles: for the sustainable management of the historic environment in Wales (2011)¹⁹;
- National Heritage Act 1983 (amended 2002)²⁰;

¹⁰ Welsh Assembly Government (2024) *Planning Policy Wales. Edition 12. February 2024*. Welsh Assembly Government. Cardiff

¹¹ Welsh Assembly Government (2017) *Planning Policy Wales (Technical Advice Note 24: The Historic Environment)*. Welsh Assembly Government. Cardiff

¹² HM Government (2017) *The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations*. HM Government, London.

¹³ Welsh Assembly Government (2015) *Well-being of Future Generations (Wales) Act 2015 (Updated 2024)*. Welsh Assembly Government. Cardiff

¹⁴ Welsh Assembly Government (2023) *Historic Environment (Wales) Act 2016*. Welsh Historic Environment

¹⁵ HM Government (1953) *Historic Buildings and Ancient Monuments Act 1953*. HM Government, London.

¹⁶ Historic Environment Group (2023) *Historic Environment and Climate Change in Wales Sector Adaptation Plan*. Historic Environment and Climate Change in Wales. SAP Actions and Activities 2022

¹⁷ Cadw (2017) *The Setting of Heritage Assets in Wales*. Welsh Assembly Government. Cardiff

¹⁸ Cadw (2017) *Understanding Scheduling in Wales*. Welsh Assembly Government. Cardiff

¹⁹ Cadw (2011) *Conservation Principles: for the sustainable management of the historic environment in Wales*. Welsh Assembly Government. Cardiff.

²⁰ HM Government (1983) *National Heritage Act (Amended 2002)*. HM Government, London.

- Hedgerows Regulations 1997: Schedule 1 – Additional Criteria for Determining “Important” Hedgerows²¹; and
- Rhondda Cynon Taf Local Development Plan up to 2021 (adopted March 2011)²².

10.17. In addition to compliance with the EIA legislation, the most relevant policy documents to this impact assessment are discussed in more detail below.

Future Wales: The National Plan 2040

- 10.18. Future Wales – the National Plan 2040 is the national development framework, setting the direction for development in Wales to 2040. It is a development plan with a strategy for addressing key national priorities through the planning system, including sustaining and developing a vibrant economy, achieving decarbonisation and climate-resilience, developing strong ecosystems and improving the health and well-being of our communities.
- 10.19. Under this reviewed policy document archaeological sites, buildings, parks and gardens, conservation areas, battlefields or other aspects of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are considered heritage assets. These heritage assets include both designated sites and non-designated sites identified by the Local Planning Authority and must be a consideration in the planning process due to their heritage interest.
- 10.20. Policy 18 (Renewable and Low Carbon Energy Developments of National Significance) provides a decision-making framework for renewable and low carbon energy technologies. Outlined in the document *“there are no unacceptable adverse impacts on statutorily protected built heritage asset”*.

Planning Policy Wales (12th Edition)

- 10.21. This document mainly offers guidance and advice regarding consideration of the setting of heritage assets. The guidance was produced by the Welsh Government and is supplemented by a series of Technical Advice Notes, Welsh Government Circulars, and policy clarification letters, which together with Planning Policy Wales provide the national planning policy framework for Wales.
- 10.22. The primary objective of Planning Policy Wales is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales, as required by the Planning

²¹ HM Government (1997) *The Hedgerows Regulations*. HM Government, London.

²² Rhondda Cynon Taf (2011) *Rhondda Cynon Taf Local Development Plan up to 2021*. Rhondda Cynon Taf County Borough Council. Pontypridd.

(Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation.

10.23. Planning Policy Wales recognises the special characteristics of the historic environment. The Welsh Government's specific objectives for the historic environment seek 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.*

Planning Policy Wales Technical Advice Note 24: The Historic Environment

10.24. This Technical Advice Note should be read in conjunction with Planning Policy Wales which sets out the land use planning policies of the Welsh Government, including for the Historic Environment 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.

10.25. There are useful concepts regarding setting illustrated in the document, and it lays out the recommended procedure for assessing the effects a development proposal may have on the surrounding assets and their settings. The document defines setting as the surroundings in which an asset is experienced, and discusses the effects that developments can have on the different types of setting heritage assets have.

“The setting of an historic asset includes the surroundings in which it is understood, experienced, and appreciated embracing present and past relationships to the surrounding landscape. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral. Setting is not a historic asset in its own right but has value derived from how different elements may contribute to the significance of a historic asset.” (Paragraph 1.25)

10.26. As a result, this assessment takes into account the setting of all identified heritage assets and determines the impact that the Proposed Development may have on them. It is understood that views to and from the heritage asset, as well as any meaningful intervisibility that it shares with its surrounding landscape, can constitute significance. Detailed consideration of these

views has been undertaken and any relevant impacts, with mitigation measures where appropriate, have been highlighted.

“It is for the applicant to provide the local planning authority with sufficient information to allow the assessment of their proposals in respect of scheduled monuments, listed buildings, conservation areas, registered historic parks and gardens, World Heritage Sites, or other sites of national importance and their settings. These principles, however, are equally applicable to all historic assets, irrespective of their designation. For any development within the setting of a historic asset, some of the factors to consider and weigh in the assessment include:

- *the significance of the asset and the contribution the setting makes to that significance;*
- *the prominence of the historic asset;*
- *the expected lifespan of the proposed development;*
- *the extent of tree cover and its likely longevity;*
- *non-visual factors affecting the setting of the historic asset such as noise.”* (Paragraph 1.26)

10.27. The Welsh Government, therefore, are not seeking to ensure that heritage assets do not preclude development and their protection should not prevent change. However, the more important a designated asset, the greater the weight should be given to its conservation. This assessment will identify the significance of designated and non-designated heritage assets and apply appropriate weight to the potential impact on them as a result of the Proposed Development. The local planning authority will need to make its own assessment of the impact within the setting of a historic asset, having considered the responses received from consultees as part of this process. A judgement has to be made by the consenting authority, on a case-by-case basis, over whether a Proposed Development may be damaging to the setting of the historic asset, or may enhance or have a neutral impact on the setting by the removal of existing inappropriate development or land use.

Hedgerows Regulations 1997

10.28. Part II of Schedule 1 within the Hedgerows Regulations 1997 states the additional criteria for determining “important” hedgerows in an archaeological and historic context. This can be important for a site where hedgerows may require alteration or removal to accommodate the design of a proposal.

“1. The hedgerow marks the boundary, or part of the boundary, of at least one historic parish or township; and for this purpose, “historic” means existing before 1850.

2. The hedgerow incorporates an archaeological feature which is-

(a) *included in the schedule of monuments compiled by the Secretary of State under section 1 (schedule of monuments) of the Ancient Monuments and Scheduled Areas Act 1979; or*

(b) *recorded at the relevant date in a sites and Monuments Record.*

3. *The hedgerow-*

(a) *is situated wholly or partly within an archaeological site included or recorded as mentioned in paragraph 2 or on land adjacent to and associated with such a site; and*

(b) *is associated with any monument or feature on that site.*

4. *The hedgerow-*

(a) *marks the boundary of a pre-1600 AD estate or manor recorded at the relevant date in a sites and Monuments Record or on a document held at that date at a Record Office; or*

(b) *is visibly related to any building or feature of such an estate or manor.*

5. *The hedgerow-*

(a) *is recorded in a document held at the relevant date at a Record Office as an integral part of a field system pre-dating the Inclosure acts; or*

(b) *is part of, or visibly related to, any building or other feature associated with such a system, and that system-*

(i) *is substantially complete; or*

(ii) *is of a pattern which is recorded in a document prepared before the relevant date by a local planning authority, within the meaning of the 1990 Act(b), for the purposes of development control within the authority's area, as a key landscape characteristic."*

Rhondda Cynon Taf Local Development Plan

10.29. Rhondda Cynon Taf County Borough Council are preparing a Revised Local Development Plan for the period 2022 - 2037. This process formally began in April 2022. This will replace the current LDP for Rhondda Cynon Taf (2006 – 2021). The current LDP will remain in force until the Revised LDP is adopted. Relevant policies within the current LDP are as follows:

Policy AW 7 - 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.

10.30. Expanding upon the policy wording, the plan contains the following explanatory text:

“The historic built environment and the man made features of archaeological, historic or architectural interests are integral to the quality of the County Borough’s environment. They are unique to Rhondda Cynon Taf and trace the development of the area over time. Areas of recognised architectural and / or historical merit or sites of archaeological importance include listed buildings and conservation areas and their settings, registered historic landscapes and historic parks and gardens and their settings; and archaeological remains. Over the plan period, the Council will, where appropriate, seek to implement enhancement and management schemes to improve the character, quality and appearance of these recognised heritage features. This policy will be used to ensure that these important features are protected and enhanced”.

10.31. This impact assessment will therefore consider all designated and non-designated heritage assets identified within the above local policies in order to ensure that direct and indirect impacts upon them as a result of the Proposed Development are properly assessed in compliance with policies in EIA legislation as well as the local plan and PPW.

METHODOLOGY

Aims and Objectives

10.32. The aims of the assessment are as follows:

- To identify all known heritage assets within the study zone based on all available public resources;
- To identify the archaeological potential of the Application Site through collation of results from the desk-based assessment, geophysical survey and site walkover survey;
- To determine what if any level of recording will be required for any extant remains;
- To assess the significance of any direct or indirect effect of the Proposed Development on cultural heritage assets and their settings and potential archaeological remains within the study zone, from construction through to decommissioning;

- To identify mitigation measures where possible and aid in the design process to reduce the potential impacts of the proposed scheme; and
- To provide recommendations for any further archaeological/heritage assessment work that should be undertaken as part of the Proposed Development.

10.33. All assessments of significance and impacts have been undertaken in line with the tables and terminology set out in **Table 10-2** and **Table 10-3**, where the magnitude of impact and importance/sensitivity of a heritage asset and its setting are qualitatively determined through professional judgement, and effects of ‘moderate adverse’ would be considered significant within EIA criteria:

Table 10-2: Significance of Direct Effects

Magnitude of Impact	Importance/Sensitivity of the Heritage Asset			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Very Low	Minor	Negligible	Negligible	Negligible

Table 10-3: Significance of Indirect Effects

Magnitude of Impact	Importance/Sensitivity of the Heritage Asset/Setting			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Negligible	Minor	Negligible	Negligible	Negligible

Desk-based Assessment

Scope of Assessment

10.34. The desk-based assessment was conducted to ascertain all historical and archaeological information relevant to the Application Site and the local area. A search of designated heritage assets including Scheduled Monuments, World Heritage Sites, Registered Historic

Parks and Gardens, Historic Landscapes, Registered Battlefields, Listed Buildings and Conservation Areas has been carried out within a 5km study zone of the Proposed Development. Non-designated sites within the National Monuments Record of Wales (NMRW) and Heneb datasets have been identified within a 1km study zone.

- 10.35. The sizes of the above study zones were selected to ensure that comprehensive and informative data was collated to characterise the direct and indirect impacts that the Proposed Development may have on historical and archaeological assets, as well as the archaeological potential of the land within the Application Site boundary. Due to the nature of the records, some degree of overlap is possible (for example a site that has been recorded within both the HER and as a Listed Building) and some assets may therefore have been repeated. Where appropriate, sites of exceptional value or sensitivity outside the relevant study zones have also been assessed.
- 10.36. Historical databases and various archives were consulted to identify the designated assets and undertake the DBA. These assets were imported into ArcGIS Pro as shapefiles in order to determine their locations relative to the Application Site and produce the figures supporting this assessment. The main sources consulted for the assessment include:
- National Monuments Record of Wales (NMRW);
 - Rhondda Cynon Taf County Borough Council;
 - Published sources available on the National Library of Wales website;
 - Glamorgan-Gwent Archaeological Trust (GGAT) / Heneb's *Historic Environment* Record (HER) – obtained under HER Enquiry Reference Number 9120;
 - Cadw Historic Assets;
 - GIS shapefiles hosted via Data Map Wales and Local Authority links;
 - Defra Data Services Platform (Lidar data);
 - Aerial imagery via Google Earth, Bing Maps, World Imagery Wayback and ArcGIS Pro global mapping;
 - National Collection of Aerial Photography;
 - Central Register of Aerial Photographs for Wales;
 - <http://www.britainfromabove.org.uk/>; and
 - Excavation reports hosted by Archaeology Data Service and OASIS.

Map Regression Analysis

- 10.37. Analysis of historic maps can reveal the changes in land use and field boundaries in the area and can highlight potential areas of archaeological interest that may have been lost in the subsequent years. Relevant maps were consulted to undertake this analysis as part of the desk-based assessment and site walkover survey.

Aerial Photography

- 10.38. To identify potential archaeological features within the Application Site that are not recorded within the relevant databases, aerial photography of the land was examined in order to identify any cropmarks or markings within the Application Site that may be indicative of previously unknown features. This includes both modern and historical aerial imagery.

Lidar Data

- 10.39. Lidar datasets for the region were consulted to identify what data may exist for land inside the Application Site. Relevant data that can be useful for archaeological purposes comprise Digital Terrain Model (DTM) and Digital Surface Model (DSM) of 0.5m, 1m and 2m resolutions. These datasets are relatively recent and updated on a regular basis, so were consulted more than once during the assessment.

Assessment of Construction Phase Effects

- 10.40. Potential effects during the construction phase are primarily considered as physical disturbance of known or associated archaeological remains. These direct impacts can be caused through the construction processes within the footprint of the Development, including ancillary works such as access tracks. Direct impacts can affect both above ground and subsurface remains, which will both be considered within this assessment. The presence and character of any existing archaeological features will be identified within the site boundary, and the archaeological potential of the site assessed through a desk-based assessment of the surrounding archaeological resource and landscape. The significance of any impacts will be determined by considering the construction methodology within the Application Site and to what extent this would disturb any sub-surface remains.
- 10.41. The significance of any impacts is determined in line with the criteria presented in **Table 10-2** above, by considering the construction methodology within the Application Site and to what extent this would disturb any sub-surface remains. It is noted that the Application Site was highlighted as an area unlikely to possess archaeological features of significance at the depths expected to be impacted by the proposal. As such, while archaeology has not been entirely 'scoped out' of the assessment, the archaeological appraisal has been undertaken commensurate with this idea.
- 10.42. The potential for indirect effects during the construction phase will also be considered within this assessment, although they will be temporary in nature.

- 10.43. A do-nothing scenario will also be considered, involving the appraisal of potential future impacts upon the existing baseline archaeology and heritage in the event of the Proposed Development not progressing and current land use continuing.

Assessment of Operational Phase Effects

- 10.44. Potential effects during the operational phase are considered to be primarily derived from visual impacts on heritage assets as a result of the Proposed Development. Assets identified through the sources previously listed were assessed for impacts using the criteria presented in **Table 10-3** above. Visual impacts upon these assets are determined by the views and intervisibility shared with the Proposed Development, as well as the nature, character, date, extent, setting and surviving remains of the feature where relevant.
- 10.45. The four-stage approach outlined within the Cadw guidance document 'Setting of Historic Assets in Wales' was followed. This involves the structuring of assessment in line with the following stages:
- Stage 1 – identify the historic assets
 - Stage 2 – define and analyse the setting
 - Stage 3 – evaluate the potential impact of change or development
 - Stage 4 – consider options to mitigate the impact of a proposed change or development
- 10.46. Indirect effects of 'moderate' or above are considered significant and appropriate mitigation measures have been recommended where appropriate in order to lower the potential impact.
- 10.47. The potential for direct effects during the operational phase will also be considered within this assessment, although additional construction activities or ground disturbance are not likely to occur during this phase.
- 10.48. A do-nothing scenario will also be considered, involving the appraisal of potential future impacts upon the existing baseline archaeology and heritage in the event of the Proposed Development not progressing and current land use continuing.

Zone of Theoretical Visibility

- 10.49. A Zone of Theoretical Visibility (ZTV) was produced to identify sites with a greater potential for being indirectly impacted by the Proposed Development. The ZTV has been overlaid on the heritage assets within the study zones, to identify those that will potentially be visually impacted by the Proposed Development during the operational phase. This constituted stage 1 of the impact assessment in line with the Cadw guidance document.
- 10.50. Digital Terrain Modelling sourced from digital height data derived from Ordnance Survey, with the viewer height set at 2m high was used to calculate the ZTV. The produced ZTV was 'bare

earth' and therefore did not account for any elements in the landscape such as trees, hedgerows, walls or buildings that may help screen views, nor account for the influences of the weather upon any views.

The Importance of Setting

- 10.51. Setting can be important to the way in which historic assets or places are understood, appreciated and experienced. The Cadw document 'Setting of Historic Assets in Wales' is used as guidance for determining the contributions made by settings to the heritage value of their assets, and how these settings may be sensitive to indirect impacts. Defining and appraising the settings of assets in this way constituted stage 2 of the impact assessment.
- 10.52. Where development is proposed it is important to identify and define the setting of the heritage asset and to assess how development might impact upon this resource. Setting often extends beyond the property boundary, or 'curtilage', of an individual historic asset into a broader landscape context. Less tangible elements can also be important in understanding the setting. These may include function, sensory perceptions or the historical, artistic, literary and scenic associations of places or landscapes. In the light of this guidance, development proposals should seek to avoid or mitigate detrimental impacts on the settings of historic assets.

Assessment of Decommissioning Phase Effects

- 10.53. Potential effects during the decommissioning phase will be considered within this assessment. This includes the potential for direct effects via removing infrastructure and reinstating areas, as well as the potential for indirect effects similar to that during the construction phase.

Cumulative Effects

- 10.54. Cumulative effects may occur where the combination of separate impacts resulting from different developments build up to be potentially significant. As such, where individual impacts may be minor, they may contribute to a more significant collective impact. Such impacts can be direct or indirect. Cumulative indirect impacts are primarily considered to be visual in nature and may occur on heritage assets where they act as receptors to more than one development with which they have visibility.
- 10.55. Heritage assets identified within the cultural heritage chapter will be considered in combination with the cumulative results of **Chapter 4: Landscape and Visual Impact Assessment** in order to determine any cumulative impacts upon archaeology and heritage assets.

Mitigation Measures

- 10.56. Mitigation measures will be considered for the reduction or management of any direct or indirect effects that are assessed as being Moderate Adverse or above during stage 3 of the impact assessment. This applies to all phases of the Proposed Development. Mitigation measures for the reduction of indirect effects may include such methods as additional screening through planting vegetation, while mitigation measures for the reduction of direct effects may include iterative design changes, exclusion areas, non-intrusive construction methods, programmes of archaeological works, or any combination thereof. Consideration of such mitigation constituted stage 4 of the impact assessment.
- 10.57. Following the implementation of any recommended mitigation measures, resultant impacts may be reduced. This is considered within the residual effects section which follows the proposed mitigation measures.

Site Visits

- 10.58. A geophysical survey and site walkover survey were conducted separately at the Application Site, on the 8th – 12th July and 2nd August 2024 respectively. The primary aim of the surveys was to identify any potential archaeological or historical features within the Application Site that are not otherwise recorded, as well as verify the presence and extents of any potential features highlighted within aerial imagery, historic maps or lidar data.
- 10.59. The land and fields within the Application Site were surveyed, documented photographically and inspected for surface artefacts, signs of sub-surface archaeological features and intervisibility with designated heritage assets. The results of these surveys also considered available information on the known designated and non-designated sites within and close to the Application Site.

Assessment Limitations

- 10.60. The consulted sources contain records of known archaeological and historic features. The record is not an exhaustive record of all surviving historic environment features and does not preclude the possible existence of archaeological remains of significance within the study zone, which are at present unknown or have been added to the records recently. It was assumed that official data provided by public bodies was accurate and up-to-date.
- 10.61. Land access during the site walkover survey and geophysical survey was mostly obtained, but some areas within the southern fields of the site were not accessed due to health and safety concerns regarding terrain and cattle, as well as difficulty with using equipment on the steeper gradients within these fields. However, these limitations are not considered to be significant or affect the results within this assessment.

BASELINE CONDITIONS

Archaeological Period Classifications

10.62. The period classifications below provide chronological context for the archaeological assets which are discussed as part of this report.

- Mesolithic (10,000BC – 4,000BC)
- Neolithic (4,000BC – 2,500BC)
- Bronze Age (2,500BC - 700BC)
- Iron Age (700BC – AD43)
- Roman (AD43 – AD410)
- Early Medieval (AD410 - AD1066)
- Medieval (AD1066 - AD1540)
- Post Medieval (AD1540 – AD1901)
- Modern (AD1901 onwards)

Archaeological and Cultural Heritage Assets

10.63. The Application Site does not contain any designated heritage assets within the extent of its boundary. However, there are relatively large numbers of designated heritage assets within the surrounding 5km study area, including scheduled monuments, listed buildings, conservation areas, historic landscapes and registered historic parks and gardens (**Figure 10.1 & 10.2: Appendix 10A**). However, there are no historic battlefields or world heritage sites within the 5km study area.

10.64. A single non-designated heritage asset is located within the Application Site, which is the record for Rhydyfelin ‘Village’ (NC93) (**Figure 10.3: Appendix 10A**). However, this feature appears to relate to the early origins of Rhydyfelin to the south, rather than anything present within the Application Site. Its position within the site boundary may instead be a result of the rounded grid reference contained within its database entry²³.

10.65. Heritage assets and recorded archaeological sites identified within the relevant study areas of 5km and 1km are summarised below. Within 5km of the Application Site there are a total of:

- 21 Scheduled Monuments;

²³ <https://coflein.gov.uk/en/site/402670/> last accessed 03/02/25

- One Historic Park and Garden;
- One Historic Landscape;
- No Registered Battlefields;
- No World Heritage Sites;
- Three Grade I Listed Buildings;
- 22 Grade II* Listed Buildings;
- 123 Grade II Listed Buildings; and
- Nine Conservation Areas.

10.66. Within 1km of the Application Site there are a total of:

- 51 point records within the GGAT/Heneb HER;
- Eight polygon records within the GGAT HER; and
- 76 records within the RCAHMW/Coflein.

10.67. The full list of designated and non-designated heritage assets within the relevant study areas are listed in **Appendix 10B**.

Historical Background

10.68. The Application Site lies within the county borough of Rhondda Cynon Taff, with the largest residential communities of Pontypridd town to the west, Rhydyfelin village to the south and Abertridwr village to the east. The county borough was formed on 1 April 1996, by the merger of the former Mid Glamorgan districts of Rhondda, Cynon Valley and Taff-Ely.

Prehistoric Period

10.69. The prehistoric period within the landscape is represented by numerous scheduled monuments, including round cairns (NA02, NA06, NA08, NA15 & NA16), a ring cairn (NA19), cup-marked stones (NA20 & NA21), a hillfort (NA04), and two cross ridge dykes (NA11 & NA12). These features date predominantly to the Bronze Age, including the Cross Ridge Dyke & Earthwork on Cefn Eglwysilan (NA11) which runs adjacent to the northeast of the Application Site boundary. Similar prehistoric boundary earthworks, such as those within the Cross Ridge Dyke & Cairn (NA12) to the north of NA11, comprise a linear ditch and bank and would likely have divided land for reasons of land allotment or tribal influence. While no embankment is visible for NA11, its function and original composition is presumed to have been similar.

- 10.70. The presence of the two cross dykes within this upland area confirms prehistoric activity which has the potential to extend into the Application Site. Further evidence for prehistoric activity in the landscape include the round cairns and ring cairn, generally occupying prominent locations with clear views, while a number of further non-designated cairns, barrows and enclosures are present within the 1km study area.

Romano-British Period

- 10.71. A single record from the Roman period was identified within the 5km study area. This is the Pen-y-Coedcae Roman Camp (NA05), situated c. 2.6km to the southwest of the Application Site. While the majority of Wales is known to have been conquered by the Roman Army in the 1st century AD, this scheduled monument has been interpreted as a marching camp, used temporarily for the army moving through an area. Combined with the absence of any other Romano-British records in the study areas, there is no distinct evidence for such activity related to this period within or around the Application Site.

Early Medieval and Medieval Periods

- 10.72. Limited information is available for early medieval settlement within the study areas, but the record for St Elans Church (NA31), c. 1km to the east-southeast of the Application Site, states that *“the site is an older Christian site, an C8-C10 cross slab having been discovered in the churchyard”*²⁴. As such, early medieval settlement within villages in the local landscape is probable despite the limited surviving representation, which is not an uncommon theme for many areas.
- 10.73. In addition, the early medieval period serves as a key milestone for the development of the Welsh language, with many current placenames likely to be derived from this period. In particular, placenames for many of the nearest settlements appear to share the common denominator of their historical versions being derived from their locations along the River Taff and in some cases to early structures which no longer exist (Glyntaff as Taff Glen, Rhydyfelin as Mill at the Ford, and Pontypridd as Bridge by the Earthen House, which may suggest an early medieval fortified crossing point (Owen 2015), probably at the location of the scheduled and grade I listed Pontypridd Bridge (NA01/NB01)²⁵, which was constructed in 1756 but may have been part of a succession of earlier bridges at this location. However, evidence for settlement around the bridge during this period is very limited. Non-designated sites near the Application Site, such as the Senghenydd Dyke / Deer Park (NC12/NC136), thought to have belonged to the Lords of Caerphilly Castle, and hollow ways (NC40 & NC92) to the east, may suggest some degree of evidence for medieval land use during this period.

²⁴ <https://cadwpublic-api.azurewebsites.net/reports/listedbuilding/FullReport?lang=en&id=13498> last accessed 03/02/25

²⁵ <https://cadwpublic-api.azurewebsites.net/reports/sam/FullReport?lang=en&id=2230> last accessed 04/02/25

- 10.74. The later medieval period is represented partly by a single scheduled monument in the 5km study area; namely Tomen y Clawdd (NA03), which comprises the remains of a steep-sided motte located c. 2.65km to the south of the Application Site. In isolation, the motte does not provide much information on the likely settlement of the area during the medieval period, as its position at the confluence of two streams on high ground indicates that it may have had a purely defensive function at the border between areas under Welsh control and Norman control²⁶, rather than any indication for wider settlement.
- 10.75. It is also noted that the Cadw record for Pontypridd Bridge²⁷ also denotes the feature as medieval, despite its construction in 1756 by William Edwards. As mentioned, the placename for Pontypridd is likely derived from this crossing point and it is possible that a succession of preceding wooden bridges were constructed at this location²⁸ from as far as the medieval period. The evidence for medieval settlement in the area remains very limited however, with the first such documentation being agrarian settlements noted in tax records from the 16th century (Williams, 2003), while the area formed part of the commote of Glynrhondda.

Post-medieval and Modern

- 10.76. Prior to the 19th century, the area around Pontypridd remained rural and the population scattered²⁹. While there is some isolated evidence for prior development, such as Pontypridd Bridge, the town of Pontypridd itself boomed in the mid to late 19th century alongside its industrial transformation linked to the coal and iron industries.
- 10.77. The growth was catalysed by the slightly earlier construction of the Glamorganshire Canal in 1794, and the later construction of the Taff Vale Railway in 1841. The population of the town rose from around 3,000 at this time to over 32,000 by 1890³⁰ as a result of the industrial revolution, while the surrounding villages of Rhydyfelin, Treforest and Abertridwr all followed similar and linked transformations.
- 10.78. Until the mid-20th century, the coal industry continued to dominate life and development within the local area, attracting people from wider areas including other parts of Wales, England and Ireland. As a result, while villages in the area were Welsh-speaking in 1820, by 1900 it was noted that Pontypridd was a predominately English-speaking town, sparking a desire to reinstate Welsh culture and language in the area once again. Currently, Pontypridd and the surrounding villages show only remnants of their coal mining origins, modernising to a post-industrial economy and character.

²⁶ <https://cadwpublic-api.azurewebsites.net/reports/sam/FullReport?lang=en&id=3466> last accessed 04/02/25

²⁷ <https://cadwpublic-api.azurewebsites.net/reports/sam/FullReport?lang=en&id=2230> last accessed 04/02/25

²⁸ <https://www.pontypriddtowncouncil.gov.uk/history-of-pontypridd> last accessed 04/02/25

²⁹ <https://www.pontypriddmuseum.wales/history-of-pontypridd#a1756> last accessed 04/02/25

³⁰ <https://www.pontypriddtowncouncil.gov.uk/history-of-pontypridd> last accessed 04/02/25

- 10.79. The Application Site itself does not appear to have been developed or affected by the post-medieval industrial boom of the local area, and the dominant agricultural usage of the site is clear on its depiction on the 1839 Tithe Appointment Map (**Figure 10.5**), which details the site as being within a mix of arable and pasture usage, and OS 1885 and 1901 maps (**Figures 10.6 & 10.7**). No coal levels or trial shafts are depicted within the Application Site on historic mapping, although the presence of an 'old coal level' is noted outside the Application Site, between the farmsteads of Bryn Tail and Hendre-Prosser, on both the OS 1885 and OS 1901 maps.

Map Regression Analysis

- 10.80. **Appendix 10A: Figure 10.5** contains the 1839 Tithe Appointment Map, **Appendix 10A: Figure 10.6** contains the OS 1885 Map and **Appendix 10A: Figure 10.7** contains the OS 1901 Map. These selected maps show the progression of land use and field boundaries in the area, and can highlight potential areas of archaeological interest that may have been lost in the subsequent years. While the Application Site can be accurately georeferenced onto the Ordnance Survey (OS) maps, the scale and accuracy of earlier non-OS maps often mean that their georeferenced locations are approximations only.
- 10.81. The 1839 Tithe Appointment Map (**Figure 10.5**) depicts the Application Site occupying approximately 36 separate fields and numerous field boundaries. The map also depicts several local farmsteads, namely 'Bryn Tail', 'Hendre Evan Prosser' and 'Tir cae mawr' within the surrounding area. The Application Site comprised a mix of arable, pasture, meadow/scrub and wooded fields within three different ownerships. **Table 10-4** shows each of their approximate field names interpreted from the written tithe records along with their land use at the time of their recording in 1839.
- 10.82. Only minor features related to land use are discernible on the map, including field boundaries, footpaths, and a quarry within the west of the site (Field 38 on **Figure 3 of Volume 4**). No archaeological features of significance are discernible in the Application Site.

Table 10-4: Field names and land uses on 1839 Tithe Apportionment map

Tithe Field Number	Field Name	Land Use
Hendre Evan Prosser, Cae Bach – Mrs Margaret Morgan		
2194	Cae Degwm Isfa (Lower Tithe Field)	Pasture
2195	Cae Mawr (Big Field)	Pasture
2196	'Cae Brim Mimron'	Arable
2197	Cae Bach (Small Field)	Arable
2198	Graig (Rock)	Pasture
2200	Graig (Rock)	Pasture
2201	Cae'r Lleal (The Local Field)	Meadow
2202	Erw (One Acre)	Arable

2203	'Hendre'	Meadow
2205	Cae Byarthy (Home Field)	Arable
2206	Coed Cae (Tree Field)	Arable
2207	Cae Degwm Ucha (Upper Tithe Field)	Arable
Bryn Tail, Gwaun y Gerwia – Reverend Evan Jones		
2219	Cae'r Cochill (Cochill's Field)	Arable
2220	Cwm (Valley)	Wood & Pasture
2222	Cae Lach (Small Field)	Pasture
2223	'Llaun Gach'	Meadow
2224	Cae Tri Cyfen (Three Level Field)	Pasture
2225	'Tan'	Meadow
2226	'Llaun Gach'	None
2230	Cae Bach (Small Field)	Pasture
2231	Cae pen y Llacen (Field at the Top of the Gap)	Pasture
2232	Coed Cae (Tree Field)	Pasture
2233	'Whecher'	Pasture
2233a	'Whecher'	Pasture
2233b	'Whecher'	Pasture
2234	Cae'r Defoid (Field of the Rituals)	Pasture
2235	Cae'r Lloi (Field of the Calves)	Arable
2236	Cae Mawr (Big Field)	Arable
2237	Pen y Llacen (Top of the Gap)	Arable
2238	Cae Melyn (Yellow Field)	Pasture
2239	Gwaun y Gerwia (The Deer's Furrow)	Meadow
2240	Cae Llwyd (Gray Field)	Pasture
2241	Cae Llwyd (Gray Field)	Pasture
2242	Croft (Croft)	Pasture
Graig Alva & Pwllgwern, Naneg Felig – Lord Dynevor & John Matthew Richards Esquire		
2342	Naneg Felig (Happy Grandmother)	Arable
2343	Cae Llwyd (Gray Field)	Arable

- 10.83. The OS 1885 Map (**Figure 10.6**) shows that since its depiction on the 1839 Tithe Appointment Map, little change occurred within the Application Site, with the main differences related to the removal of several internal field boundaries within its northern and western sections, and the addition of several field boundaries within its eastern sections. The large area of meadow (field 2232 on the 1839 Tithe Map) remains uncultivated on the 1885 map, likely to be rough grassland, heath or bracken, but is depicted as being split up by numerous internal boundaries, suggesting it may have been brought into pasture usage at this point. As with the tithe map, only minor features related to land use are discernible on the map, including field boundaries and footpaths. The quarry within the west of the site is disused and no longer

labelled, instead depicted as a small area of scrub or trees. No archaeological features of significance are discernible in the Application Site, but evidence of the industrial transformation of the local area is discernible to the southwest, where a tramway and coal level are depicted.

- 10.84. Similarly, the Application Site does not show any significant changes on the 1901 OS map (**Figure 10.7**). Field divisions are largely the same as depicted on the 1885 map and the only internal features still relate to field boundaries and footpaths. No signs of the former quarry in the west of the site are visible, but a number of defunct industrial features are labelled to the southwest of the Application Site, including 'old quarries', 'old tramway' and 'old coal level' near Hendre-Prosser farmstead and through Coed Glyntaf / Glyn-Taff Wood. The developed extent of Glyntaff had noticeably expanded by this point, with the new Glyntaff Cemetery abutting the woodland to the southwest of the Application Site.

Aerial Photography

- 10.85. Since its depiction on the 1901 OS map, the Application Site has seen no notable changes and remains within predominantly agricultural usage. Other than the removal of some internal field boundaries to facilitate modern farm machinery and efficient farming methods, no changes or development has occurred. Cropmarks visible within the Application Site appear related to linear forms associated with former field boundaries and likely drainage features, as well as natural/topographical features. No cropmarks likely to indicate archaeological features of significance are discernible.
- 10.86. The surrounding farmsteads at Bryn Tail, Tir-Cae-Mawr and Hendre-Prosser, with the former two visibly expanding with large, modern farm buildings now dominating their settings. The surrounding settlements within the general Pontypridd and Rhydyfelin region have grown substantially and now cover much of the local Taff Valley. The built environs include only remnants of their coal mining origins and have modernised to a post-industrial economy and character.
- 10.87. Historical aerial photographs of fields within the Application Site were consulted using sources such as the National Collection of Aerial Photography (NCAP), Central Register of Aerial Photographs for Wales (CRAPW), Cambridge University Collection of Aerial Photography (CUCAP) and the Britain from Above (BfA) databases. However, while numerous such images from between 1951 – 1994 were identified^{31,32,33,34,35,36}, these are restricted to the built

³¹ <https://www.cambridgeairphotos.com/location/fz20/> last accessed 06/02/25

³² <https://ncap.org.uk/frame/11-1-1-175-3?pos=0> last accessed 06/02/25

³³ <https://ncap.org.uk/frame/11-1-1-175-4?pos=1> last accessed 06/02/25

³⁴ <https://ncap.org.uk/frame/11-1-1-175-5?pos=2> last accessed 06/02/25

³⁵ <https://ncap.org.uk/frame/11-1-1-175-6?pos=3> last accessed 06/02/25

³⁶ <https://www.britainfromabove.org.uk/en/image/WPW032523> last accessed 06/02/25

environs of Pontypridd and do not show the fields within the Application Site. The sole exception to this is the 1969 aerial image of the Application Site visible within the CRAPW³⁷ (**Figure 10.9: Appendix 10A**). The 1969 image shows the field divisions and general land use of the site at this time but no development or cropmarks of archaeological interest are discernible.

Lidar Data

- 10.88. **Appendix 10A: Figure 10.8** contains the 1m DSM Lidar data of the Application Site. This data was reviewed in order to identify the potential for hitherto-unknown archaeological features as well as identify the possible extents of known features.
- 10.89. As with other resources, only features associated with land use and natural formations are discernible on the lidar data. This includes linear features associated with former field boundaries, drainage and footpaths, including a raised trackway within Fields 15 – 17, as well as natural topographical and hydrological features. Nothing expected to be of archaeological significance was identified within the lidar data.

Site Visit

- 10.90. An archaeological walkover survey of the Application Site was conducted on the 2nd August 2024 by Issica Baron and Jessie James of Red River Archaeology, and their results presented below. The fields were walked and inspected for surface artefacts, signs of sub-surface archaeological features and intervisibility with designated heritage assets.
- 10.91. Field numbers referred to are contained within **Figure 3 of Volume 4**, while plates referred to are contained within the photographic register in **Appendix 10C**.
- 10.92. Conditions were good; the ground was generally dry with some dew, and although overcast there were views up to at least 32km, as Flatholm and Steepholm islands were clearly visible to the southeast (e.g. Field 13, Plates 9-10, Field 43, Plate 49). To the south the skyline was terminated at The Garth (Plate 18), 6km away. Views extended from Fields 1 and 4 for c. 6.5km to the north with Mynydd Goitre-Coed and Treharris distinguishable (Plate 27), and 9km to Tylorstown Tip (Plate 28) to the northwest. 13km to the west the Llynfi Afan Wind Farm was visible on the skyline from Field 1 (Plate 33). Views to the northeast and east were limited to the western face of Eglwysilan Mountain above Eglwysilan Road (Plate 16).
- 10.93. The site visit established that the site consists of primarily grassy pasture for sheep, cows and horses. Field boundaries are typical for the area, occasionally modern fencing but more often dry-stone walls. In the southwestern fields near Bryn Tail farm, boundaries were often banks with stone wall on one side up against it, and hedge or trees on top, and a relict field boundary was noted. The topsoil was generally thin and fields were stony, with bedrock exposed. The southern part of the site had a number of ravines as boundaries. Probable quarrying of the

³⁷ <https://datamap.gov.wales/maps/apu-welsh-government-aerial-photography/view#/> last accessed 06/02/25

hillsides was observed, with piles of partially worked stone, likely relate to the construction of and upkeep of the stone walls.

- 10.94. The only possible feature noted was the curvilinear sweep of a ditch (or less likely, natural gully) across Field 37. However, analysis of historic mapping confirmed this as the line of a former footpath established in the mid-19th century.
- 10.95. Views of surrounding mountains/hills and down the valleys were substantial, and it was possible to identify a number of scheduled monuments and prominent buildings within the study area and beyond it.

Scheduled Monuments

- 10.96. The scheduled monument Cross Ridge Dyke & Earthwork on Cefn Eglwysilan (NA11), right on the northeast boundary of the site, aligns with the field boundary between Fields 13 and 14 and was visible as an earthwork on the western face of Eglwysilan Mountain (Plate 6). The three ringsworks and possible associated earthworks on the mountain to the northeast of Field 14 are located on top of it, and the variable vegetation growth in that direction masked whether or not the worn, low features were intervisible on the skyline. Garnedd Llwyd cairn (NA15) on the other side of the mountain was definitely not visible.
- 10.97. The Newbridge Beam Colliery Engine (NA13) was re-erected outside the Treforest campus of the University of South Wales, moved from its original location at the Newbridge Colliery. The university buildings immediately next to it are visible from several angles from the site, but it is difficult to distinguish the beam engine itself against the white buildings (e.g. Plate 52).
- 10.98. Although there are views past Pantygraigwen with Barry Sidings Countryside Park to the left, it was not possible to discern the Hetty Steam Winch House (NA14) from the site, as it is slightly lower in the valley than the views. The tall tapering chimney stack and lower red structures of the Lewis Merthyr Colliery are visible from the site (Plates 30, 33), but the Ventilation Furnace (NA10) of the same Colliery is not. The Colliery marks the eastern edge of the Historic Landscape: The Rhondda (NA23), and the typical characteristics of the Hafod HLCA 002 area are implied around it. Other key aspects of the historic landscape are also visible, including the Tylorstown Tip (Plate 28) in HLCA 019.
- 10.99. A Roman Camp (NA05) is located on top of Pen-y-Coedcae on the opposite side of the valley. The solar farm between Maendy Road and Black Road was not visible from the site, nor was the Roman Camp on the far/west side of Black Road. However, Rhiw Saeson Caerau hillfort (GM065) to the west is situated on higher ground and was visible from the upper fields (e.g. Field 13, Plates 11-12).
- 10.100. Tarren Deusant Sculptured Rock & Spring (NA09) and the defended enclosure Lle'r Gaer (NA04) are both located even further to the southwest of the Roman Camp, and neither were visible from the site.

Settlement Views

- 10.101. There are general views towards the town of Pontypridd, and Sardis Road Stadium is distinguishable, but the well-manicured lawns and trees of Pontypridd Golf Club screen Ynysangharad Park (NA22), Victoria Bridge (NA01), the standing stone at Coed-pen-maen (NA19) and the bardic complex (NA18).
- 10.102. Although part of Ton-teg is intervisible (Plate 11) the motte (NA03) is screened by intervening trees and hills. Similarly, despite the long views to the south and southeast of the site down the valley towards Steepholm and Flatholm (Plate 68) it is not possible to distinguish the chimney of the Nant Garw China works (NA07) from the surrounding settlement activity.

Field Summaries

- 10.103. **Field 1** was a grassy pasture with a high, well-maintained dry stone boundary walls. There was a 'sheep creep' through the northern wall (Plate 26). There was a circular depression with piles of stones of varying sizes from boulders to cobbles, possibly quarrying (Plates 31-32). There were excellent views to the distance to the north and northwest (Plates 27-28), west (Plate 33), southwest (Plate 30) and south.
- 10.104. **Field 2** was an even grassy pasture, moderately sloping from east to west and southwest, with dry stone wall and fence boundaries. There were excellent views towards Pontypridd (Plate 34).
- 10.105. **Field 3** was a grassy pasture, sloping from east to west with a boggy depression in the northeastern corner.
- 10.106. **Field 4** was a grassy pasture, sloping from east to west (Plate 29). There were two trees in Field 4.
- 10.107. **Field 5** was grassy pasture, sloping from northeast to southwest. There were no features of note.
- 10.108. **Field 6** contained a large manure pile, an articulated sheep skeleton, and modern gates built of solid wood posts and breeze blocks.
- 10.109. **Field 7** was a gently sloping pasture. The southern boundary was a high, well-maintained dry-stone wall. There was a metalled trackway in the southern corner of the field. There was an iron water pipe.
- 10.110. **Field 8** was a triangular field, grassy pasture with one large rolling hill (Plate 35).
- 10.111. **Field 9** was a grassy pasture with a partially tarmacked trackway along its southwestern boundary (Plate 40). There was a 'sheep creep' through the southern boundary dry stone wall (Plate 36). There was a round concrete drainage access structure with square 'Clark Drain Pedestrian' cast iron cover (Plates 37-39).

- 10.112. **Field 10** was gently sloping grassy pasture. There was some abandoned farming equipment. The field was crossed by a ditch. There was a track along the eastern fenceline. The southern boundary was a ditch with erosion revealing bedrock, to the south of which was a grassy area and then a trackway bounded by a high, well-maintained dry-stone wall (Plate 21-22). There was a staggered junctions of walls and fencing where fields 8, 9 and 10 meet (Plate 23). There was a large circular depression in the field at the southern end, and it was unclear if it was natural or possibly grassed-over quarrying (Plates 24-25). There were occasional sheep bones on the surface. There were excellent views of The Garth (Plates 18-20).
- 10.113. **Field 11** was gently sloping grassy pasture. There was no boundary between fields 10 and 11. There was a large flagstone (same stone as the bedrock natural) lying in the field.
- 10.114. **Field 12** was gently sloping grassy pasture, slightly less rolling than fields 13, 14 and 17 to its east. There were some deep tyre ruts crossing the field. The southern boundary was a ditch and hedge. The western boundary was a fence and ditch. The northern boundary was a partially collapsed dry stone wall (Plate 15). There were clear views to the north of Eglwysilan Mountain (Plate 16-17), where there were areas of bald rock, possibly natural collapse or quarrying/mining.
- 10.115. **Field 13** was the highest field of the site, with long views stretching to the islands of Flatholm and Steepholm off the coast to the southeast (Plates 9-10) and Rhiw Saeson Caerau hillfort to the west (Plates 11-12). It was grassy pasture but an upper triangle of reedy bog in the field was fenced off. The western boundary was a ditch, with Field 12 to the west being lower; a slight terracing (Plate 13). An eroded section of the ground next to the western entrance to Field 13 revealed a stratigraphy of yellow sandy topsoils/hillwash overlying a darker, more organic layer (Plate 14).
- 10.116. **Field 14** was a fairly even, gently rolling grassy pasture, moderately sloping from north to south (Plate 6). The ground by the southern entrance was improved by rubble; engineering brick, tile, aggregate cement and stones. The northern boundary was a fence parallel to a dry-stone wall to the north. The southern half of the eastern boundary was dry stone wall. The western boundary was a ditch with flowing water, approximately 0.85m deep. The entrance through the western boundary was a large subcircular waterlogged depression with large open cast iron pipes (Plates 7-8).
- 10.117. **Field 15** was a grassy rolling pasture, sloping from north to south, and the cross-ridge dyke to the north was visible (Plate 42). There was a culvert through the southern boundary wall (Plate 41).
- 10.118. **Field 16** was a grassy pasture with rolling hills sloping from north to south, with no features of note.
- 10.119. **Field 17** was crossed across its centre by a raised, curved trackway (Plate 1). The field was uneven gently rolling grassy pasture, moderately sloping from north to south. The western boundary of Field 17 was dry stone walling with an exterior drainage ditch. The wall was lower to the south of the entrance gate (Plate 2). The northern boundary consisted of a bank with

a hedge growing on top of it, with an exterior ditch. The southern boundary was a gentle bank with hedge and woody growth on top (Plate 5). There was a culvert/drainage structure built from cement blocks in the middle of the field (Plate 43). There were excellent views to the west, south and southeast (Plates 3-4). The eastern boundary was a ditch.

- 10.120. **Field 18** was outside the red line boundary but had notes taken. The field comprised a mown, improved grass pasture. It was not accessed due to the presence of livestock. There were no entrances from Field 16 or 17 and it was viewed from outside. The northern boundary was a dry-stone wall (Plates 70-71).
- 10.121. **Field 19** was steeply sloping grassy pasture with bee boxes in a small enclosure next to the woods. The wooded area was very steep, northeast to south/southwest. The northwestern boundary was a high dry-stone wall. It was crossed by a grassy track which had eroded 0.35m into the hillside on its northern side.
- 10.122. **Field 20** was a grassy pasture, steeply sloping north to south. There was one tree. There was a large herd of sheep. The eastern boundary was a fence and sparse treeline, with a bank and ditch to the east. The northern boundary was a dry-stone wall and bank with trees on it.
- 10.123. **Fields 21 and 22** were outside the red line boundary and contained livestock, so were not accessed.
- 10.124. **Fields 23 and 24** were gently undulating grassy fields with sheep. The eastern boundary was a ditch and there was a hedge bounding Bryn Tail Road to the west. The southern boundary was a fenceline and there were woods to the north.
- 10.125. The entrance from **Field 20 to Field 25** was staggered, with trees to the east and banks to the west (Plate 72), but no current explanation for the layout was discerned.
- 10.126. **Field 25** was crossed by a relict field boundary down the middle of the field, surviving as a gentle bank (Plate 73). The northern and eastern boundaries were treelines, with a substantial ditch to the east. The western boundary was a ravine. There was a large herd of sheep. There were clear views down the valley.
- 10.127. **Field 26** was outside the red line boundary but had notes taken. It was slightly visible from Fields 25 and 33 (Plate 80-81), through breaks in the treeline. It was not accessed due to the presence of livestock.
- 10.128. **Field 27 & 28** were outside the red line boundary of the site and were not accessed.
- 10.129. **Field 29 – 31** were outside the red line boundary of the site at the time of survey, and were not accessible during a second visit.
- 10.130. **Field 32** was very steep with uneven ground and plenty of sheep grazing (Plate 74). There was a trackway along the northern boundary, which was a dry-stone wall (Plate 75) and trees. The eastern and southern boundaries were fencing.

- 10.131. **Field 33** was tall grass. There was a dry-stone wall along the northern boundary, and a public footpath sign (Plate 77). There was no indication that the public footpath had been used in recent times, with no path worn through the tall grass. The sign pointed east, but the route across to Field 26 proved to be down the side and across a very steep overgrown ravine (Plates 78-79). The southeastern corner of Field 33 was boggy and impassible.
- 10.132. **Fields 34 – 35** were outside the red line boundary of the site at the time of survey and were not accessible during a second visit.
- 10.133. **Field 36** was viewed from Field 32 to its north. No entrance from the north was found. It was a very steeply sloping grassy pasture (Plates 82-83).
- 10.134. **Field 37** was a grassy pasture on a rolling hillside. There appeared to be a large curvilinear ditch across the field (Plate 50), with a second linear ditch running towards it from the northeastern entrance. The large ditch correlates with the line of a former footpath established within the field in the mid-19th century (see **Figure 10.6: Appendix 10A**), while the second ditch appears to be natural in origin.
- 10.135. **Field 38** was not entered as views from Field 37 were good and there was a large herd of sheep (Plate 53).
- 10.136. **Field 39** was not entered as there was a large herd of sheep and the gate from Field 40 was in disrepair (Plate 58). The field was improved grassy pasture (Plate 59). The northeastern boundary was a high stone wall. The northwestern boundary was a treeline, and the eastern boundary was a hedge. The ground around the entrance was metalled with stone and rubble, including brick.
- 10.137. The red line boundary across **Field 40** proved to be the line of an overhead cable. The field had thin turf with bedrock exposed in several locations, and there was at least one large dip in the field. There was a large slab on the surface near the northern boundary (Plate 56), and a pile of stone just outside it, near to a dry-stone wall, possibly quarrying/working the stone for the wall (Plate 60). The much steeper hillside to the north had two areas of exposed bedrock, one possibly naturally forming a cave/shelter (Plate 55). The northern field boundary was a fence line. The southern boundary appeared to be a relatively new, sparse hedge and fence line. There was a more established hedge forming the western boundary.
- 10.138. **Field 41** was outside the red line boundary of the site, but a photograph was taken of the bank and dry-stone wall along its southern boundary (Plate 44). The wooded area was very steep with a bank at the top.
- 10.139. **Field 42** was a gently rolling hillside consisting of improved grassy pasture, sloping from east to west. It was crossed by an overhead powerline. The field boundaries were treelines (Plate 46). Earthworks on top of The Garth were clearly visible on the skyline beyond Treforest (Plate 45).

- 10.140. **Field 43** the boundary between Field 43 and 42 had dry stone wall backed by a bank with hedge and trees on top (Plates 47-48). There was a dirt trackway along the northern side. There were views of the upper terraces of Treforest (Plate 49).

Geophysical Survey

- 10.141. A geophysical (magnetometer) survey was undertaken within the Application Site by Headland Archaeology (UK) between 8th – 21st of July 2024. The survey covered the majority of the fields within the Application Site but could not safely cover some of the southern fields due to issues with steep terrain, ground conditions and livestock.
- 10.142. No anomalies likely to be of archaeological significance were identified from the survey, and the report confirms a low archaeological potential within the site based on the geophysical survey results alone. The full geophysical survey report is contained within **Appendix 10D**, but the conclusion of the results is presented below.

“The geology was conducive to magnetic survey and that there was likely sufficient magnetic contrast for the detection of archaeological features, if present, notwithstanding the limitations of magnetometer survey to identify the types, sizes, and period of archaeological features as described in Section 3.2. The results of the survey therefore likely provide a reasonably good indication of the extent of sub-surface archaeological features within the GSA.

The survey has identified a range of linear and curvilinear anomalies of agricultural origin identifying recent and historic cultivation trends including ridge and furrow ploughing, field drains, and several former field boundaries recorded on historic mapping.

A few anomalies of uncertain origin have also been recorded although none is thought likely to have any archaeological potential. The distribution of these anomalies close to field margins or adjacent to modern features, such as pylon bases or field drains, suggests a modern origin is most likely.

Although the bedrock varies between sandstone and mudstone, with superficial deposits in some places, the geology is generally considered to be conducive to magnetic survey and the identification of a range of low magnitude features across the GSA confirms that there was sufficient magnetic contrast, for the detection of potential archaeological features, if present, notwithstanding the broader limitations of magnetometer survey. It is therefore argued the results of the survey likely provide a reasonably good indication of the archaeological potential of the site.

The archaeological potential of the GSA is therefore assessed as low based solely on the results of the geophysical survey.”

POTENTIAL EFFECTS

Do Nothing Scenario

10.143. No direct or indirect effects on known archaeological and heritage assets are anticipated in a “Do Nothing Scenario”. However, any unrecorded sub-surface remains within the Application Site may be impacted through attrition by further agricultural use of the land, particularly ploughing activity, without any opportunity for preservation by record.

Construction Phase

10.144. The main effects during the construction phase would be direct impacts resulting from groundworks required by the proposal, specifically involving the following.

- Excavation required for foundations of transformer units, substation, monitoring house, storage containers, CCTV posts, and cable trenches;
- Topsoil stripping required for access tracks and temporary construction compounds; and
- Piling required for poles associated with solar panel arrays and perimeter fencing.

10.145. The specific cumulative ground disturbance areas associated with each construction element is listed below, with the anticipated total ground disturbance footprint calculated from this. By definition, any direct effects occurring upon heritage and archaeology resources during construction will be permanent in nature.

Ground Disturbance and Direct Effects from Construction Methods

10.146. Different levels of intrusion and disturbance are anticipated for different construction elements. As such, the potential for impacting upon sub-surface remains is dependent on the type and scale of each construction element. The following information provides quantitative detail on each aspect of construction that is expected to have potential direct impacts upon archaeology.

10.147. Construction involving topsoil stripping has, in general, a lower potential for impacting upon sub-surface remains below the archaeological horizon but retains a similar potential for encountering archaeological remains as construction involving deeper excavation work.

Excavation Works

- 13 Transformers at 2.9m by 2.3m, resulting in total ground disturbance of c. 86.7m²;
- Two storage containers at 13.7m by 2.4m, resulting in total ground disturbance of c. 65.8m²;
- Aux transformer at 3.8m by 3.8m, resulting in total ground disturbance of c. 14.4m²;
- Substation at 7.7m by 2.6m, resulting in total ground disturbance of c. 20m²;

- Monitoring house at 3.9m by 3.2m, resulting in total ground disturbance of c. 12.5m²;
- 58 CCTV posts requiring bases of 0.75m by 0.65m, resulting in total ground disturbance of c. 28.3m²; and
- Cable trenches estimated to be 3,250m in length and up to 1m wide/1m deep, resulting in total ground disturbance of c. 3,250m².

Topsoil Stripping

- Access tracks expected to be 3.5m wide on average and c. 2,458.4m long cumulatively, resulting in total ground disturbance of c. 8,604.3m²; and
- One temporary compound area measuring c. 60m by 50m, resulting in ground disturbance of c. 3,000m².

Piling

- Galvanised metal mounting frames will be supported by posts piled into the ground within two different rack sizes:
 - 897 large racks involving 8,970 pile-driven poles, each with a footprint of 0.008m², resulting in total ground disturbance of 71.8m²; and
 - 495 small racks involving 2,970 pile-driven poles, each with a footprint of 0.008m², resulting in total ground disturbance of 23.8m².
- Mesh fencing measuring 2m high and 7,500.8m long will be implemented around the site, requiring 2,143 posts of 0.03m² footprint each. Resultant ground disturbance is therefore expected to be 64.3m².

Vehicle Movements

10.148. Vehicle movements are expected to be largely accommodated by the internal site tracks. Where off-road driving is required (e.g., placement or removal of piling), there is potential for ground compression or rutting in adverse/wet conditions. However, this is not expected to have any notable effect on sub-surface archaeology and the current agricultural use of the Application Site indicates that the ground is already subject to frequent movement of agricultural machinery.

Piling

10.149. Piling is anticipated to be done by a c. 2.95 tonne pile driver with rubber tracks. The relatively low weight of the vehicle (compared to standard agricultural vehicles which are currently on

use on the Application Site) and the rubber tracks (as opposed to tyres) indicate that its activity is not expected to have any impact upon potential sub-surface remains.

- 10.150. A standard agricultural vehicle will also be used to move panels on areas without an access track where this is required. This vehicle will be of similar weight and specifications as other agricultural vehicles which are commonly used on the land.

Excavation and Topsoil Stripping

- 10.151. Standard 360° excavators will be used on site to excavate material. Movement of this vehicle will be limited; movement up once during excavation and down once during backfilling. The excavator will be on tracks and will largely move on areas due to be subsequently stripped of topsoil.

Summary of Ground Disturbance

- 10.152. Overall, the proposed footprints constitute the following proportions of the 70.9ha Application Site area:
- 15,137.5m² for infrastructure (c. 2.13% of the Application Site area); and
 - 157m² for piling (c. 0.02% of the Application Site area).

Total Ground Disturbance

- 10.153. The overall cumulative ground disturbance area resulting from the Proposed Development is therefore **15,294.5m²** or c. **2.16%** across the full Application Site area. As such, the overall potential for encountering or disturbing below-ground archaeology within the Application Site during the construction phase is considered to be relatively low compared to other types of development. In addition, the modern agricultural usage of land throughout the Application Site has potentially resulted in disturbance to any sub-surface archaeology through the use of farm machinery, which may therefore affect the possible survival of such remains.
- 10.154. In consideration of the above and the relatively low archaeological potential of the Application Site indicated within the geophysical survey report, the potential for the Proposed Development to directly affect hitherto unknown sub-surface archaeology of significance across the site is anticipated to be low. Nonetheless, the Application Site is situated within a general area of archaeological potential and, as per the nature of archaeological remains, any direct impacts upon this resource are considered to be **permanent and irreversible** so should be subject to mitigation measures.

Direct Effects on Known Archaeological and Heritage Assets

Designated Heritage Assets

- 10.155. There are no designated heritage assets located within the Application Site that could be physically impacted by the Proposed Development (see **Figure 10.2: Appendix 10A**). The closest designated site is the Cross Ridge Dyke & Earthwork on Cefn Eglwysilan (NA11), which is a scheduled monument located adjacent to the northeast of the Application Site.
- 10.156. The designated area for the scheduled monument does not continue into the Application Site itself, but the projected line of the dyke may have originally continued into Field 13 or 14. However, no evidence of a continuing ditch or linear associated with the feature was identified within the site boundary from the geophysical survey or analysis of aerial imagery / lidar data.
- 10.157. There is a small chance that the existing field boundary between Fields 13 and 14, although following a different trajectory, encompasses any remains of the prehistoric dyke within the Application Site. If this is the case, then such remains are not at risk of direct impacts as the field boundary has been sufficiently buffered within the Proposed Development design (see **Figure 4 of Volume 4**). As such, no sub-surface remains associated with the monument are expected to directly be impacted within the Application Site, but the possibility of undetected remains within Field 13 cannot be entirely dismissed.
- 10.158. No other designated features lie within the vicinity of the Application Site. As such, **no direct effects are anticipated to occur upon any designated heritage assets**, although the possibility of hitherto-unknown sub-surface remains associated with the adjacent scheduled monument NA11 is considered as part of the archaeological appraisal within this assessment.

Non-designated Heritage Assets

- 10.159. A single non-designated heritage asset is located within the Application Site, which is the record for Rhydyfelin 'Village' (NC93) (**Figure 10.3: Appendix 10A**). However, this feature appears to relate to the early origins of Rhydyfelin to the south, rather than anything present within the Application Site. Its position within the site boundary may instead be a result of the rounded grid reference contained within its database entry³⁸.
- 10.160. Several non-designated heritage assets also lie within close proximity to the outer boundary of the Application Site, including:
- Hendre Ifan Prosser Farm – Pigsty (NC11);
 - Bryn-tail House (NC30);
 - Sheep Wash (NC56); and
 - Bryn Tyle; Bryntail Coal Level (NC96).

³⁸ <https://coflein.gov.uk/en/site/402670/> last accessed 03/02/25

- 10.161. However, each of the four assets refer to structures with defined extents and no expectation for associated remains to extend into the Application Site. Similarly, features identified from the site walkover survey and desk-based assessment were limited to trackways and dry-stone walls, while nothing of archaeological importance was identified.
- 10.162. A raised trackway within Fields 15 – 17 was discernible at ground level during the walkover survey, but the track is not visible on OS historic mapping (**Figures 10.6 & 10.7: Appendix 10A**) or on the 1969 aerial image (**Figure 10.9: Appendix 10A**), so is considered to be of relatively modern construction and not sensitive to direct impacts. A trackway is depicted within this area on the 1839 tithe apportionment map (**Figure 10.5: Appendix 10A**), but the line of the track does not match the line of the clearly defined raised trackway visible on lidar data (**Figure 10.8: Appendix 10A**) and during the site survey.
- 10.163. In consideration of the above, **direct effects upon non-designated heritage assets are anticipated to be Negligible.**

Archaeological Potential

- 10.164. The baseline analysis indicates that while the Application Site lies within a general area with archaeological potential, no specific expectation for encountering sub-surface remains was identified. No designated heritage assets are present within the Application Site and the sole non-designated asset within the site refers to the general record for the nearby settlement of Rhydyfelin. Similarly, features identified from the site walkover survey and desk-based assessment were limited to trackways and dry-stone walls, while nothing of archaeological importance was identified.
- 10.165. The geophysical survey undertaken within the Application Site identified various anomalies associated with agricultural land use, field drains and former field boundaries. No anomalies of likely archaeological importance were identified from the survey, which concludes an overall low archaeological potential of the land based on the geophysical survey results.
- 10.166. Sub-surface features are expected to be limited to any remains of the post-medieval footpaths within Fields 8, 10, 11, 15 – 17, 32 and 33, the former quarry in Field 38, and various former field boundaries and cultivation marks throughout the Application Site.
- 10.167. As discussed previously, scheduled monument Cross Ridge Dyke & Earthwork on Cefn Eglwysilan (NA11) does not appear to continue into the Application Site itself, but the projected line of the dyke may have originally continued into Field 13. No sub-surface remains associated with the monument are expected to survive within the field, but this possibility cannot be entirely dismissed. Any surviving remains that do exist inside the site may be at risk of direct impacts from proposed development within Field 13.
- 10.168. In consideration of the above and the aforementioned construction methods/ground disturbance, the potential of the proposed development to encounter or disturb sub-surface archaeology of significance is expected to be low, with sub-surface remains likely to be limited to the post-medieval agricultural and quarrying usage of the fields. Such remains would not

be of particular importance. Nonetheless, as with all greenfield land within a general area of archaeological potential, there is a small chance that significant sub-surface archaeology is present within the Application Site and has not been detected by the various surveys and analyses. This general potential extends to the prehistoric and medieval period due to the presence of recorded sites from these periods in proximity to the eastern boundary of the Application Site. Some degree of mitigation would be prudent to ensure the preservation by record or *in-situ* of any chance archaeological finds, as discussed later in this assessment.

Indirect Effects

10.169. Indirect effects during the construction phase are anticipated to be limited to visual and noise disturbances resulting from the operations of machinery and various construction activities. Worst-case indirect effects upon heritage assets arising from this are considered to be **Negligible** and **temporary**, lasting only for the duration of the construction schedule, and will occur primarily within the specified daily working hours. Indirect effects upon heritage assets during this phase are therefore not considered to be of any significance.

Operational Phase

Direct Effects

10.170. As no additional construction or ground disturbance activities are anticipated during the operational phase of the development, **no direct effects** are expected to occur.

Indirect Effects

10.171. As part of the stage 1 assessment for indirect effects, a Zone of Theoretical Visibility (ZTV) was calculated for the proposed development design. This ZTV was overlain onto the heritage assets map in order to identify those which have the potential to be visually impacted by the Proposed Development (**Figure 10.1 – 10.3: Appendix 10A**). The ZTV is a bare-earth model which does not account for intervening hedgerows, trees or built structures, all of which may offer screening that can limit the views and intervisibility between the asset and the Proposed Development.

10.172. From all of the designated heritage assets identified within the 5km study area, the following were identified to lie within the calculated ZTV:

- Seven scheduled monuments (NA01, NA05, NA07, NA11, NA13, NA14 & NA19);
- One historic park and garden (NA22);
- One historic landscape area (NA23);
- Three grade I listed buildings (NA01 – 03);

- 17 grade II* listed buildings (NA04 – 07, NA09 – 14, NA18 – 20 & NA22 – 25);
- 87 grade II listed buildings (NA26, NA31 – 32, NA34 – 45, NA49 – 54, NA59 – 60, NA70 – 72, NA75 – 90, NA95 – 109, NA111, NA114 – 136, NA139, NA141 & NA143 – 145); and
- Six conservation areas (NA151 – 156).

10.173. The potential for each of these designated heritage assets to be visually impacted is discussed in more detail below by considering the views and visibility identified during the site walkover survey and the screening elements present within and around the Application Site. Setting appraisals are then undertaken for all assets where such views may be possible (stage 2) and potential indirect effects evaluated for each (stage 3). Finally, possible implementation of any mitigation measures is considered later within the assessment where indirect effects are found to be potentially significant (stage 4).

10.174. A total of 145 non-designated records from the GGAT/Heneb HER and National Monuments Record of Wales are present within the 1km study area, many of which are situated within the calculated ZTV. These non-designated sites are typically considered to be less sensitive to possible visual impacts than those with statutory designation, with the exception of those that are also recorded and protected as designated sites and have therefore been assessed as such. However, non-designated sites deemed to have potential views, and which may be sensitive to visual impacts, for example those with substantial standing remains and/or settings integral to their heritage value, have been similarly assessed for indirect effects.

Scheduled Monuments

10.175. Of the scheduled monuments within the ZTV (see **Table 10-5**), several were identified as being entirely screened or imperceptible from within the Application Site. This includes ‘The Pottery, Nantgarw’ (NA07), located c. 4.5km to the southeast of the Application Site, the setting of which is enveloped by woodland and further screened by large buildings associated with the University of South Wales to its northwest (**Plate 52: Appendix 10C**). Similarly, the site inspection confirmed that no views or intervisibility with the Pontypridd Bridge (NA01) or the Ring Cairn and Two Standing Stones on Coedpenmaen Common (NA19) was possible due to the woodland around the intervening Pontypridd Golf Club (e.g., **Plates 34 & 51: Appendix 10C**).

Table 10-5: Scheduled Monuments within the calculated ZTV

Neo Ref.	Database No.	Name
NA01	GM015	Pontypridd Bridge (<i>Medieval</i>)
NA05	GM267	Pen-y-Coedcae Roman Camp (<i>Roman</i>)
NA07	GM335	The Pottery, Nantgarw (<i>Post Medieval/Modern</i>)
NA11	GM452	Cross Ridge Dyke & Earthwork on Cefn Eglwysilan (<i>Unknown</i>)

NA13	GM457	Newbridge Beam Engine (<i>Post Medieval/Modern</i>)
NA14	GM459	Hetty Pit (<i>Post Medieval/Modern</i>)
NA19	GM510	Ring Cairn and Two Standing Stones on Coedpenmaen Common (<i>Prehistoric</i>)

- 10.176. Views with Hetty Pit NA14 were predicted to be theoretically possible due to the tall stature of the extant winding house. However, no such views were identified to be possible during the site walkover survey. Any views or intervisibility between the setting of the monument and the Proposed Development are therefore expected to be imperceptible, particularly due to the intervening distance of c. 3.5km and the surrounding modern development. The mix of modern and industrial elements comprising its setting is considered to be of low sensitivity to indirect impacts, while the magnitude of any views or intervisibility that may be possible is expected to be negligible.
- 10.177. In addition to the above, some degree of views and visibility between the Newbridge Beam Engine (NA13) and the Proposed Development are expected to be possible, including from points along Llanwit Road and from within the grounds of the University of South Wales campus. However, the setting of the monument does not contribute any particular significance to its heritage value as it does not lie *in-situ* due to its relocation to this point in 1920³⁹. While partial views with the proposal are predicted to be possible over the built environs of Treforst/Glyntaff, resultant indirect impacts will be of low magnitude while its sensitivity to visual impacts is also low.
- 10.178. **Negligible indirect effects are therefore anticipated to occur upon NA01, NA07, NA13, NA14 and NA19.** Indirect effects upon the remaining scheduled monuments are discussed in more detail below.

Cross Ridge Dyke & Earthwork on Cefn Eglwysilan (NA11)

- 10.179. The scheduled Cross Ridge Dyke & Earthwork on Cefn Eglwysilan is situated adjacent to the northeast of Fields 13 and 14 of the Application Site. The dyke was visible during the site inspection as a linear bank and ditch on the western face of the hill (**Plate 6: Appendix 10C**) while the associated scheduled earthwork is situated further to the east. The circular earthwork is not described within the Cadw entry⁴⁰, but its discernible size and composition on aerial imagery and lidar data suggests a ring-ditch/burial cairn monument of Bronze Age date. It is possible that the cross dyke may also originate from this period although it is not known. Nonetheless, the features share a setting on the slope of the Cefn Eglwysilan hill overlooking the landscape to the south.
- 10.180. The ring-ditch, as a funerary monument, is considered to be sensitive to potential visual impacts due to its clear views to the west, south and east and the integral nature of these

³⁹ <https://cadwpublic-api.azurewebsites.net/reports/sam/FullReport?lang=en&id=2295> last accessed 21/02/25

⁴⁰ <https://cadwpublic-api.azurewebsites.net/reports/sam/FullReport?lang=en&id=387> last accessed 21/02/25

views to the original siting of the monument in this location. The presence of substantial modern development in these directions compromises the value of these views to the setting of the ring-ditch somewhat, but the relatively undeveloped land within the Application Site provides a beneficial contribution to this setting. The Proposed Development is expected to interfere with immediate views to the west and southwest, but will not affect more distant views or those in other directions, including visual links with the Garnedd Llwyd cairn (NA15). In addition, the Proposed Development will not interfere with the visual relationship between the ring-ditch and the dyke, which may be of importance if the features are considered contemporary.

- 10.181. The dyke itself is considered to be less sensitive as a specific feature to visual impacts, having a function likely associated with land division. Its primary orientation is to the northwest and these views would not be affected by the Proposed Development. However, southwestern views from the dyke are certainly expected to be affected by panels proposed within at least Fields 7, 12, 13 and 14. Such views will not significantly affect the setting of the dyke, whose primary heritage value is derived from its sub-surface remains rather than from its visual setting. Nonetheless, visual impacts upon the dyke are inevitable due to the proximity and scale of the development.
- 10.182. While it is a possibility that the dyke may have originally continued into the Application Site along the line of the current field boundary between Fields 13 and 14, this boundary does not possess the same remains as those within the designated area and there is no evidence of ground level of any remains that would be sensitive to visual impacts. Taken as a singular designation and assumed to be contemporary elements, **scheduled monument NA11 is considered to be of medium sensitivity to indirect impacts and the magnitude of indirect impact resulting from the Proposed Development is similarly anticipated to be medium, resulting in Moderate Adverse indirect effects overall.**

Pen-y-Coedcae Roman Camp (NA05)

- 10.183. The Pen-y-Coedcae Roman Camp is a scheduled monument located c. 2.5km to the southwest of the Application Site. As a temporary marching camp, the monument likely dates to around AD74-77⁴¹ as the Roman units pushed west. Surviving earthworks at the camp comprise a bank 4.6m wide and up to 0.9m high, with a shallow outer ditch.
- 10.184. The primary heritage value of the monument is derived from its sub-surface remains, but the clear views of the surrounding landscape and Taff Valley from its position on elevated land would have been a key factor in its location here. Its setting comprises a mix of agricultural land and unused scrubland, now divided by Black Road towards its eastern extent. The setting of the monument is considered to be sensitive to potential visual impacts due to its undeveloped land and its integral views, although this sensitivity is compromised somewhat by the construction of a solar farm adjacent to its east.

⁴¹ <https://cadwpublic-api.azurewebsites.net/reports/sam/FullReport?lang=en&id=2891> last accessed 21/02/25

- 10.185. This solar farm and the modern development within the Pontypridd area lie inside the intervening area between the Application Site and the Roman camp. However, due to the sloping topography, views of these elements from within the Roman camp designation may be screened by woodland while long-distance views with the Application Site may still be possible 'above' them. Such views of the Proposed Development are expected to be limited and partially screened by vegetation, while no visibility with the Roman camp was identified to be possible from within the Application Site during the site visit. Nonetheless, infrequent views from the containing fields as well as visibility of both locations from points along Black Road and Llantrisant Road are predicted to be a possibility.
- 10.186. Overall, **scheduled monument NA05 is considered to be of medium sensitivity to potential indirect impacts, while the magnitude of indirect impact is anticipated to be low at this distance, resulting in Minor Adverse indirect effects.**

Historic Parks and Gardens

- 10.187. Ynysangharad Park (NA22) was opened in 1923 as a public war memorial park located c. 1km to the west of the Application Site, comprising fields, allotment gardens and an orchard in the area between Ynysangharad House and the Brown Lenox Chain and Anchor Works on the east and the River Taff on the west and south⁴² (**Table 10-6**). While the interior composition has changed over time, it remains a well-preserved designed landscape with sporting facilities, ornamental features and two internal listed buildings, specifically the grade II* listed 'Memorial to Evan and James James' (NB19) and grade II listed lido (NB114).

Table 10-6: Historic Parks and Gardens within the calculated ZTV

Neo Ref.	Database No.	Name
NA22	PGW(Gm)3(RCT)	Ynysangharad Park (<i>Grade II</i>)

- 10.188. Its well-defined extent, now bound by the A470 on the east, Bridge Street on the north and the river on the west and south, sits within the core of Pontypridd and is surrounded by the modern urban environs of the town. As such, the setting of the asset benefits greatly from its internal green spaces, recreational features and its position on the riverbank, while the enveloping town is a key part of its social history.
- 10.189. The park is therefore considered to be potentially sensitive to any impacts which interfere with the visual relationship between the various elements of the park. However, the setting of the park is largely contained within a surrounding band of woodland which screens many

⁴² <https://cadwpublic-api.azurewebsites.net/reports/parkgarden/FullReport?lang=en&id=195> last accessed 21/02/25

ground-level views with the rest of the town, vastly reducing its sensitivity to any visual changes occurring from the wider landscape.

- 10.190. In consideration of the above, the Application Site is not expected to make any contribution to the setting of the park, while views and intervisibility between the two areas were not identified to be possible during the site visit, which confirmed that such views are screened by woodland within Pontypridd Golf Club (e.g., **Plates 34 & 51: Appendix 10C**). As a result, **indirect effects upon Ynysangharad Park (NA22) are anticipated to be Negligible.**

Historic Landscape Areas

- 10.191. The Rhondda historic landscape area (**Table 10-7**) is located c. 4.1km to the west of the Application Site, defined by two narrow, steep-sided valleys within the heart of the Glamorgan coalfield⁴³. As discussed within the historical background, the coal mining industry was integral to the post-medieval growth of the area and the urban expansion around Pontypridd.

Table 10-7: Historic Landscape Areas within the calculated ZTV

Neo Ref.	Database No.	Name
NA23	HLW (MGI) 5	The Rhondda

- 10.192. The landscape area was largely created in the latter half of the 19th century, the structural remnants of which are partially visible scattered throughout the villages and hillsides, contributing to the lasting character of the region and defining its overall setting. These remnants were largely imperceptible during the site walkover survey, but some of the taller structures such as the chimney stack of the Lewis Merthyr Colliery were identified above the built environs (**Plates 30 & 33: Appendix 10C**).
- 10.193. At this distance and considering the largely modern development within its setting, the historic landscape area is not expected to be sensitive to potential visual impacts occurring from within the Application Site. In addition, while views and intervisibility with the Proposed Development are likely to be inevitable from various points throughout its landscape, the magnitude of such impacts at this distance are predicted to be low overall. **Indirect effects upon The Rhondda historic landscape area (NA23) are therefore anticipated to be Negligible.**

Listed Buildings and Conservation Areas

⁴³ [https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=en&id=HLW%20\(MGI\)%205](https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=en&id=HLW%20(MGI)%205) last accessed 21/02/25

10.194. Of the listed buildings within the ZTV (**Table 10-8**), many are not expected to be of sufficient sensitivity to potential impacts from the Proposed Development or are not predicted to be at risk of impacts at a sufficient magnitude to result in indirect effects above negligible.

Table 10-8: Listed Buildings and Conservation Areas within the calculated ZTV

Neo Ref.	Database No.	Name
Grade I Listed Buildings		
NB01	13497	Pontypridd Bridge
NB02	13515	Hetty Engine House
NB03	24872	Headframe at Hetty Shaft
Grade II* Listed Buildings		
NB04	13119	Former Lewis Merthyr Colliery lamproom and fan house
NB05	13121	Former Lewis Merthyr Colliery Trefor pithead and headframe
NB06	13122	Former Lewis Merthyr Colliery Trefor winding engine house
NB07	13124	Former Lewis Merthyr Colliery Bertie winding engine house
NB09	13506	Former Casting House and Workshop at Treforest Tinplate Works
NB10	13507	Workshop NW of Tinning House at Treforest Tinplate Works
NB11	13508	Former Tinning House at Treforest Tinplate Works
NB12	13509	Former Smithy at Treforest Tinplate Works
NB13	13510	Former Rolling Mill at Treforest Tinplate Works
NB14	13532	Municipal Buildings
NB18	21957	Tomb of William Edwards in the churchyard of St Ilan, Eglwysilan
NB19	24841	Memorial to Evan and James James at Ynysangharad Park
NB20	24845	Taff Vale Railway Viaduct over Mill Street including masonry weir
NB22	24860	Church of St Catherine
NB23	24871	Fan House at Hetty Shaft
NB24	24882	Leat Retaining Wall at Treforest Tinplate Works
NB25	24912	Machine Bridge (also known as Pont y Doctor)
Grade II Listed Buildings		
NB26	13123	Former Lewis Merthyr Colliery fanhouse
NB31	13498	Church of St Ilan
NB32	13504	,161-2,Broadway,Treforest,Pontypridd,MID GLAMORGAN,CF37 1BH
NB34	13520	The Pontypridd Museum (formerly Tabernacle Baptist Chapel)
NB35	13521	Telephone Call-box

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NB36	13522	,4-8,Church Street,Pontypridd,Pontypridd,MID GLAMORGAN,CF37 2TH
NB37	13523	Old Market Hall
NB38	13524	The Criterion Public House
NB39	13525	Pontypridd Railway Station Main Platform including buildings and canopy
NB40	13526	Railway Bridge beneath Pontypridd Railway Station
NB41	13527	Rhondda Branch Junction Signal Box
NB42	13528	Market Chambers
NB43	13529	Eglwys Gymraeg Sardis (Sardis Chapel)
NB44	13530	Merlin Hotel
NB45	13535	Former Mission Hall
NB49	17126	Former Lewis Merthyr Colliery chimney
NB50	17127	Lower Eirw bridge
NB51	17128	Bridge over Cwm Hafod
NB52	18805	St David's Presbyterian Church and Hall
NB53	18806	Eglwysbach Surgery (formerly Capel Goffa)
NB54	20819	Duffryn Ffrwd Manor
NB59	21956	Lych Gate at the church of St Ilan, Eglwysilan
NB60	21958	Memorial to Annie Lawrence in the churchyard of St Ilan, Eglwysilan
NB70	23234	Nantgarw House
NB71	23523	Parish Hall
NB72	23953	Ysgol Gyfun Bryn Celynnog
NB75	24842	Drinking Fountain
NB76	24843	National Westminster Bank
NB77	24844	Pontypridd United Church including attached second hall
NB78	24846	Muni Arts Centre
NB79	24847	,10,Market Street,Pontypridd,Pontypridd,,CF37 2ST
NB80	24849	Taff Vale Railway Viaduct over River Taff
NB81	24850	Railway Viaduct over River Rhondda
NB82	24851	Market Tavern Hotel
NB83	24852	Pontypridd Register Office
NB84	24853	Railway Viaduct over Nant Clydach (partly in Abercynon Community)
NB85	24854	Cilfynydd War Memorial
NB86	24855	Newbridge Chainworks Canal Basin on the Glamorganshire Canal
NB87	24856	Bridge over Glamorganshire Canal W of Newbridge Chainworks basin

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NB88	24857	Lock Chambers 31 & 32 with attached walls, Glamorganshire Canal
NB89	24858	Welch Regimental War Memorial
NB90	24859	St Catherine's Church Parish Rooms
NB95	24869	Castle Bridge
NB96	24870	Crawshay Obelisk SW of Castle Bridge
NB97	24873	Trehafod Memorial Hall and Institute
NB98	24874	Coed y Lan Comprehensive Lower School, including rear science block and gymnasium
NB99	24875	Capel Rhondda, including attached Sunday school
NB100	24876	Bethany Baptist Church
NB101	24877	Libanus Welsh Baptist Church
NB102	24878	Catholic Church of St Dyfrig
NB103	24879	Church Hall at Catholic Church of St Dyfrig
NB104	24880	Presbytery at Catholic Church of St Dyfrig
NB105	24881	Forest House, University of Glamorgan
NB106	24883	Rhydyfelin War Memorial
NB107	24884	Honeywell Power Tools Testing Division
NB108	24885	Treforest Textile Printers
NB109	24886	Pig Sty at Berthlwyd Farm
NB111	24888	Railway Bridge over Sardis Road
NB114	24891	Lido at Ynysangharad Park
NB115	24892	,7,Church Street,Pontypridd,Pontypridd,,CF37 2TH
NB116	24893	,8,Church Street,Pontypridd,Popntypridd,,CF37 2TH
NB117	24894	,9,Church Street,Pontypridd,Pontypridd,,CF37 2TH
NB118	24895	,10,Church Street,Pontypridd,Pontypridd,,CF37 2TH
NB119	24896	The Arcade
NB120	24897	Le Crazy Croissant
NB121	24898	La Chop
NB122	24899	Pets Corner
NB123	24900	,163,Broadway,Treforest,Pontypridd,,CF37 1BH
NB124	24901	,164,Broadway,Treforest,Pontypridd,,CF37 1BH
NB125	24902	,165,Broadway,Treforest,Pontypridd,,CF37 1BH
NB126	24903	,166,Broadway,Treforest,Pontypridd,,CF37 1BH
NB127	24904	,167,Broadway,Treforest,Pontypridd,,CF37 1BH
NB128	24905	,168,Broadway,Treforest,Pontypridd,,CF37 1BH

NB129	24906	,169,Broadway,Treforest,Pontypridd,,CF37 1BH
NB130	24907	,170,Broadway,Treforest,Pontypridd,,CF37 1BH
NB131	24908	,171,Broadway,Treforest,Pontypridd,,CF37 1BH
NB132	24909	,172-3,Broadway,Treforest,Pontypridd,,CF37 1BH
NB133	24910	,174-5,Broadway,Treforest,Pontypridd,,CF37 1BH
NB134	24911	,176,Broadway,Treforest,Pontypridd,,CF37 1BH
NB135	24913	Lloyds TSB Bank, Market Square branch
NB136	24914	Mr Snooker's Club (formerly Cecil Cinema)
NB139	80670	Treforest Tinplate Works Feeder Sluice and Weir
NB141	80762	Road bridge over Nant Clydach
NB143	80764	Taff Vale Railway bridge over Cwm Clydach
NB144	80873	War Memorial
NB145	81031	Taff Vale Railway bridge over Cwm Clydach (partly in Abercynon Community)
NB151	WAL/RCT/CEB4/2D	Graigwen, Pontypridd
NB152	WAL/RCT/CEB4/2J	Taff, Pontypridd
NB153	WAL/RCT/CEB4/2K	Pontypridd Town Centre
NB154	WAL/RCT/CEB4/2M	Broadway, Treforest
NB155	WAL/RCT/CEB4/2N	Old Park Terrace, Treforest
NB156	WAL/RCT/CEB4/2O	Castle Square, Treforest

- 10.195. Listed buildings within Glyncoch/Cilfynydd are limited to grade II listed road/rail bridges (NB84, NB141, NB143 & NB145) and a war memorial (NB144). While views and intervisibility are a distinct possibility at certain points along several local roads, such views will be partially screened and not considered to be harmful to any of their settings, which are largely contained to their local areas and not sensitive to visual impacts from the surrounding landscape.
- 10.196. Similar to the above, the setting of the war memorial in Ynysybwl (NB144) is contained within its village and is not considered to be sensitive to wider visual changes, including from the Application Site. In addition, no views or intervisibility with the Proposed Development are expected to be possible at this distance.
- 10.197. Listed buildings within Trehafod are mostly associated with the coal mining landscape within which it sits. This includes two grade I listed buildings at the Hetty Shaft/Engine House (NB02 & NB03), several grade II* listed buildings within the former Lewis Merthyr Colliery (NB04 – 07) and the Fan House at Hetty Shaft (NB23), as well as several further grade II listed buildings. However, The Rhondda historic landscape area (NA23) constitutes the shared setting for the structures, which is not expected to be sensitive to potential visual impacts occurring from within the Application Site at this distance and in consideration of the enveloping modern

urban environs. As with the historic landscape area, while intervisibility between the listed buildings and the Proposed Development may be possible at certain point, the magnitude of such impacts at this distance are predicted to be low overall.

- 10.198. The majority of listed buildings within the study area are located within Pontypridd and Treforest, which includes a number of grade I, II* and II listings as well as the conservation areas of Graigwen (NB151), Taff (NB152), Pontypridd Town Centre (NB153), Broadway (NB154), Old Park Terrace (NB155), and Castle Square (NB156). The sole grade I listed building in the area is the Pontypridd Bridge (NB01), which has been previously considered under its designation as a scheduled monument. No views or intervisibility were identified as being possible between the bridge and the Application Site during the site visit, due to the woodland around the intervening Pontypridd Golf Club (e.g., **Plates 34 & 51: Appendix 10C**).
- 10.199. Similar screening effects from the woodland around the golf club serves to restrict views with many of the listed buildings within the Graigwen, Taff and Pontypridd area. Where views and intervisibility are possible, usually from assets to the west of the town centre, these are possible above the intervening urban environs. As such, the views are partially restricted by buildings, while resultant views with the Proposed Development are set in the background of substantial existing development within the town.
- 10.200. The primary heritage value of the listed buildings within these areas is derived from their architectural merit, but they also benefit from their proximity to one another and their overall shared setting. This shared setting is contained within the town and is not considered to be sensitive to potential visual impacts occurring from the surrounding area. As such, there are no listed buildings identified within the town where substantial harm is anticipated upon their settings as a result of the Proposed Development.
- 10.201. Similar characteristics are present for the listed buildings within Treforest, which are also largely clustered and possess a strong group benefit that is not particularly sensitive to visual changes in the wider landscape. While some degree of visibility is predicted for a number of listed buildings, such views will be partially restricted and set against substantial existing development and will not harm the heritage value of any listed buildings or their settings.
- 10.202. A group of grade II* listed structures at the former Tinsplate Works (NB09 – 13 & NB24) are set back from the core of the urban environs and benefit greatly from their well-defined setting, but likewise their setting does not derive any benefit from fields within the Application Site. Similarly, Pig Sty NB109 is also set back from the main town, but is situated within a group of large, modern farm buildings which dominate its setting. As a result, it is similarly not considered to be sensitive to visual impacts from the proposal.
- 10.203. Listed buildings further to the southeast extent of Pontypridd include the grade II listed Duffryn Ffrwd Manor (NB54), Nantgarw House (NB70), Honeywell Power Tools Testing Division (NB107) and Treforest Textile Printers (NB108). However, due to the distance and intervening urban environs, views between the structures and the Application Site are imperceptible. Similar effects are true for the grade II listed Parish Hall (NB71) in Church Village and the Ysgol Gyfun Bryn Celynnog (NB72), the grade II listed Beddau Girls School,

both of which sit within urban settings that are not considered to be sensitive to views with the Proposed Development.

- 10.204. **Negligible indirect effects are therefore anticipated to occur upon all listed buildings and conservation areas identified within the 5km study area, with the exception of the group of four listed buildings situated at the Church of St Ilan, which are discussed in more detail below.**

Church of St Ilan (NB18, NB31 & NB59 – 60)

- 10.205. A total of four listed buildings are present within the grounds of the Church of St Ilan c. 1km to the east-southeast of the Application Site, including one grade II* (NB18) and three grade II (NB31 & NB59 – 61) as follows:

- Tomb of William Edwards in the churchyard of St Ilan, Eglwysilan (NB18) – *Late C18 double chest tomb to William Edwards and his wife. William Edwards (1719-89) was an Independent Minister and a civil engineer, best known as a builder of bridges. Born at Ty Canol, Eglwysilan, in 1726 he moved to Bryn Tail in the same parish, where he lived the remainder of his life. He was pastor of Groeswen chapel from 1745 until his death. His chief engineering work is Pontypridd bridge of 1746-54⁴⁴;*
- Church of St Ilan (NB31) – *Upland Glamorgan church consisting of W tower, nave with S porch and a lower and narrower chancel. Of random rubble sandstone. The church is first mentioned in 1254 but the site is an older Christian site, an C8-C10 cross slab having been discovered in the churchyard. Eglwysilan remained a large upland rural parish until industrialisation in the C19. Of the medieval church the walls of nave and chancel have survived but the details are mainly later, with C18 and C19 windows⁴⁵;*
- Lych Gate at the church of St Ilan, Eglwysilan (NB59) – *Probably C18 and possibly contemporary with work on the church, such as the rebuilding of the tower in 1731 and insertion of windows in 1751 and 1762. Square in plan and of roughly coursed rubble sandstone. The pyramidal roof has reconstituted stone tiles, laid 1980-4, and a weathervane finial. Churchyard walls are attached on the E and W sides⁴⁶; and*
- Memorial to Annie Lawrence in the churchyard of St Ilan, Eglwysilan (NB60) – *A marble sculpture of a classically robed woman holding a bunch of flowers. It stands on a tall*

⁴⁴ <https://cadwpublic-api.azurewebsites.net/reports/listedbuilding/FullReport?lang=en&id=21957> last accessed 21/02/25

⁴⁵ <https://cadwpublic-api.azurewebsites.net/reports/listedbuilding/FullReport?lang=en&id=13498> last accessed 21/02/25

⁴⁶ <https://cadwpublic-api.azurewebsites.net/reports/listedbuilding/FullReport?lang=en&id=21956> last accessed 21/02/25

sandstone base with moulded plinth and cornice. The E side of the base bears an inscription in engraved letters: 'Erected by public subscription in honoured memory of Annie Dorothy Lawrence ... of Abertridwr who died August 17th, 1908, yielding up her life rather than her virtue'⁴⁷.

- 10.206. The group setting of the assets comprises the overall church and graveyard, which is well-defined by a stone wall which extends around its complete perimeter and incorporates the lych gate at the entrance at its southeast corner. The wall encloses the setting but does not restrict views with the surrounding area.
- 10.207. The surrounding landscape contains only light development, such as several houses and farm buildings nearby and the 'Rose & Crown' pub adjacent to the south of the church. These buildings do not significantly detract from its setting, which in turn is considered to be potentially sensitive to views of the Proposed Development due to the historical social links the church and graveyard have with the surrounding communities, possibly extending to land within the Application Site, which lay within its historic parish.
- 10.208. While the primary heritage value of the church and its associated listings is derived from their architectural merit and surviving fabric which dates from its medieval and post-medieval phases, the above indicates that its setting also makes a positive contribution to its heritage value.
- 10.209. Views and intervisibility with the Proposed Development are expected to be partially possible from various points, including limited views from within its setting as well as clearer intervisibility from points along Eglwysilan Road (e.g., **Viewpoint 5: Figure 1.6 of Chapter 1**). These limited views were confirmed to be possible from certain fields such as Field 20 during the site visit (**Plate 64: Appendix 10C**). However, views of the Proposed Development will be limited to the higher-elevation fields of the Application Site and are not expected to significantly affect the views or setting of the church. Overall, direct effects upon the group setting of the listed buildings at the Church of St Ilan are anticipated to be **Minor Adverse**.

Non-designated Sites

- 10.210. There is a total of 145 non-designated archaeological sites were identified within the 1km study zone (see **Table 3: Appendix 10B**). These sites can be used to evaluate the potential for archaeological remains within the Application Site. However, although a large number of the non-designated sites lie within the calculated ZTV, many typically lack standing remains (for example cropmark sites, findspots, historical records or event records) or are not considered to be sensitive to possible visual impacts (for example quarries, field walls, drainage ditches or milestones).

⁴⁷ <https://cadwpublic-api.azurewebsites.net/reports/listedbuilding/FullReport?lang=en&id=21958> last accessed 21/02/25

10.211. Indirect effects upon non-designated sites such as the above, or those that are well-screened by vegetation or buildings, are anticipated to be **Negligible**, but indirect effects will be higher where views or intervisibility are possible between the proposal and a heritage asset whose setting is at least partly sensitive to such views. A list of anticipated indirect effects upon non-designated assets, where these are expected to be above 'Negligible', are contained within the **Table 10-10**.

Table 10-10: Indirect Effects anticipated upon Selected Non-designated Heritage Assets

Asset	Description from Database	Sensitivity to Impact	Magnitude of Impact	Indirect Effect
Pant Waungorwg Enclosures (NC05 – 07)	<p><i>Three possible hut circles, and indefinite traces of others, situated in hummocky ground on a ridge which slopes to the south (Egloff 2009).</i></p> <p><i>The enclosure comprises of a circular risen ring covered in turf on a hillside with a raised circle in the middle of the enclosure.</i></p> <p><i>Feature not very convincing, contours very vaguely defined and hard to make out from any angle. A series of dips and bumps in the hillside, no real circular or followable lines.</i></p>	Low	Medium	Minor Adverse
Hollow Way on Cefn Eglwysilan (NC40)	<p><i>A short section of a hollow way on Cefn Eglwysilan running north-south. It may have continued on further to the north although there is now no trace, except for a 1.8m gap in the early medieval Cross Dyke which runs NE-SW across its route.</i></p>	Low	Medium	Minor Adverse
Cefn Eglwysilan, Hollowway (NC92)	<p><i>A hollow way pursuing a somewhat meandering course for c.258m N-S across Cefn Eglwysilan.</i></p> <p><i>The feature is 3.0-4.0m across at the top, from 1.5-2.0 at the base, and is c.1.0m deep, fading rapidly at its N & S ends.</i></p>	Low	Medium	Minor Adverse
Cefn Eglwysilan, Round Barrow (NC123)	<p><i>A round barrow which measures 7 metres in diameter and up to 0.75 metres high. Some stone is visible through the grass cover and there is a triangulation pillar standing on top of the barrow. J.J. Hall, Trysor, 28 October 2012</i></p>	Low	Medium	Minor Adverse
Senghenydd Dyke / Deer Park (NC136)	<p><i>Medieval dyke thought to enclose a deer park belonging to the Lords of Caerphilly Castle on the upper part of the Nant yr Aber valley and surrounding hills. Parts well preserved comprising bank & internal ditch, c12.5km long enclosing c2500 acres.</i></p>	Low	Medium	Minor Adverse

Summary of Operational Phase Effects

- 10.212. The main operational effects of the project would result from visual impacts upon the settings of surrounding cultural heritage and archaeological remains. The setting and potential visual impact upon each of the designated heritage assets have therefore been assessed above.
- 10.213. Seven scheduled monuments identified within the 5km study zone are located inside the calculated ZTV. Indirect effects upon five of these assets (NA01, NA07, NA13, NA14 & NA19) are anticipated to be **Negligible**, while indirect effects upon the Pen-y-Coedcae Roman Camp (NA01) are anticipated to be **Minor Adverse** and indirect effects upon the Cross Ridge Dyke & Earthwork on Cefn Eglwysilan (NA11) are anticipated to be **Moderate Adverse**. Mitigation measures are therefore recommended in relation to the potential indirect effects upon NA11, as discussed later.
- 10.214. One historic park and garden was identified within the 5km study zone. Indirect effects upon Ynysangharad Park (NA22) are anticipated to be **Negligible**.
- 10.215. One historic landscape area was identified within the 5km study zone. Indirect effects upon The Rhondda historic landscape area (NA23) are anticipated to be **Negligible**.
- 10.216. A total of 107 listed buildings within the 5km study area were identified to lie within the calculated ZTV, including three grade I, 17 grade II* and 87 grade II listed buildings. Indirect effects upon each of the listed buildings is anticipated to be **Negligible**, with the exception of those within the group setting of the Church of St Ilan (NB18, NB31 & NB59 – 60), upon which indirect effects are anticipated to be **Minor Adverse**.
- 10.217. Six conservation areas were identified within the 5km study zone. Indirect effects upon the conservation areas are anticipated to be **Negligible**.
- 10.218. Indirect effects upon non-designated sites within 1km, excluding those otherwise assessed as scheduled monuments or listed buildings, are anticipated to be **Minor Adverse** for the Pant Waungorwrg Enclosures (NC05 – 07), Hollow Way(s) on Cefn Eglwysilan (NC40 & NC92), Round Barrow on Cefn Eglwysilan (NC123), and Senghenydd Dyke / Deer Park (NC136). **Negligible** indirect effects are anticipated for all other non-designated heritage assets.
- 10.219. There were no world heritage sites or historic battlefields identified within the 5km study zone. As such, these resources are not considered to be at risk of any significant indirect effects.

Decommissioning Phase

- 10.220. The potential direct effects upon heritage assets during the decommissioning phase are primarily derived from ground disturbance associated with the removal of the relevant foundations and infrastructure as implemented during the construction stage. As a result, the areas subject to this disturbance will already have been affected by similar disturbance during

the construction phase, any additional direct effects upon the heritage and archaeology resources are anticipated to be **Negligible** during the decommissioning phase.

- 10.221. As with the construction phase, indirect effects during the decommissioning phase are anticipated to be limited to visual and noise disturbances resulting from the operations of machinery and various construction activities. Impacts arising from this are considered to be **Negligible** and **temporary**, lasting only for the duration of the construction schedule, and will occur primarily within the specified daily working hours.

MITIGATION MEASURES

Iterative Design

- 10.222. As part of the design process for the Proposed Development, the archaeological baseline contributed to its changing design and red line boundary. As a result, features that are near to the Application Site have since been excluded from the proposed design in order to ensure their preservation *in-situ*. This includes the scheduled dyke and earthwork NA11 adjacent to the northeast, as well as the sheep wash NC56 within the field to the east of the Application Site.
- 10.223. Due to the nature of the Proposed Development, it is not possible to mitigate all potential visual impacts, but the design has endeavoured to narrow down its extent to fields that minimise potential indirect effects upon surrounding heritage assets. Such effects on heritage assets during the operational phase have been assessed as overall Moderate Adverse or below. In particular, the Cross Ridge Dyke & Earthwork on Cefn Eglwysilan (NA11) scheduled monument to the northeast and the listed buildings at the Church of St Ilan (NB18, NB31 & NB59 – 60) to the southeast are anticipated to be at risk of Moderate Adverse indirect effects.
- 10.224. Stage 4 considerations have therefore been undertaken to determine the potential mitigation measures which may help reduce and minimise these effects. As such, **additional planting and screening measures have been adopted within the proposed development design along the northern and eastern boundaries of the Application Site as seen in the LEMP and associated Photomontages** as described within the Landscape Chapter of the EIA and the landscape and environmental management plan. These measures will help to mitigate the magnitude of visual impacts from the proposal and ensure that indirect effects are kept minimal.

Prior to Construction Phase

- 10.225. The desk-based assessment, site walkover survey and geophysical survey of the Application Site indicated that the potential of the Proposed Development to encounter or disturb sub-surface archaeological remains is expected to be limited to the post-medieval agricultural and quarrying usage of the fields.

- 10.226. As with all greenfield land within a general area of archaeological potential, there is a small chance that significant sub-surface archaeology is present within the Application Site and has not been detected by the various surveys and analyses. As such, it is recommended that **a pre-construction programme of archaeological test trenching** be undertaken within the Application Site in the event that planning permission is obtained.
- 10.227. Any further evaluation or fieldwork should be done in accordance with a Written Scheme of Investigation (WSI) to be agreed with Heneb. The primary objective of any test trenching should be to verify the positive and negative/'blank' results of the geophysical survey and further confirm the absence or potential presence of any sub-surface archaeology, while the results of the work would also inform any further investigative or mitigative measures in advance of the construction phase.

Construction Phase

- 10.228. As previously mentioned, there is no expectation for significant archaeology to be encountered during the construction stage of the development. However, the implementation of an appropriate **archaeological Written Scheme of Investigation (WSI)** for archaeological monitoring throughout the ground disturbance elements of the construction schedule may be prudent during the construction stage of the Proposed Development, due to its location within a landscape containing general archaeological potential. The specific need for such an approach should be informed by the aforementioned pre-construction test trenching programme.
- 10.229. Any such WSI should include for the presence of a qualified archaeologist at the Application Site during the construction phase, to **monitor the groundworks of highest disturbance** (such as access tracks, cable trenching, compound areas and infrastructure foundations such as transformers, substation and other units).
- 10.230. The implementation of archaeological monitoring as above would ensure measures are in place for the full identification, recording and/or preservation of any hitherto-unknown sub-surface remains within the Application Site. However, any requirements for these measures and the previous recommendations are at the discretion of Heneb, while any WSI for such work would similarly be subject to their approval.

Operational Phase

- 10.231. During the operational lifetime of the Proposed Development, it is anticipated that the measures proposed as part of the development design and the Landscape Chapter (see **Chapter 1**) will ensure indirect effects upon the settings and views of the surrounding heritage assets are kept minimal.
- 10.232. Specifically, **additional planting along the northern and eastern boundaries of the Application Site will help to reduce indirect effects upon the Cross Ridge Dyke & Earthwork on Cefn**

Eglwysilan (NA11) scheduled monument to the northeast and the listed buildings at the Church of St Ilan (NB18, NB31 & NB59 – 60) to the southeast.

- 10.233. This requires the implementation and maintenance of the hedgerow proposed, as well as the maintenance of the existing vegetative screening throughout the operational phase. A landscape and environmental management plan has also been developed in order to outline these measures and reduce the overall potential visual impact.

Decommissioning Phase

- 10.234. Additional direct effects upon the heritage and archaeology resources are anticipated to be Negligible during the decommissioning phase. Similarly, indirect effects during the decommissioning phase are anticipated to be temporary and limited to visual and noise disturbances resulting from the operations of machinery and various construction activities. As such, **no specific mitigation measures are considered to be required** for archaeology and heritage during the decommissioning phase.

RESIDUAL EFFECTS

Construction Phase

- 10.235. With the implementation of appropriate mitigation measures as outlined above, measures would be in place for the full identification, recording and/or preservation of any sub-surface remains of significance within the Application Site. As such, residual direct effects upon both known and hitherto-unknown archaeology/heritage are anticipated to be **Negligible** and **permanent**.
- 10.236. Indirect effects during the construction phase are anticipated to be limited to visual and noise disturbances resulting from the operations of machinery and various construction activities. Worst-case residual indirect effects arising from this are considered to be **Negligible** and **temporary**, lasting only for the duration of the construction schedule, and will occur primarily within the specified daily working hours.

Operational Phase

- 10.237. As no additional construction or ground disturbance activities are anticipated during the operational phase of the development, **no residual direct effects** are expected to occur.
- 10.238. During the operational lifetime of the Proposed Development, it is anticipated that the measures proposed as part of the development design and the Landscape Chapter (see **Chapter 1**)/LEMP will ensure indirect effects upon the settings and views of the surrounding heritage assets are kept minimal.

- 10.239. Specifically, additional planting along the northern and eastern boundaries of the Application Site will help to reduce indirect effects upon the Cross Ridge Dyke & Earthwork on Cefn Eglwysilan (NA11) scheduled monument to the northeast and the listed buildings at the Church of St Ilan (NB18, NB31 & NB59 – 60) to the southeast.
- 10.240. With the growth of the additional proposed vegetative screening, indirect effects are expected to reduce slightly over time for certain heritage assets, but the worst-case residual indirect effects are nonetheless anticipated to remain **Minor Adverse**, lasting for the duration of the operational phase.

Decommissioning Phase

- 10.241. The potential direct effects upon archaeology and heritage assets during the decommissioning phase are anticipated to be Negligible and no specific mitigation measures are therefore considered to be necessary for this stage. As such, residual direct effects will likewise be **Negligible** and **permanent**.
- 10.242. As with the construction phase, worst-case indirect effects during the decommissioning phase are considered to be **Negligible** and **temporary**, lasting only for the duration of the construction schedule, and will occur primarily within the specified daily working hours. As such, no specific mitigation measures are considered to be necessary for this stage and residual indirect effects will likewise be **Negligible** and **temporary**.

CUMULATIVE EFFECTS

- 10.243. Cumulative effects may occur where the combination of separate impacts resulting from different developments build up to be potentially significant. As such, where individual impacts may be minor, they may contribute to a more significant collective impact. Such impacts can be direct or indirect; however, as recorded development has been extremely limited within the Application Site, **no significant additional cumulative direct effects** are anticipated and will be sufficiently mitigated by the implementation of the aforementioned mitigation measures.
- 10.244. Cumulative indirect effects upon heritage assets are primarily considered to be visual in nature and may occur where they act as receptors to more than one development with which they have visibility. However, while some degree of cumulative visual effects are expected to occur through shared views with existing or consented developments in the local landscape, these cumulative visual effects are not expected to result in any significant cumulative effects on the settings of any heritage assets.
- 10.245. Although the consented wind farm near to the Proposed Development (DNS/3272053, 23/0427/DNS/ & 22/1272/DNS) is likely to result in cumulative views for many points in the

landscape, no instances were identified where cumulative indirect effects resulting from this upon any specific heritage asset increased the overall indirect effects anticipated upon them. As such, overall cumulative indirect effects upon the heritage resource are anticipated to be **Minor Adverse** during the operational phase, in line with the overall indirect effects previously assessed. The full list of cumulative developments identified and considered within the surrounding area is presented in the table below.

Table 10-10: Cumulative Developments Identified within the Surrounding Area

App. No.	Type of Development	Development Description	App. Stage	Decision Type	Decision	Distance	Direction
<u>CAERPHILLY COUNTY BOROUGH COUNCIL</u>							
DNS 8357463 23/0427/ DNS/ 22/1272/ DNS	Wind Farm	Construct and operate up to 14 wind turbines and associated infrastructure	Finalised	Permission	Granted	0.010km	E
23/0508/F ULL	Residential	Erect residential development of 169 residential units and associated works	Finalised	Permission	Granted	4.532km	NE
22/0072/F ULL	Residential	Erect residential development of 153 No. units with new access, landscaping, drainage arrangements and associated works	Finalised	Permission	Granted	1.870km	E
23/0470/F ULL	Infrastructure	Erect a synchronous condenser with ancillary infrastructure and associated works including access and landscaping, and a cable connection to the adjacent existing substation for the purpose of supplying grid stability to the National Grid as part of their pathfinder 3 initiative	Finalised	Permission	Granted	3.410km	NE
23/0116/ DNS	Solar Farm	Construct and operate a Solar Photovoltaic (PV) Farm - Development of National Significance	Finalised	Permission	Granted	2.754km	E

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21/0855/F ULL	Infrastructure	Install anemometer mast of up to 81.3 m high (including instruments) for 3 years, with associated security fencing	Finalised	Permission	Granted	3.940km	NE
16/0385/F ULL	Wind Farm	Erect a single wind turbine of up to 77m tip height and associated infrastructure	Finalised	Permission	Granted	1.733km	NE
<u>Rhondda Cynon Taf County Borough Council</u>							
24/1017/S SO	Wind Farm	8 turbines	Scoping report	n/a	n/a	5.5km	N (Twyn Y Glog)
23/0958/F UL	Residential	Proposed residential development of 20 no. dwellings,	Pending decision	n/a	n/a	3.5km	N (CF37 3DJ)
DNS 3280378 22/1129/ DNS	Wind Farm	To construct and operate a wind farm consisting of up to 7 wind turbines and associated infrastructure (Development of National Significance)	Finalised	Permission	Granted	4.600km	W
15/1635/F UL	Wind Farm	Erection of two wind turbines with a tip maximum height of 125m, associated infrastructure, transformer cabin and access track, including access via the public highway and across Cribin Ddu Farm and Llwynhelyn Farm	Finalised	Permission	Granted	4.463km	NW
20/0934/S SO	Residential	Screening Opinion for proposed to develop the site for a new, residential community comprising up to 110 dwellings in a mix of housing types and tenures.	Finalised	Permission	Resolved	4.36km	NW
08/1380/F UL	Quarry	Application for determination of conditions for mineral site. The Environmental Act 1995 (Section 96 and	Finalised	Permission	Granted	1.71km	NW

		paragraph 9 of schedule 13).					
21/1517/ GREG	Education	New Welsh medium primary school, MUGA, sports field, car park, landscaping, and associated infrastructure works.	Finalised	Permission	Granted	0.855km	S
22/0425/ GREG	Education	Provision of a new 3-16 'all through' school, demolition of some buildings and replacement, refurbishment of others, new staff car park, coach car park and pupil drop off, associated works.	Finalised	Permission	Granted	1.530km	S
22/1128/ DNS	Solar Farm	Solar park, access and associated development (Development of National Significance)	Finalised	Permission	Raise No Objection	2.705km	S
18/1402/ OUT	Residential	Outline application for residential development (All matters reserved save for access) with associated public open space, landscaping and other associated works	Finalised	Permission	Granted	3.860km	SW
15/0777/F UL	Solar	Solar photovoltaic park, ancillary development and ecological enhancements	Constructed	Permission	Granted	2.8km	SW on opposing side of the valley. Berthllwyd Farm CF37 1PS
14/1014/F UL	Solar	Installation of a solar farm and associated infrastructure, including photovoltaic panels, mounting frames, inverters, transformers, substations,	Constructed	Permission	Granted	4.44km	South (Willowford Road Tonteg Pontypridd CF38 1SL)

SUMMARY AND CONCLUSIONS

- 10.246. A Cultural Heritage and Archaeology Chapter has been included within this EIA to identify and evaluate the potential direct and indirect effects on archaeological and built heritage resources during the operational, construction, and decommissioning phases of the proposed solar farm on lands at Bryntail Farm, Bryntail Lane, Pontypridd.
- 10.247. The desk-based assessment, site walkover survey and geophysical survey of the Application Site indicated that the potential of the Proposed Development to directly impact archaeological remains of significance is low, with such impacts expected to be limited to the post-medieval agricultural and quarrying usage of the fields, primarily former field boundaries, trackways and cultivation remains. Nonetheless, as with all greenfield land within a general area of archaeological potential, there is a small chance that significant sub-surface archaeology is present within the Application Site that has not been detected by the various surveys and analyses. In addition, while no remains associated with the adjacent scheduled Cross Ridge Dyke & Earthwork on Cefn Eglwysilan (NA11) were identified to continue into the Application Site, this possibility of surviving remains within Field 13 or within the boundary between Fields 13 and 14 cannot be entirely dismissed at this point.
- 10.248. The implementation of an appropriate archaeological Written Scheme of Investigation (WSI) for test trenching is recommended in the event that planning permission is granted, with the objective of verifying the results of the geophysical survey, further confirming the absence or presence of any hitherto-unknown sub-surface remains, and informing the need for any further appropriate investigative or mitigative measures. This approach allows for a programme of archaeological works which would ensure the identification and preservation *in-situ* and/or by record of any hitherto-unknown sub-surface remains within the Application Site.
- 10.249. Indirect effects resulting from the Proposed Development are expected to be Moderate Adverse upon the Cross Ridge Dyke & Earthwork on Cefn Eglwysilan (NA11) scheduled monument to the northeast and the listed buildings at the Church of St Ilan (NB18, NB31 & NB59 – 60) to the southeast, in the absence of any mitigation. However, additional planting and screening measures have been adopted within the Proposed Development design, as described within the Landscape Chapter of the EIA and the landscape and environmental management plan. With the growth of the additional proposed vegetative screening, indirect effects are expected to reduce slightly over time for certain heritage assets, with residual indirect effects upon NA11, NB18, NB31 & NB59 – 60 anticipated to be Minor Adverse overall, lasting for the operational duration of the proposal. All other indirect effects upon heritage assets are anticipated to be Minor Adverse or Negligible and do not require any specific mitigation measures.
- 10.250. With the implementation of the proposed and recommended mitigation measures, it is considered that the Proposed Development will not result in substantial harm or significant effects to archaeology and heritage resources.

BIBLIOGRAPHY

Chapter 10: Cultural Heritage and Archaeology

Aerial imagery via Google Earth, Bing Maps, World Imagery Wayback and ArcGIS Pro global mapping

Cadw (2016). *Register of Historic Parks and Gardens*. Ynysangharad War Memorial Park Entry

Cadw Historic Assets Database

Central Register of Aerial Photographs for Wales

Code of Conduct, Chartered Institute of Field Archaeologists (CIfA) (2014, Revised 2022)

Conservation Principles: for the sustainable management of the historic environment in Wales (2011)

Davies, J. (2005). *A History of Wales*. Penguin

Defra Data Services Platform (Lidar data)

Excavation reports hosted by Archaeology Data Service and OASIS

Future Wales: The National Plan 2040 (Future Wales, 2021)

GIS shapefiles hosted via Data Map Wales and Local Authority links;

Glamorgan-Gwent Archaeological Trust (GGAT) (2019). *Historic Environment Record: Pontypridd*

Glamorgan-Gwent Archaeological Trust (GGAT) / Heneb's *Historic Environment Record* (HER)

Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) (2018)

Hedgerows Regulations 1997: Schedule 1 – Additional Criteria for Determining “Important” Hedgerows

Historic Buildings and Ancient Monuments Act 1953

Historic Environment and Climate Change in Wales (2023)

Historic Environment Wales, Act 2023

<http://www.britainfromabove.org.uk/>

Hughes, S. (2007). *Chronicle of Welsh Bridges*. Gwasg Carreg Gwalch

Jones, E. (2012). *Markets and Market Halls of South Wales*. University of Wales Press

Lloyd, J. (1998). *The Taff Vale Railway*. Oakwood Press

Morgan, P. (2008). *Religion and Society in Pontypridd*. RCT Heritage Trust

National Collection of Aerial Photography

National Heritage Act 1983 (amended 2002)

National Monuments Record of Wales (NMRW);

National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales (NPAAW 2017)

Owen, H. (2015). *Place-Names of Glamorgan*. Welsh Academic Press

Planning Policy Wales (12th Edition, 2024)

Chapter 10: Cultural Heritage and Archaeology

Planning Policy Wales (Technical Advice Note 24: The Historic Environment) (2017)

Published sources available on the National Library of Wales website;

RCAHMW (2022). *Coflein Database*. www.coflein.gov.uk

RCAHMW Guidelines for Digital Archives (2015)

RCTCBC (2018). *Pontypridd Conservation Area Appraisal*. Rhondda Cynon Taf County Borough Council

RCTCBC (2020). *Ynysangharad Park Regeneration Strategy*

Rhondda Cynon Taf County Borough Council

Rhondda Cynon Taf Local Development Plan up to 2021 (adopted March 2011)

Rowson, S. (2009). *The Glamorganshire Canal: A Historical Guide*. Tempus Publishing

Standards and Guidance for Archaeological Desk Based Assessment, ClfA (2014, Updated 2020)

Standards and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives, ClfA (2014, Revised 2020)

The Setting of Heritage Assets in Wales (2017)

The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017, Part 4

Understanding Scheduling in Wales (2019)

Well-being of Future Generations (Wales) Act 2015 (Updated 2024)

Williams, C. (2003). *The Making of the Welsh Working Class*. University of Wales Press

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Appendix 10D: Geophysical Survey Report