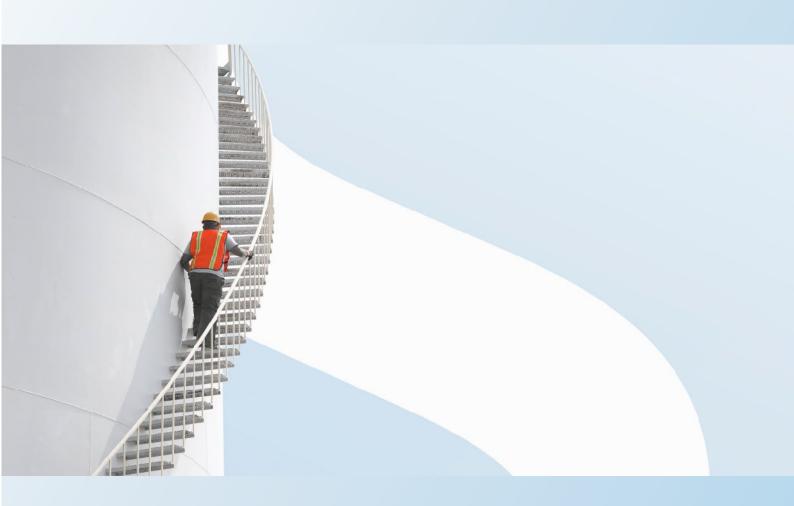


Pennant Walters

Mynydd y Glyn

Draft Environmental Statement Appendix 7C:

Written Scheme of Investigation for Desk-based Assessment



This report was prepared by WSP Environment & Infrastructure Solutions UK Limited (formerly known as Wood Environment & Infrastructure Solutions UK Limited), company registration number 02190074, which is carrying out these services as a subcontractor and/or agent to Wood Group UK Limited



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Table 2.1 Guidance documents

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1. Introduction

1.1 Background

This document presents a Written Scheme of Investigation (WSI), prepared by Wood Group UK Ltd for Pennant Walters (hereafter 'the Client'), for archaeological desk-based assessment to inform proposals for Mynydd y Glyn Wind Farm, Rhondda Cynon Taff (NGR 303530,189386) hereafter named 'the Site'. The assessment work is required in relation to proposals for a wind farm (the Project) within the Site (planning application forthcoming). This WSI has been prepared in response to a request from The Glamorgan-Gwent Archaeological Trust Archaeological Planning Officer, on behalf of Rhondda Cynon Taff County Borough Council, within an email to Wood dated 16/02/22. As the proposed wind farm will generate more than 10MW it is defined as a Development of National Significance (DNS) and will be considered by an Inspector before being determined by Welsh Ministers. The Project will be subject to Environmental Impact Assessment (EIA).

1.2 Scope

- This WSI has been drafted to cover tasks which are required to provide an archaeological baseline, which is required as part of the EIA for the Project.
- This WSI sets out the scope of archaeological desk study research and reporting required to develop a detailed understanding of the archaeological baseline. This baseline will provide sufficient information to make informed assessments of potential effects arising from direct disturbance to or loss of heritage assets during the construction and operation of the Project. The baseline information may also be used in the identification of a need for any further survey, and in the identification of any mitigation measures required as a result of the Project.
- This document introduces the overall scheme and archaeological background as well as setting out the overarching procedures and standards for archaeological assessment.
- The document has been prepared in accordance with current guidelines published by the Chartered Institute for Archaeologists (2014)¹.
- 1.2.5 The Chartered Institute for Archaeologists (ClfA) describes a WSI as follows:

"In a planning context, the applicant or their agent should provide a WSI in response to the brief. The WSI must be prepared by a competent archaeologist and set out the proposed scheme of investigation in sufficient detail to satisfy the planning archaeologist or monitor that it is an appropriate response to the brief and that works will be appropriate and proportionate to the known/potential remains and the level of impact. It should also contain sufficient detail to provide a benchmark against which the results of the work may be measured and must be agreed by all relevant parties before work can commence."

1.3 Site Location and Geology

The Site is located approximately 3km to the west of Pontypridd. The Site comprises a plateau of extensive semi-improved acid grassland used for grazing livestock with steep-sloping sides. The wider landscape surrounding the Site is predominantly used for

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¹ Chartered Institute for Archaeologists. 2014 (revised 2020). Standard and guidance for historic environment desk-based assessment



- livestock grazing with plantation conifer woodland managed for forestry and small urban settlements.
- The bedrock geology is Brithdir Member Sandstone, a sedimentary bedrock formed approximately 308 to 310 million years ago in the Carboniferous Period in a local environment previously dominated by rivers. The superficial (drift) geology is in the majority not recorded; however areas of peat are shown, which formed up to 3 million years ago in the Quaternary Period in a local environment previously dominated by organic accumulations (British Geological Survey, 2022).



2. Legislative Legislation, Policy and Guidance

2.1 Statutory Framework

Ancient Monuments and Archaeological Areas Act 1979

2.1.1 The Ancient Monuments and Archaeological Areas Act (1979) sets out that sites considered to be of national importance are required to be compiled in a Schedule of Monuments. Scheduled monuments may include any above or below ground building, structure or work which fulfils the criteria for scheduling set out by the Secretary of State for Culture, Media and Sport. These sites are accorded statutory protection and Scheduled Monument Consent is required before any works are carried out which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering up a Scheduled Ancient Monument. Scheduled monument protection is offered not only to the known structures and remains of a site but also to the soil under and around them to protect any archaeological interest. This act also provided for the designation of Areas of Archaeological Interest in which statutory provisions for access to construction sites for carrying out archaeological works apply.

Planning (Listed Buildings and Conservation Areas) Act 1990

- 2.1.2 The Planning (Listed Buildings and Conservation Areas) Act 1990 covers the registration of Listed Buildings (buildings that are seen to be of special architectural or historic interest) and designation of Conservation Areas (areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance).
- 2.1.3 A Listed Building may not be demolished, altered or extended in any manner which would affect its character as a building of special architectural or historic interest without Listed Building Consent being granted. There are three Grades of listing (in descending order):
 - Grade I: buildings of exceptional interest;
 - Grade II*: particularly important buildings of more than special interest; and
 - Grade II: buildings of special interest, warranting every effort to preserve them.
- The 1990 Act requires local planning authorities to draw up and publish proposals for the preservation and enhancement of Conservation Areas and sets out a duty to consider the desirability of preserving the character of a Conservation Area in planning decisions. The act also gives local planning authorities the ability to control demolition and other works in Conservation Areas which would not normally require planning permission.

The Historic Environment (Wales) Act 2016

- 2.1.5 The Historic Environment (Wales) Act 2016 made a number of amendments to the 1979 and 1990 Acts to address the needs of the Welsh historic environment. It also introduced several stand-alone provisions for Wales.
- 2.1.6 Subordinate legislation supplements primary legislation and is often in the form of Orders or Regulations. It enables an Act to be commenced and provides the detail necessary for



the implementation of an Act. It also allows that detail to be amended without the need for a new Act.

2.2 National Planning Policy and Guidance

Planning Policy Wales (Edition 11, February 2021)

- Planning Policy Wales sets out the Welsh Government's land use planning policies. Its primary objective 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 (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation.
- 2.2.2 Chapter 6, 'Distinctive and Natural Places', explains how planning system must take into account the Welsh Government's objectives to protect, conserve, promote and enhance the historic environment as a resource for the general well-being of present and future generations. It also sets out the planning policies for the sustainable management of specific categories of historic assets.

Future Wales: The National Plan 2040 (February 2021)

- The National Development Framework Future Wales the National Plan 2040, sets out the Welsh Government's land use priorities and provides a national land use framework. The development plan for Wales influences all levels of the planning system in Wales and helps to shape Strategic and Local Development Plans prepared by councils and national park authorities.
- Policy 35 'Valleys Regional Park' is relevant to south-east Wales. "The Welsh Government supports the establishment of the Valleys Regional Park. Strategic and Local Development Plans should embed its principles into their planning frameworks. The Welsh Government will work with local authorities, the third sector and key partners to support the Valleys Regional Park and maximise opportunities for new development."
- 2.2.5 "The Welsh Government, communities and partners have developed a positive framework through 'Our Valleys, Our Future' to drive change and regeneration. The Valleys Regional Park seeks to maximise the social, economic and environmental potential of the Valleys' natural and cultural heritage assets and it is important the planning system supports its delivery."

Technical Advice Note 24: The Historic Environment (2017)

- This technical advice note provides guidance on how the planning system considers the historic environment during development plan preparation and decision making on planning and listed building consent applications. It also provides specific guidance on how the following historic assets should be considered:
 - scheduled monuments;
 - archaeological remains;
 - listed buildings;
 - conservation areas:
 - historic parks and gardens;



- historic landscapes;
- historic assets of special local interest; and
- world heritage sites.

2.3 Local Planning Policy

Rhondda Cynon Taf County Borough Council Local Development Plan

- 2.3.1 The current Local Development Plan was adopted on 2nd March 2011. The Local Development Plan identifies where new developments such as housing, employment, community facilities and roads, will go.
- 2.3.2 The historic environment is considered in policy AW 7 of the Local Development Plan "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."

2.4 Technical Guidance

Guidance documents which are relevant to this WSI are listed in **Table 2.1**.

Table 2.1 Guidance documents

Guidance	Relevance
Cadw	
Setting of Historic Assets in Wales 2017 ²	Sets out the principles used to assess the potential impacts of development or land management proposals within the settings of World Heritage Sites, ancient monuments (scheduled and unscheduled), listed buildings, registered historic parks and gardens, and conservation areas.
Conservation Principles for the sustainable management of the historic environment in Wales 2011 ³	Set out six guiding principles for the conservation of the historic environment.
Professional Guidance	
Chartered Institute for Archaeologists (CIfA) Standard and guidance for archaeological desk-based assessment 2014 ⁴	Sets out standards for the production of archaeological desk- based assessments.
Chartered Institute for Archaeologists (CIfA) Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment 2014 ⁵	Sets out standards for the provision of consultancy advice in the historic environment.

² Cadw 2017. Setting of Historic Assets in Wales. (Online) Available at: https://cadw.gov.wales/advice-support/placemaking/heritage-impact-assessment/setting-historic-assets (Accessed June 2022).

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³ Cadw, Welsh Government (2011), Conservation Principles for the Sustainable Management of the Historic Environment in Wales. (Online). Available at: https://cadw.gov.wales/advice-support/conservation-principles/conservation-principles (Accessed June 2022).

⁴ Chartered Institute for Archaeologists 2014. Standard and guidance for historic environment desk-based assessment (Online) Available at: https://www.archaeologists.net/codes/cifa (Accessed June 2022).

⁵ Chartered Institute for Archaeologists 2014. Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment (Online) Available at: https://www.archaeologists.net/codes/cifa (Accessed June 2022).



Wales Archaeological Research Framework

This resource provides relevant archaeological research assessment and research agenda for Wales. The series of publications is organised by chronological period from the Palaeolithic to the modern period, and provides a viable, realistic and effective academic basis for undertaking archaeological intervention.



3. Archaeological and Historic Background

- There are no designated historic assets located within the Site boundary. Thirteen listed buildings lie within the 1km study area. These are located to the north of the Site, at a distance of over 800m. No scheduled monuments. historic park and gardens, conservation areas, or World Heritage Sites are located within the 1km study area.
- The northern area of the Site lies within The Rhondda registered historic landscape. The Rhondda represents a rare and important historic landscape and as such is included in the national Register of Landscapes of Historic Interest in Wales: Part 2:2: Landscapes of Special Historic Interest (2001).
- Between 1km and 5km from the Site there are eight scheduled monuments, the closest being Hetty Pit (Cadw 2257) at 1.67km from the Site to the north-east, one historic park and garden at c.3km to the east, and seven conservation areas to the east, the closest being Troedrhiw-Trwyn at 1.95km. There are numerous listed buildings within 1km-5km from the Site.



4. Archaeological Assessment Scope

4.1 Approach

- 4.1.1 The proposed archaeological investigation methods comprise:
 - A Desk-based Assessment.

4.2 Research Context

It is important to set the scope of the assessment work and the results obtained into a wider framework for archaeological research and investigation.

4.3 Standards and Guidance

- 4.3.1 All elements of the work will be carried out by staff with sufficient competence and experience to perform the tasks to recognised acceptable professional standards. The overall programme of archaeological works will be managed by an accredited member of the Chartered Institute for Archaeologists (ClfA) or someone of equivalent competence and experience, and the reporting will be carried out by a suitably experienced archaeologist, competent in the tasks required of them.
- 4.3.2 All work will be carried out in compliance with the following professional standards and guidance:
 - ClfA 2014. Code of Conduct:
 - ClfA (2014, revised 2020). Standard and guidance for historic environment deskbased assessment;
 - Cadw 2017. Setting of Historic Assets in Wales.
 - The Welsh Archaeological Trusts 2018. Guidance for the Submission of Data to the Welsh Historic Environment Records.
 - The National Panel for Archaeological Archives in Wales 2017. The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales.
 - The Royal Commission for the Ancient and Historical Monuments of Wales 2015. RCAHMW Guidelines for Digital Archives.



5. Standards for Archaeological Work

5.1 Desk-based Assessment

Summary and Standards

- To understand the potential for and significance of archaeological remains, a desk-based assessment will be produced.
- This WSI sets out a programme of works to ensure that the desk-based assessment will meet the standard required by The Chartered Institute for Archaeologist's (ClfA) Standard and guidance for historic environment desk-based assessment (2014, revised 2020). ClfA defines desk-based assessment as:

"Desk-based assessment is a programme of study of the historic environment within a specified area or site on land, in the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance; the character of the study area, including appropriate consideration of the settings of heritage assets;"

- 5.1.3 The desk-based assessment will involve review of the following data sources covering a study area of 1 km from the Site boundary, extending to 5 km for designated assets:
 - Historic Environment Record.
 - National Monument Record.
 - Designated Asset data.
 - Portable Antiquities Scheme data.
 - Light Detection and Ranging (LiDAR).
 - Historic maps.
 - Aerial photographs.
 - Published sources (works, reports and other information relevant to the desk-based assessment, consulted via online sources and The Glamorgan Archives as available).
- 5.1.4 A site walkover will also be undertaken.

Aims and Objectives

The primary purpose of the desk-based assessment is to describe and assess the historic environment resource within the Site in order to support an assessment of effects of the Project (to be reported in an Environmental Statement), and to inform the need for and scope of any further survey work.



Methodology

Data Collection

- Data will be collected from the Glamorgan-Gwent Historic Environment Record (GGHER) within a 1 km study area from the Site boundary. Information collected will include data on monuments, finds and archaeological investigations, sources for all investigations, links to aerial photos, information on Historic Landscape Character, conservation areas and information about nationally important sites. The data held by the Royal Commission for the Ancient and Historical Monuments of Wales (RCAHMW) in the National Monuments Record of Wales will also be checked.
- Data will be collected from Cadw within a 5 km study area from the Site boundary. Information collected will include all nationally protected historic buildings and sites in Wales comprising listed buildings, scheduled monuments, protected wrecks, registered parks and gardens, registered landscapes, world heritage sites and battlefields.
- 5.1.8 Where available, data will be collected from the Portable Antiquities Scheme within a 1 km study area from the Site boundary. The data will comprise information on archaeological objects found by metal detector users or the public.

LiDAR

- 5.1.9 LiDAR data will be obtained for the Site and its immediate environs and processed in QGIS to produce hill shade and contour shaded representation of the Site.
- The source data will comprise 1m digital surface model (DSM) asc tiles that will be merged to form a continuous model across the Site. The data will be presented in QGIS as hill shade with suitable attributes to reveal any historic environment features in the landscape. An example would include pseudo lighting set at an altitude of 30°, Azimuth of 315°, with a Z factor set to 3 to help define features. Pseudo lighting will be set to various azimuths with the aim of identifying microtopographic features.
- The hill shade layer will be underlain by a single band pseudo colour rendition of the same DSM with quantile spread of approximately 10 classes. With the hill shade layer set as semi-transparent over the single band pseudo colour rendition, it will enable an easier interpretation of the sites and its immediate surroundings topographic features.
- The imagery will be analysed alongside existing national datasets (listed under Data Gathering Methodology section). This reference material will be used to cross-check features identified on the LiDAR imagery. The results will be incorporated into the baseline report.

Historic Maps

- A variety of historic maps will be consulted to gain an understanding and inform how the Site and surrounding study area have developed over time.
- 5.1.14 Where available, tithe maps (and apportionments), estate maps and any other relevant historical maps will be consulted via online sources and The Glamorgan Archives
- Ordnance Survey maps dating to the 19th and 20th century will be consulted at the following scales of 1:10,000; 1:10,560; 1:2,500 and 1:1,250 scales.



Aerial Photography

Provision will be made for the analysis of aerial photographs of the Site dating from the early 20th century to the present. This analysis will help to identify previous land uses. An aerial photographic analysis will also include the study of cropmarks, soilmarks and earthworks to identify features that otherwise may not be visible at the present time. A range of sources will be consulted as appropriate including the RCAHMW, Britain from Above and the Central Registry for Aerial Photography Wales (CRAPW).

Site walkover

- 5.1.17 A Site walkover will be undertaken by a surveyor with photographic and recording equipment.
- 5.1.18 The surveyor will adhere to safe and agreed access locations at all times. The collection of the data summarised above will be used to inform the baseline outline in the desk-based assessment.

5.2 Reporting and Archiving

Reporting

- The desk-based assessment will be produced as a document that will form a baseline report to be appended to the Environmental Statement.
- 5.2.2 The report will include:
 - a statement of the objectives and methods of the study;
 - identification of areas of known and possible archaeological or historic landscape interest, together with brief justification of such identification, and a preliminary indication of their likely importance including areas of multiple cultural heritage interest:
 - the anticipated degree of survival of any archaeological site or area so identified;
 - summary maps at an appropriate scale and plans at an appropriate scale of the study area maps on which are plotted basic data related to the study in question.
 - a comprehensive bibliography of sources of information consulted, including those with no useful information;
 - consideration of the evidence assembled within a wider landscape setting;
 - a critical review of the effectiveness of the methodology employed;
 - an assessment of aerial photographs;
 - consideration of LiDAR imagery. The assessment should make clear where the data was obtained and how it has been processed;
 - the plottings of the Historic Landscape Characterisation and an assessment of the impact of any development on the landscape character.



Archiving

- A digital copy of the report will be supplied to the Glamorgan-Gwent Historic Environment Record (HER) on the understanding that it will become a public document after an appropriate period of time (generally not exceeding six months).
- A project archive will be prepared in accordance with the National Monuments Record (Wales) agreed structure and be deposited with the National Monuments Record, RCAHMW, on completion of the site analysis and report production.



6. Health, Safety, Security and Environment (HSSE)

- Health and Safety will take priority over all other requirements. A conditional aspect of all archaeological work is both safe access to the area of work and a safe working environment. All relevant Health and Safety legislation (Health and Safety at Work Act 1974), regulations and codes of practice will be respected and adhered to.
- The survey will be carried out in accordance with safe working practices and under the defined Health, Safety and Environmental Policy. All equipment must be suitable for the purpose and in sound condition and comply with Health and Safety Executive recommendations.
- Where conflict between Health and Safety and progressing the archaeological survey is identified, every effort will be made by the client, in discussion with the archaeological contractors, to identify a safe way of completing the archaeological investigations to appropriate standards.
- 6.1.4 Any specific site security requirements will be arranged prior to access to the Site. These will be discussed and agreed with the client.



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