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7. Historic Environment

7.1 Introduction

7.1.1 This chapter presents an assessment of the likely significant effects of the Project with respect to the Historic Environment. The Historic Environment is defined in Conservation Principles as¹:

“All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and deliberately planted or managed.”

7.1.2 This is represented by features, or assets, including buildings, archaeological remains and artefact scatters. Some historic assets have been designated as Scheduled Monuments, Listed Buildings or Conservation Areas, Register Park and Gardens, and Registered Historic Landscapes. These and non-designated assets are managed in the planning process in accordance with national and local planning policy and guidance.

7.1.3 The assessment is based on information obtained to date. It should be read in conjunction with the Proposed Development description provided in **Chapter 4: Description of the Project**.

7.1.4 This chapter describes:

- the legislation, policy and technical guidance that has informed the assessment (**Section 7.2**);
- consultation and engagement that has been undertaken and how comments from consultees relating to the Historic Environment have been addressed (**Section 7.3**);
- the methods used for baseline data gathering (**Section 7.4**);
- overall baseline (**Section 7.5**);
- embedded measures relevant to the Historic Environment (**Section 7.6**);
- the scope of the assessment for the Historic Environment (**Section 7.7**);
- the methods used for the assessment (**Section 7.8**);
- the preliminary assessment of the Historic Environment effects (**Section 7.9**);
- preliminary assessment of cumulative (inter-project) effects (**Section 7.10**); and
- a summary of the preliminary significance conclusions (**Section 7.11**).

7.1.5 In addition, this Chapter is supported by the following appendices:

- **Appendix 7A:** Desk-based assessment;
- **Appendix 7B:** Historic environment gazetteer;
- **Appendix 7C:** Desk-based assessment Written Scheme of Investigation;

¹ 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 August 2022).

- **Appendix 7D:** Stage 1 Settings Assessment and
- **Appendix 7E:** Assessment of the Significance of the Impact of Development on Historic Landscape (ASIDOHL).

Limitations and assumptions

- 7.1.6 The information provided in this Draft ES is preliminary, the final assessment of likely significant effects will be reported in the ES. The Draft ES has been produced to fulfil Pennant Walters' consultation duties and enable consultees to develop an informed view of the likely significant effects of the Proposed Development
- 7.1.7 The following overall limitations have been identified:
- The baseline data collection has involved the completion of a desk-based assessment. This is a predictive tool and relies on a series of assumptions and extrapolations to develop an understanding of the potential extent and character of archaeological remains within the Proposed Development Site (the 'Site'); and
 - The desk-based assessment has involved the collection of data from the Historic Environment Record (HER). The HER is continually updated as further data regarding the historic environment becomes available; for example, when the results of recent archaeological investigations are made available. As the HER is a record only of known features, it is not a reliable predictive tool, but can provide useful information that can be used with other information to develop an understanding of the potential presence, nature and significance of archaeological remains.
- 7.1.8 These limitations are not considered to affect the robustness of the assessment of the likely significant effects of the Proposed Development.

7.2 Relevant legislation, planning policy and technical guidance

- 7.2.1 This section identifies the legislation, planning policy and technical guidance that has informed the assessment of effects with respect to the historic environment. Further information on policies relevant to the Proposed Development provided in **Chapter 5: Legislation and policy overview**.

Legislation

- 7.2.2 A summary of the relevant legislation is given in **Table 7.1**.

Table 7.1 Legislation relevant to the Historic Environment assessment

Legislation	Legislative context
Historic Environment (Wales) Act 2016²	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. Subordinate legislation supplements primary legislation and is often in the form of Orders or Regulations. It enables an Act to be commenced and

² National Assembly for Wales (2016) Historic Environment (Wales) Act. (Online). Available at: <https://www.legislation.gov.uk/anaw/2016/4/contents> (Accessed August 2022).

Legislation	Legislative context
<p>Planning (Listed Buildings and Conservation Areas) Act 1990³</p>	<p>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.</p> <p>Covers the registration of listed buildings and designation of conservation areas. 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:</p> <ul style="list-style-type: none"> • 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.
<p>Ancient Monuments and Archaeological Areas Act 1979⁴</p>	<p>The basic legislation that provides for:</p> <ul style="list-style-type: none"> • the scheduling of monuments of national importance; • the control of works to scheduled monuments through the scheduled monument consent process; • action against unauthorised works or deliberate damage to scheduled monuments; and • the acquisition and guardianship of ancient monuments.

Planning policy

7.2.3 A summary of the relevant national and local planning policy is given in **Table 7.2**.

³ UK Public General Act (1990) Planning (Listed Buildings and Conservation Areas) Act 1990 (Online). Available at: <https://www.legislation.gov.uk/ukpga/1990/9/contents> (Accessed August 2022).

⁴ UK Public General Act (1979) Ancient Monuments and Archaeological Areas Act 1979 (Online). Available at: <https://www.legislation.gov.uk/ukpga/1979/46/contents/2006-10-01> (Accessed August 2022).

Table 7.2 Planning policy relevant to the Historic Environment assessment

Policy	Policy context
National planning policy	
Planning Policy Wales, Edition 11⁵	<p>National planning policy for Wales is set out in Planning Policy Wales (Edition 11, 2021) (PPW). 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.</p> <p>PPW sets out the role of local authorities in the protection of the historic environment, working with other agencies such as Cadw and the Welsh Archaeological Trusts. PPW states that development plans should reflect national policies for the protection of the historic environment. It also notes the various historic environment designations which exist for the protection of monuments, historic buildings and areas, as well as historic landscapes.</p> <p>PPW also sets out the treatment of the historic environment in the development management process. It states that the desirability of preserving an ancient monument and its setting is a material consideration in determining a planning application, and that there should be a presumption in favour of the physical preservation of monuments of national importance. For archaeological remains of lesser importance, it will be necessary to weigh the importance of the archaeology against other factors, such as the need for the development. Where a local authority decides that physical preservation of archaeology is not justified then it will be appropriate for provision to be made for the recording of archaeology in advance of its loss, and this can be secured through a planning condition.</p> <p>PPW notes the statutory requirement to have regard to the desirability of preserving listed buildings and their settings. The protection of World Heritage Sites and their settings should also be a material consideration in the determination of planning applications. Similarly, parks, garden and landscapes included in the 'Register of Parks and Gardens of Special Historic Interest in Wales's should be considered.</p>
Future Wales: The National Plan 2040 (February 2021)	<p>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.</p> <p>Policy 35 – 'Valleys Regional Park' is relevant to south-east Wales. "<i>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.</i>"</p> <p><i>"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,</i></p>

⁵ Welsh Government (2021). Planning Policy Wales, Edition 11 (Online). Available at: <https://gov.wales/planning-policy-wales> (Accessed August 2022).

Policy	Policy context
	<i>economic and environmental potential of the Valleys' natural and cultural historic assets and it is important the planning system supports its delivery."</i>
Local planning policy	
Rhondda Cynon Taf County Borough Council Local Development Plan up to 2021 (Adopted March 2011)⁶	<p>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.</p> <p>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."</p>

Technical guidance

7.2.4 A summary of the technical guidance for the Historic Environment is given in **Table 7.3**.

Table 7.3 Technical guidance relevant to the Historic Environment assessment

Technical guidance document	Context
Technical Advice Note 24: The Historic Environment⁷	TAN 24 was adopted in May 2017 to provide guidance on how the planning system should consider the historic environment during development plan preparation and decision making on planning applications.
Cadw. Heritage Impact Assessment in Wales⁸	Sets out the general principles to consider when planning changes to historic assets and applying for listed building, conservation area and scheduled monument consent.
Cadw. Setting of Historic Assets in Wales⁹	Sets out the principles used to assess the potential impact 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.

⁶ Rhondda Cynon Taf County Borough Council (2011). Local Development Plan up to 2021 (Adopted November 2012). (Online). Available at: <https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/LocalDevelopmentPlan20062021.aspx> (Accessed August 2022).

⁷ Cadw, Welsh Government (2017). Technical Advice Note 24: The Historic Environment. (Online) Available at: <https://gov.wales/technical-advice-note-tan-24-historic-environment> (Accessed August 2022).

⁸ Cadw 2017. Heritage Impact Assessment in Wales. (Online) Available at: <https://cadw.gov.wales/advice-support/placemaking/heritage-impact-assessment/heritage-impact-assessment> (Accessed August 2022).

⁹ 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 August 2022).

Technical guidance document	Context
Cadw. Managing Historic Character in Wales ¹⁰	Explains why it is important to recognise historic character and use it as an evidence base for conservation, regeneration and planning work. It shows how policies and programmes to manage change can take inspiration from the past to help create and sustain distinctive places for the future.
Cifa. Standard and guidance for historic environment desk-based assessment ¹¹	Sets out standards for the production of archaeological desk-based assessments.
Cifa. Standard and guidance for stewardship for the historic environment ¹²	Defines the outcome of work that satisfies aspirations for good stewardship and describes best practices for achieving it.

7.3 Consultation and engagement

Overview

- 7.3.1 The assessment has been informed by consultation responses and ongoing stakeholder engagement. An overview of the approach to consultation is provided in **Section 2.4 of Chapter 2: Approach to Environmental Impact Assessment.**

Scoping Direction

- 7.3.2 A Scoping Direction was issued by Planning and Environment Decisions Wales (PEDW, formerly Planning Inspectorate Wales), on behalf of the Welsh Ministers, on 01 December 2021. A summary of the relevant responses received in the Scoping Direction in relation to the Historic Environment and confirmation of how these have been addressed within the assessment to date is presented in **Table 7.4.**

Table 7.4 Summary of EIA Scoping Direction responses for the Historic Environment.

Consultee	Consideration	How addressed in this Draft ES
Cadw	Further clarification requested on the process to identify potential for effects on designated historic assets located within 5km of the Proposed Development	A Stage 1 Settings Assessment has been undertaken for all the designated historic assets within 5km of the Proposed Development. This is included as Appendix 7D. It has been agreed with Cadw and the list of assets to be included in the settings assessment for the Draft ES has been agreed. The provisional

¹⁰ Cadw 2017. Managing Historic Character in Wales. (Online) Available at: <https://cadw.gov.wales/advice-support/placemaking/historic-character/managing-historic-character> (Accessed August 2022).

¹¹ Chartered Institute for Archaeologists 2014. Standard and guidance for historic environment desk-based assessment (Online) Available at: <https://www.archaeologists.net/codes/cifa> (Accessed August 2022).

¹² Chartered Institute for Archaeologists 2014. Standard and guidance for stewardship for the historic environment. (Online) Available at <https://www.archaeologists.net/codes/cifa> (Accessed August 2022).

Consultee	Consideration	How addressed in this Draft ES
		assessment of effects on settings is included in Section 7.8 .
Cadw	Effects on The Rhondda Registered Historic Landscape of special historic interest located within 5km and partially within the Site to be assessed by ASIDOHL.	An ASIDOHL has been undertaken. This is included as Appendix 7E . It will be shared with Cadw.
The Glamorgan-Gwent Archaeological Trust (GGAT)	Requested completion of a Written Scheme of Investigation (WSI) to agree scope of archaeological desk-based assessment to assess potential for direct disturbance of archaeological assets	A Written Scheme of Investigation (WSI) for archaeological desk-based assessment has been agreed with GGAT. This is included as Appendix 7C .

Technical engagement

7.3.3 Technical engagement with consultees in relation to the Historic Environment is ongoing. A summary of the technical engagement undertaken to date is outlined in **Table 7.5**.

Table 7.5 Technical engagement on the Historic Environment assessment

Consultee	Consideration	How addressed in this Draft ES
Cadw	Effects on designated historic assets located within 5km of the Proposed Development	Consultation is underway. Effects on designated assets within 5km are considered in the assessment.
Cadw	Effects on The Rhondda Registered Historic Landscape of special historic interest located within 5km and partially within the Site	Consultation is underway. Effects on The Rhondda Registered Historic Landscape are considered in the ASIDOHL.
The Glamorgan-Gwent Archaeological Trust (GGAT)	Direct disturbance of archaeological assets	An archaeological desk-based assessment has been prepared and is included as Appendix 7A . Consultation with GGAT will continue.

7.4 Data gathering methodology

Study area

Wind Farm Development

7.4.1 In order to inform an assessment of effects on archaeological remains within the Site and the surrounding area, the following study areas were assessed:

- a 5km study area from the boundary of the Site has been used to identify historic assets that may be subject to potentially significant effects arising from changes to their settings; and

- a 1km study area from the boundary of the Site has been used to identify historic assets which may be subject to potentially significant effects arising from direct disturbance.

Grid Connection

7.4.2 In order to inform an assessment of effects on archaeological remains within the grid connection corridor and the surrounding area, the following study areas were assessed:

- a 500m study area from the boundary of the potential grid connection corridor has been used to identify historic assets that may be subject to potentially significant indirect effects; and
- a 500m study area from the boundary of the potential grid connection corridor has been used to identify historic assets which may be subject to potentially significant direct effects.

Desk study

7.4.3 A desk study has been completed in accordance with a Written Scheme of Investigation (WSI), which sets out the sources to be consulted in order to establish the archaeological baseline for the Site. The WSI was agreed with the Glamorgan-Gwent Archaeological Trust Archaeological Planning Officer and is included as **Appendix 7C**. A summary of the organisations that have supplied data, together with the nature of that data is outlined in **Table 7.6**.

Table 7.6 Data sources used to inform the Historic Environment assessment

Organisation	Data source	Data provided
The Glamorgan Gwent Archaeological Trust	Historic Environment Record	HER data within 1km study area radius from the Site boundary.
Cadw	Registers of Designated Historic Assets including scheduled monuments, listed buildings, registered parks and gardens and conservation areas within 5km of the Site	National datasets.
National Monument Record (NMR), RCAHMW	Archive	Aerial photographs.
National Library of Wales	Archive	Cartographic sources.
Gwent Archives	Archive	Historic and cartographic sources.
Welsh Government and Natural Resources Wales	Lle Geo-Portal	Light Detection and Ranging (LiDAR) Composite dataset.
British Museum and National Museum Wales	Portable Antiquities Scheme data	Archaeological finds by the public.

Survey work

7.4.4 A site walkover was undertaken by Katie Pitt, WSP Environment & Infrastructure Solutions UK Limited on 24 August 2022. This comprised a visual inspection of the Site including its topography and land use, as well as designated historic assets within a 5km study area. The known non-designated historic assets within the Site were visited.

7.5 Overall baseline

Current baseline

7.5.1 The archaeological and historical background of the Site is described in the Historic Environment Desk-Based Assessment, included as **Appendix 7A**.

Non-designated historic assets

7.5.2 There are three records of non-designated historic assets located within the Site boundary and these are listed in **Table 7.7**. There are 13 non-designated HER records within the 1km study area, which are included in **Appendix 7C** and shown on **Figure 7.1**.

Table 7.7 Non-designated historic assets located within the Site boundary

HER Ref	Name	Easting	Northing	Period	Type
GGAT08528 m	Trig Pillar (TP5050), Mynydd-Y-Glyn (intact)	303585	189448	Modern	Triangulation Point
GGAT08529 m	Trig Pillar (TP10087), Mynydd-Y-Glyn (destroyed)	303585	189449	Modern	Triangulation Point
GGAT01740 m	Hafod, Rhiwgarn	302590	189730	Medieval	Long hut

Designated historic assets

- 7.5.3 There are no designated historic assets located within the Site boundary. Five listed buildings lie within 1km of the Site boundary. These are located to the north of the Site, at a distance of over 800m. No scheduled monuments or registered park and gardens, conservation areas, or World Heritage Sites are located within 1km of the Site boundary. All designated historic assets within 1km of the Site boundary are listed in **Table 7.8** and shown on **Figure 7.2**.
- 7.5.4 A Stage 1 Assessment has been carried out for all the designated historic assets within the 5km study area, in accordance with The Setting of Historic Assets in Wales¹³ (**Appendix 7D**). The selection of historic assets to be included in the ES has been completed with reference to the Zones of Theoretical Visibility (ZTV) that have been calculated to show the area of theoretical visibility of the proposed turbines based on a seven turbine layout of 155m turbine height (blade tips). From the results of the Stage 1 Settings Assessment, seven scheduled monuments, four listed buildings (or groups), three conservation areas, one historic park and garden and one registered historic landscape are proposed to be assessed further within the EIA process. This includes all the designated assets listed within **Table 7.8**.

Table 7.8 Designated Historic assets within the 5km study area to be further assessed

Reference	Name	Rationale	To be assessed further in Draft ES
Scheduled Monuments			
Cadw 2230	Pontypridd Bridge	Within ZTV. 3.31km from the Site. Potential effect due to proximity to development.	Y
Cadw 3766	Ring cairn and standing stones	Within ZTV. 3.76km from the Site. Potential effect due to proximity to development.	Y
Cadw 1487	Y Garreg Siglo Bardic Complex	Within ZTV. 3.90km from the Site. Potential effect due to proximity to development.	Y
Cadw 2279	Carn-y-Wiwer Cairnfield and platforms	Within ZTV. 3.76km from the Site. Potential effect due to proximity to development.	Y

¹³ 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 August 2022).

Reference	Name	Rationale	To be assessed further in Draft ES
Cadw 2891	Pen-y-Coedcae Roman Camp	Within ZTV. 2.07km from the Site. Potential effect due to proximity to development.	Y
Cadw 3110	Lle'r Gaer	Within ZTV. 1.49km from the Site. Potential effect due to proximity to development.	Y
Cadw 613	Ventilation Furnace, Trehafod	Within ZTV. 1.31km from the Site. Potential effect due to proximity to development.	Y
Listed Buildings			
Cadw 13119	Former Lewis Merthyr Colliery group Former Lewis Merthyr Colliery lamproom and fan house,	Within ZTV. 1.02 – 1.08km from the Site. Potential effect due to proximity to development.	Y
13120	Former Lewis Merthyr Colliery Bertie pithead, headframe, tram circuit and tippler,		
13121	Former Lewis Merthyr Colliery Trefor pithead and headframe,		
13122	Former Lewis Merthyr Colliery Trefor winding engine house,		
13123	Former Lewis Merthyr Colliery fanhouse,		
13124	Former Lewis Merthyr Colliery Bertie winding engine house,		
17126	Former Lewis Merthyr Colliery chimney.		
Cadw 13129	Cymmer Independent Chapel (also known as Hen Capel Y Cymmer)	Within ZTV. 0.95km from the Site. Potential effect due to proximity to development.	Y
Cadw 17110	Church of St John	Within ZTV. 0.82km from the Site. Potential effect due to proximity to development.	Y
Cadw 13503 23948 23949 24276 24279 24280	Castellau Listed Buildings Castellau House, Castellau Congregational Chapel, Gates, piers, boundary walls and bridge at Castellau Congregational Chapel, Treferig Isha, Castellau Ganol, Pant y Ddraenan.	Within ZTV. Between 1.20 km and 2.82 km from the Site. Potential effect due to proximity to development in rural location. Requested by Cadw to be assessed	Y
Conservation Areas			
	Troedrhwiw-Trwyn	Within ZTV. 2.07km from the Site. Potential effect due to proximity to development.	Y
	Graigwen, Pontypridd	Within ZTV. 2.77km from the Site. Potential effect due to proximity to development.	Y
	Pontypridd Town Centre	Within ZTV. 2.74km from the Site. Potential effect due to proximity to development.	Y
Historic Park and garden			
GM3	Pontypridd: Ynysangharad Park	Within ZTV. Under 3.06km from the Site. Potential effect due to proximity to development.	Y

Historic assets within Site boundary

Prehistoric, Roman and Medieval buried remains

- 7.5.5 There is very little prehistoric evidence within the 1km study area to indicate the presence of previously unknown archaeological remains dating to these periods within the Site boundary, and therefore the potential for prehistoric remains is considered to be low.
- 7.5.6 There is no Roman evidence within the study area to indicate the presence of previously unknown archaeological remains dating to this period within the Site boundary, and therefore the potential for Roman remains is considered to be low.
- 7.5.7 There is one medieval non-designated historic asset within the Site, Hafod Rhiwgarn (GGAT01740m) a medieval long hut in a ruinous, damaged condition. Being open upland pasture, the medieval activity across the Site is likely to have been limited to grazing stock and establishing or maintaining low-density field boundaries. Therefore, the Site has a low archaeological potential for unknown medieval remains.

Post-Medieval buried remains

- 7.5.8 Being remote pasture, the Site has a limited potential for post-medieval and modern archaeology. Such remains are largely limited to field boundaries relating to upland pasture and associated cairns.
- 7.5.9 From the mid-19th century, the study area became an area of major coal mining industry. Collieries in the study area include the Lewis Merthyr Colliery, Glyn Colliery, and the Cymmer Colliery. A coal level is recorded on ordnance survey maps in the southern area of the Site.
- 7.5.10 There is built heritage within the Site in the form of an intact modern Trig Pillar (TP5050), Mynydd-Y-Glyn (GGAT08528m) listed within the HER, of local significance. This is immediately adjacent to the site of the destroyed Trig Pillar (TP10087), Mynydd-Y-Glyn (GGAT08529m). As such the Site has a low potential for unknown post-medieval and modern remains.

Summary

- 7.5.11 The Site has a history of pastoral use, as well as including areas of open ground. An assessment of the available data has concluded that the general archaeological potential of the Site from the prehistoric, Roman and medieval periods is low.
- 7.5.12 There are remains of post-medieval agricultural land divisions and associated cairns in localised areas of the Site, as well as limited mining remains. These remains are of low (local) significance.
- 7.5.13 As such the Site has a low potential for unknown post-medieval and modern remains.

Historic assets subject to potential effects arising from changes to settings

Scheduled Monument: Pontypridd Bridge (Cadw 2230)

- 7.5.14 The monument consists of the remains of a bridge dating to the 18th century. It is of high heritage significance for its historic and archaeological interest. Pontypridd Bridge was completed in 1756 and was the last of four bridges designed and built in the same place

by William Edwards. Edwards solved the problem of the pressure on an unusually wide arch by piercing the spandrels. This has proved successful and together with its high arch has formed the distinct character of the bridge. For 40 years the bridge was the widest span bridge in Britain (until Sunderland Bridge of 1796) and the widest in stone until London Bridge of 1831.

- 7.5.15 The monument has a local setting within the town of Pontypridd with strong links to the River Taff and the surrounding streets. It is of significance regarding post-medieval construction techniques and transportation systems. It is located in a built-up area of the town of Pontypridd, within the ZTV and adjacent to large modern buildings.

Plate 1. Scheduled Monument Pontypridd Bridge (Cadw 2230). View south-west towards the Site



Scheduled Monument: Ring cairn and standing stones (Cadw 3766)

- 7.5.16 The monument comprises the remains of a ring cairn of earth and stone which probably dates to the Bronze Age (c. 2300 - 800 BC). It is of high heritage significance for its archaeological interest. The cairn is roughly 11m in diameter. The remains include eight small upright kerb stones about 1m wide, a cist and possible capstone at the south-west edge of the ring. Excavations in about 1830 reported cremations and 'bronze buttons' were found in the stone cist. Two standing stones lie to the north and north-east. The cairn and standing stones are located on a low-level bank on Coedpenmaen common, east of Pontypridd.
- 7.5.17 The monument has a prominent setting on high ground with views to the south-west across the valley of the River Taff. It is of significance regarding prehistoric burial and ritual practices. The feature is an important relic of a prehistoric funerary and ritual landscape and retains significant archaeological potential. It is located within an overgrown and wooded area of open space on high ground that is within the ZTV and has views obscured by trees.

Plate 2. Scheduled Monument Ring cairn and standing stones (Cadw 3766). View south-west towards the Site



Scheduled Monument: Y Garreg Siglo Bardic Complex (Cadw 1487)

- 7.5.18 The monument consists of a bardic monument or gorsedd possibly dating to the 18th century. It is of high heritage significance for its historic and archaeological interest. The monument is associated with the leaders of the Celtic revival. The first and innermost group of 12 stones was erected around 1795 by Edward Williams, also known as Iolo Morganwg, probably modelled on the nearby prehistoric ring cairn. The rocking stone or Y Garreg Siglo at the centre was the focal point for Bardic ceremonies. After Williams' son Taliesin ap Iolo died in 1847, the Gorsedd was revived by Evan Davies, also known as Myfyr Morganwg, who extended the complex in 1849 for his inauguration as Archdruid of Glamorgan. He added a concentric ring of large stones about 14m in diameter around the first twelve stone. Pairs of parallel sinuous lines of smaller stones extend as an avenue in either direction from the circle for some 30m to north-west and south-east, in the form of a serpent. The serpent's head to the north-west has two carved stone 'eyes' and one surviving slab from an arrow-shaped nostil. The carvings on the right eye form concentric circles, and those on the left are the first ten letters of the Bardic alphabet. The monument continued to be used for Eisteddfodau and ceremonies until the 1920s and was a focal point for meetings of nationalists and the labour movement. Evan and James, composers of *Hen Wlad Fy Nhadau*, were admitted to the Gorsedd there in 1850.
- 7.5.19 The monument has a prominent setting on high ground in proximity to Ring cairn and standing stones (Cadw 3766), with views to the south-west across the valley of the River Taff. The monument is of significance being an early and complex monument of the Bardic revival, retaining significant archaeological potential, with a strong probability of the presence of associated archaeological features and deposits. The structure itself may be expected to contain archaeological information concerning chronology and building techniques. It is located within an area of open space on high ground that is within the ZTV, but has views to the west partially obscured by trees.

Plate 3. Scheduled Monument Y Garreg Siglo Bardic Complex (Cadw 1487). View west towards the Site



Scheduled Monument: Carn-y-Wiwer Cairnfield and platforms (Cadw 2279)

- 7.5.20 The monument comprises the remains of several prehistoric round cairns - burial mounds probably dating to the Bronze Age (c.2300 BC - 800 BC) and platform houses of unknown date. It is of high heritage significance for its archaeological interest. The 19 cairns lie in moorland on a ridge. They are spread over approximately one acre, are turf covered and range in size from 3m in diameter and 0.3m high to 6m in diameter and 0.5m high. Some are very low and flat, some are conical and some, saucer-shaped.
- 7.5.21 The platform houses are located slightly to the west of the cairnfield. Nearer the edge of the ridge top are two pairs of platform houses in a north to south line.
- 7.5.22 The monument has a prominent setting on high ground with views to the south-west across the Rhondda Fach valley. The monument is of significance regarding prehistoric burial and ritual and settlement practices. The features are important relics of a prehistoric funerary and ritual landscape and retain significant archaeological potential, with a strong probability of the presence of both intact burial or ritual deposits and environmental and structural evidence. Cairnfields may be part of a larger cluster of monuments and their importance can further enhanced by their group value.
- 7.5.23 It is located within an area of moorland on high ground that is within the ZTV, with a south-westerly aspect across the Rhondda Fach valley.

Scheduled Monument: Pen-y-Coedcae Roman Camp (Cadw 2891)

- 7.5.24 The monument comprises the remains of a Roman marching camp, probably dating from the conquest of Wales by the Romans in the first century AD (probably around AD 74 - 77). It is of high heritage significance for its historic and archaeological interest. It was built as a temporary camp by a marching army as units of the Roman legions pushed west. Pen-y-Coedcae Roman marching camp is the third largest marching camp recorded in Wales. The camp is the typical "playing card" shape with straight sides 478m by 320m in length with rounded corners. The boundary is defined today by a combination of surviving

earthworks, a bank 4.6m wide and up to 0.9m high with a shallow outer ditch, and modern hedgelines which run along the lines of the original Roman defences.

- 7.5.25 The monument has a local setting in an area of undulating, high ground with views to the east across the Taff Valley. The monument is of significance regarding Roman military organisation. The monument forms an important element within the wider context of the Roman occupation of Wales. It is located within an area of undulating pasture on high ground that is within the ZTV.

Plate 4. Scheduled Monument Pen-y-Coedcae Roman Camp (Cadw 2891). View north-west towards the Site



Scheduled Monument: Lle'r Gaer (Cadw 3110)

- 7.5.26 The monument comprises the remains of a hillfort, which probably dates to the Iron Age period (c. 800 BC - AD 74, the Roman conquest of Wales). It is of high heritage significance for its archaeological interest. Hillforts are usually located on hilltops and surrounded by a single or multiple earthworks of massive proportions. Hillforts must have formed symbols of power within the landscape, while their function may have had as much to do with ostentation and display as defence. Lle'r Gaer camp is defended by a single bank which has a maximum height of 3m on the west side.
- 7.5.27 The monument has a prominent setting on a spur of high ground with good surrounding views. The monument is of significance regarding later prehistoric defensive organisation and settlement. The site of the hillfort forms an important element within the wider later prehistoric context and within the surrounding landscape. The site is well preserved and retains considerable archaeological potential. It is located within an area of undulating pasture on high ground that is within the ZTV.

Plate 5. Scheduled Monument Lle'r Gaer (Cadw 3110). View north-west towards the Site



Scheduled Monument: Ventilation Furnace, Trehafod (Cadw 613)

- 7.5.28 The monument consists of the remains of a 19th century colliery ventilation furnace and chimney. It is of high heritage significance for its historic and archaeological interest. It served the coal level at Cwm George in the Rhondda Valley and is situated at the foot of a cliff next to a high waterfall. The chimney is tall, tapers slightly and is built of brick. At its base, on its south-west side, is a small semi-circular opening. To its south-east is a ruined archway about 1.2m wide and 1.5m high. Most of the arch has gone leaving only the springing stones on each side. Behind the chimney an arched tunnel, with an iron-stained stream in its base, runs into the hillside.
- 7.5.29 The monument has a local setting within the Cwm George. It is of heritage significance for its potential to enhance our knowledge of the early nineteenth century coal mining industry. It is located within an area of thick woodland on steeply sloping high ground that is within the ZTV.

Listed Building, Grade II: Cymmer Independent Chapel (also known as Hen Capel Y Cymmer) (Cadw 13129)

- 7.5.30 Cymmer Independent Chapel was built in 1834 to replace a previous chapel of 1743 which was founded by Rev Henry Davies and was the first Nonconformist chapel in the Rhondda. It is listed for its special interest as an historic South Wales Valleys chapel that is rare in having retained the earlier 19th century character of its main frontage. It has a local setting on the High Street of Porth, with its main frontage having a north-westerly aspect. It is of heritage significance for its historic and archaeological interest. It is located within the ZTV.

Plate 6. Listed Building, Grade II: Cymmer Independent Chapel (also known as Hen Capel Y Cymmer) (Cadw 13129). View south-east towards the Site



Listed Building, Grade II: Church of St John (Cadw 17110)

- 7.5.31 Built 1888-9 by the architect E M Bruce Vaughan of Cardiff on land of the Bedw Estate to serve the population working at the Cymmer Colliery Steam Coal Seams which was worked from 1877. The services originally alternated between English and Welsh languages. The church was in the parish of Llantrisant until the new parish of Cymmer and Porth was created in 1894. It has a localised setting within the town of Porth, with the church frontage accessed from the north and west. It is of heritage significance for the special interest of the interior arcades and furnishings, with historic and archaeological interest. It is located within the ZTV.

Listed Building, Grade II-II*: Former Lewis Merthyr Colliery Group (Cadw 17126, 13119, 13120, 13122, 13123, 13124)

- 7.5.32 Lewis Merthyr Colliery was established in the mid-1870s by W T Lewis (later Lord Merthyr) as an amalgamation of the Coedcae and Hafod Collieries both established in 1850. The present buildings are grouped around 2 shafts sunk c.1880 and c.1890. By c.1900 the colliery was one of the largest in Wales producing a million tons of coal a year. It was taken over by Powell Duffryn in 1929 and the National Coal Board in 1947. It closed in 1983 and subsequently has been redeveloped as the Rhondda Heritage Park.
- 7.5.33 Lewis Merthyr Colliery has an enclosed, localised setting in Trehafod. The colliery site contains one of the most complete groups of colliery buildings remaining in Wales, having historic and archaeological interest. It is located within the ZTV in the town of Trehafod within a steep valley.

Plate 7. Listed Building, Grade II-II*: Former Lewis Merthyr Colliery (Cadw 17126, 13119, 13120, 13122, 13123, 13124). View south-west towards the Site



Listed building, Grade II*. Castellau House

- 7.5.34 Castellau House (Cadw 13503, Grade II*) is located 2.87 km to the south-east of the nearest proposed turbine, on land gradually sloping downwards to the south-west. The listed building is a large 17th century house remodelled in c.1800 in Regency style. It has a localised rural setting in its own grounds, with a front facing to the south. It is of historic significance as a fine Regency-style villa, with the interior being of particular merit.

Listed building, Grade II. Castellau Congregational Chapel

- 7.5.35 Castellau Congregational Chapel (Cadw 23948, Grade II) and the associated Gates, piers, boundary walls and bridge at Castellau Congregational Chapel (Cadw 23949) are located 3.62 km to the south-east of the nearest proposed turbine. Castellau Welsh Independent Chapel was built in 1843, a daughter chapel to Cymmer Chapel in Porth. It was rebuilt and enlarged in 1877. It has a localised rural setting in the hamlet of Castellau, the area it served. It is of historic significance as a distinctive Gothic chapel in a rural setting retaining its character and with a fine later 19th century interior.

Listed building, Grade II. Treferig Isha

- 7.5.36 Treferig Isha (Cadw 24276, Grade II) is located 2.33 km to the south of the nearest proposed turbine. The listed building is a 17th century house, with possible earlier origins, having a lobby-entry plan-form and large hall. The unit or byre to the west of the hall is no longer extant. In the late 17th century, the house was owned by John Bevan, a descendent of John ap Jenkin, who became a Quaker and established the Quaker movement in the area. It has a localised rural setting surrounded by associated small, irregular fields. It is of historic significance as an exceptional house of this early period which has few alterations, except for the historical loss of one unit, and retains fine architectural detail. Additional historic interest is derived from the establishment of the Quaker movement in the area.

Listed building, Grade II. Castellau Ganol

- 7.5.37 Castellau Ganol (Cadw 24279, Grade II) is located 1.98 km to the south of the nearest proposed turbine, on a hillside with a south-westerly aspect. The listed building is an early 17th century long-house with hearth-passage arrangement, containing a hall, heated inner room and cow house. It has a localised rural setting surrounded by a wooded area and associated small, irregular fields. It is of historic significance as a sub-medieval farmhouse retaining its character, with the arrangement of the original long-house plan clearly discernible.

Listed building, Grade II. Pant y Ddraenan

- 7.5.38 Pant y Ddraenan (Cadw 24280, Grade II) is located 2.02 km to the south of the nearest proposed turbine, in a low-lying position. The listed building of a house and farm range have sub-medieval origins and was rebuilt in the 1830s. It has a localised rural setting surrounded by a wooded area and associated small, irregular fields. It is of historic significance as an early 19th century farmhouse, with earlier origins, retaining its character and detail.

Conservation Area: Troedrhwi-Trwyn

- 7.5.39 The Troedrhwi-Trwyn Conservation Area is in Hopkinstown on the edge of Pontypridd and includes some countryside and attractive period housing based around a vicarage and farm¹⁴. It has a localised setting and is located within the ZTV on a steeply sloping hillside with a south-easterly aspect.

Plate 8 Conservation Area: Troedrhwi-Trwyn, view south-west towards the Site



¹⁴ Rhondda Cynon Taf County Borough Council (2011). Supplementary Planning Guidance: The Historic Built Environment Available at: <https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/RelateddocumentsSupplementaryplanningGuidanc/TheHistoricBuiltEnvironmentSPG.pdf> (Accessed October 2022).

Conservation Area: Graigwen

- 7.5.40 The Graigwen Conservation Area is a residential area overlooking Pontypridd town centre containing many medium size to large houses, mostly dating from the 19th century. It has a localised residential setting and is located within the ZTV on a steeply sloping hillside with a south-easterly aspect.

Plate 9. Conservation Area: Graigwen, view south-west towards the Site



Conservation Area: Pontypridd Town Centre

- 7.5.41 The Pontypridd Town Centre Conservation Area's key characteristics include a linear plan form with a surrounding landscape of steep valley sides. There is a dominance of late 19th and early 20th century architecture including municipal buildings, Ynysangharad Park and a railway station¹⁵.
- 7.5.42 The Pontypridd Town Centre Conservation Area has a localised urban setting that is partially located within the ZTV.

Historic Park and Garden, Grade II. Pontypridd: Ynysangharad Park (GM3)

- 7.5.43 Well preserved 1920s public park, with numerous sports facilities and ornamental features, including bandstand and sunken rockwork garden. Contains some mature trees and retains its traditional flowerbeds. It has a localised urban setting located partially within the ZTV in the town of Pontypridd.

¹⁵ Rhondda Cynon Taf County Borough Council (2011). Pontypridd Town Centre Conservation Area Appraisal and Management Plan. Available at: <https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/Conservation/relateddocsconservationappraisals/PontypriddTownCentreConservationAreaAppraisalandManagementPlan.pdf> (Accessed October 2022).

Plate 10. Historic Park and Garden, Grade II. Pontypridd: Ynysangharad Park (GM3), view south-west towards the Site



Registered Historic Landscape: The Rhondda (Cadw/ICOMOS: HLW (MGI) 5)

- 7.5.44 The Rhondda Registered Historic Landscape of special historic interest represents one of the largest and best-known mining conurbations and coalfield communities in Britain, having historic and archaeological interest. In the north-western area of the 5km search area, the ZTV includes parts of The Rhondda Registered Historic Landscape, which also extends across the northern area of the Site.
- 7.5.45 As the northern area of the Site lies within The Rhondda registered historic landscape there is potential for effects on this landscape as a result of physical and visual impacts. As such, an ASIDOHL has been undertaken, which is the staged process for assessing the significance of the impact of development on historic landscape areas on the Register (included in **Appendix 7E**).

Grid Connection corridor

- 7.5.46 There are no records of non-designated historic assets located within the grid connection corridor both within and outside of the Site boundary. There are two HER records within a 500m study area within the Site boundary, modern trig pillar (GGAT 08528) and destroyed trig pillar (GGAT 08529), which are over 400m to the north-east.
- 7.5.47 There are no designated historic assets located within the grid connection corridor. One listed building is located within the 500m study area, the grade II Church of St Illtyd (Cadw 25541) that is located 87m to the south-west of the corridor of the grid connection. Two scheduled monuments, Pen-y-Coedcae Roman Camp (Cadw 2891) and Tomen y Clawdd medieval motte (Cadw 3466) are located within the 500m study area.

Future baseline

- 7.5.48 There are no known committed development(s) or forecasted changes that would materially alter the baseline conditions during the construction, and operation phases of

the Proposed Development. It is likely that continuing pastoral use of the Site would result in no change to any archaeological remains that may be present.

7.6 Embedded measures

7.6.1 A range of environmental measures have been embedded into the Proposed Development as discussed in **Section 4.8. Table 7.9** outlines how these embedded measures will influence the Historic Environment assessment.

Table 7.9 Summary of the embedded environmental measures related to the Historic Environment

Receptor	Potential changes and effects	Embedded measures	Compliance mechanism
Construction			
Designated assets within 5km with potential effects	Effects to the significance of the historic asset through change to its setting	Designs have kept effects to a minimum. The construction phase will be temporary.	Development design
Sub-surface Archaeology	Direct disturbance to sub-surface archaeology.	The existing known archaeology within the Site will be mitigated through archaeological recording such as an excavation or watching brief in any areas of impact. The exact method of archaeological recording would need to be agreed and would subsequently be secured through a DNS condition.	DNS planning condition
Trig Pillar (TP5050), Mynydd-Y-Glyn (intact) (GGAT08528m)	Direct disturbance to standing and sub-surface archaeology.	To ensure construction works do not encroach into the area of the assets they will be temporarily fenced off throughout construction works.	DNS planning condition
Hafod, Rhiwgarn (GGAT01740m)			
Operation			
Designated assets within 5km with potential effects	Effects to the significance of the historic asset through change to its setting	Designs have kept effects to a minimum.	Development design

7.7 Scope of the assessment

Spatial scope

7.7.1 The spatial scope of the assessment of Historic Environment covers the area of the Proposed Development with a 5km study area. Within this spatial scope, a 1km study area has been used to assess archaeological potential within the Site and to identify likely direct effects (**Figure 7.1**). Effects to historic assets arising from changes to their settings have been assessed within the 5km study area (**Figure 7.2**).

Temporal scope

7.7.2 The temporal scope of the assessment of Historic Environment is consistent with the period over which the Proposed Development would be carried out and therefore covers the construction and operational periods.

7.7.3 Decommissioning activities would not be expected to result in notable additional ground disturbance, though this would depend on the location of any on-site temporary compound. As this is not known at this stage, and would be considered at the time if required, this is not considered in the assessment. The removal of turbines and grid connection infrastructure would end any operational period effects on the settings of historic assets and would not give rise to any additional effect. As a result of this decommissioning period effects are not assessed.

Potential receptors

7.7.4 The receptors taken forward for assessment have been identified through desk-based assessment, and consultation with Cadw.

7.7.5 The receptors that will potentially be affected by the Proposed Development comprise:

- sub-surface archaeological remains surviving within the Site; and
- identified scheduled monuments, listed buildings, registered historic landscape and conservation areas.

7.7.6 With regard to effects on settings, a Stage 1 Assessment has been carried out for all the designated historic assets within 5km from the Site, in accordance with The Setting of Historic Assets in Wales (**Appendix 7D**). The selection of historic assets to be included in the Draft ES has been completed with reference to the ZTV that have been calculated to show the area of theoretical visibility of the proposed turbines based on a seven turbine layout of 155m turbine height (to blade tips).

7.7.7 Including those assets identified in **Appendix 7D**, the principal Historic Environment receptors that have been identified as being potentially subject to significant effects are summarised in **Table 7.10**.

Table 7.10 Historic Environment receptors subject to potential effects

Receptor	Reason for consideration
On- Site sub-surface archaeological remains	There is the potential for effects as a result of groundworks and other construction activities that are likely to completely or partially remove identified and as yet unknown historic assets.

Receptor	Reason for consideration
Off-Site designated assets (as identified through Stage 1)	Within ZTV. Within 5km km from the Site. Potential effect due to proximity to development.

Likely significant effects

7.7.8 The effects on Historic Environment assessment receptors which have the potential to be significant and have been taken forward for assessment are summarised in **Table 7.11**.

Table 7.11 Historic Environment assessment receptors scoped in for further assessment

Receptors	Justification
Sub-surface archaeological remains	There is potential for loss of or disturbance to sub-surface archaeological remains as a result of groundworks and other construction activities that are likely to completely or partially remove identified and as yet unknown historic assets.
Scheduled monument: Pontypridd Bridge (Cadw 2230)	The Pontypridd Bridge has a local setting in Pontypridd town. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Scheduled monument: Ring cairn and standing stones (Cadw 3766)	The Ring cairn and standing stones are situated within an overgrown and wooded area of open space on high ground in Pontypridd. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Scheduled monument: Y Garreg Siglo Bardic Complex (Cadw 1487)	Y Garreg Siglo Bardic Complex is located within an area of open space on high ground in Pontypridd with views to the south-east partially obscured by trees. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Scheduled monument: Carn-y-Wiwer Cairnfield and platforms (Cadw 2279)	Carn-y-Wiwer Cairnfield and platforms is located within an area of moorland on high ground, with a south-westerly aspect across the Rhondda Fach valley. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Scheduled monument: Pen-y-Coedcae Roman Camp (Cadw 2891)	It is located within an area of undulating pasture on high ground. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Scheduled monument: Lle'r Gaer (Cadw 3110)	It is located within an area of undulating pasture on high ground that is within the ZTV. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Scheduled monument: Ventilation Furnace, Trehafod (Cadw 613)	It is located within an area of thick woodland on steeply sloping high ground. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Listed Buildings, Grade II-II*: Former Lewis Merthyr Colliery lamproom and fan house, Former Lewis Merthyr Colliery Bertie pithead, headframe, tram circuit and tippler, Former Lewis Merthyr Colliery Trefor pithead and headframe, Former Lewis Merthyr Colliery Trefor winding engine house,	It is located within the town of Trehafod within a steep valley. Effects on asset through change in setting completed for reasons given in Appendix 7D .

Receptors	Justification
Former Lewis Merthyr Colliery fanhouse, Former Lewis Merthyr Colliery Bertie winding engine house, Former Lewis Merthyr Colliery chimney (Cadw 13119-13124, 17126)	
Listed Building, Grade II: Cymmer Independent Chapel (also known as Hen Capel Y Cymmer) (Cadw 13129)	It is located within the town of Porth. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Listed Building, Grade II: Church of St John (Cadw 17110)	It is located within the town of Porth. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Listed Building, Grade II-II*: Castellau Listed Buildings Castellau House (Cadw 13503), Castellau Congregational Chapel (Cadw 23948), Gates, piers, boundary walls and bridge at Castellau Congregational Chapel (Cadw 23949), Treferig Isha (Cadw 24276), Castellau Ganol (Cadw 24279), Pant y Ddraenan (Cadw 24280).	It is located within the hamlet of Castellau. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Conservation Area: Troedrhwi-Trwyn	The Troedrhwi-Trwyn Conservation Area is located on a steeply sloping hillside with a south-easterly aspect. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Conservation Area: Graigwen, Pontypridd	The Graigwen Conservation Area is located on a steeply sloping hillside with a south-easterly aspect. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Conservation Area: Pontypridd Town Centre	The Pontypridd Town Centre Conservation Area is located within an urban area. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Historic Park and Garden, Grade II. Pontypridd: Ynysangharad Park (GM3)	It is located within the town of Pontypridd. Effects on asset through change in setting completed for reasons given in Appendix 7D .
Registered Historic Landscape: The Rhondda (Cadw/ICOMOS: HLW (MGI) 5).	The Rhondda registered landscape of special historic interest is within the ZTV and partially within the Site. Effects on The Rhondda Registered Historic Landscape are considered in the ASIDOHL. in Appendix 7E .

7.8 Assessment methodology

- 7.8.1 The generic project-wide approach to the assessment methodology is set out in **Chapter 2: Approach to Environmental Impact Assessment**. However, whilst this has informed the approach that has been used in this Historic Environment assessment, it is necessary to set out how this methodology has been applied, and adapted as appropriate, to address the specific needs of this Historic Environment assessment.

Determining the significance of effects

- 7.8.2 The EIA Regulations recognise that developments will affect different environmental elements to differing degrees, and that not all of these are of sufficient concern to warrant detailed investigation or assessment through the EIA process. The EIA Regulations identify those environmental resources that warrant investigation as those that are “*likely to be significantly affected by the development*”.
- 7.8.3 The EIA Regulations do not define significance and it will be necessary to state how this will be defined for the EIA. The significance of an effect resulting from a development during construction or operation is most commonly assessed by reference to the sensitivity or value of a receptor and the magnitude of the effect, as set out in **Table 7.14**. This approach provides a mechanism for identifying areas where mitigation measures may be required and to identify the most appropriate measures to alleviate the risk presented by the development.
- 7.8.4 For the purposes of assessing the significance of effects, heritage significance has also been assigned to one of four classes of value, with reference to the heritage interests described in Conservation Principles and relying on professional judgement as informed by policy and guidance. The hierarchy given in **Table 7.12** reflects the TAN24 distinction between designated and non-designated historic assets. TAN24 further distinguishes between designated assets of the highest heritage significance (i.e. scheduled monuments, protected wreck sites, Registered Battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites) and other designated historic assets. **Table 7.12** details the basis for assessing receptor value (heritage significance).

Table 7.12 Establishing the heritage significance of assets

Heritage significance	Summary rationale	Examples
High	Asset has significance for an outstanding level of archaeological, architectural, historic and/or artistic interest	All designated historic assets or non-designated assets of demonstrably schedulable quality
Medium	Asset has significance for a high level of archaeological, architectural, historic and/or artistic interest	Locally listed buildings and buildings of merit. Regionally significant non-designated historic assets of archaeological interest.
Low	Asset has significance for elements of archaeological architectural, historic or artistic interest	Locally-significant historic assets of archaeological interest and important hedgerows
Negligible	Due to its nature of form/condition/survival, cannot be considered as an asset in its own right	Non-extant Historic Environment Record (HER) references

- 7.8.5 **Table 7.13** details the basis for assessing magnitude of change.

Table 7.13 Establishing the magnitude of change

Magnitude	Criteria
High	Loss of significance of an order of magnitude that would result from total or substantial demolition/disturbance of a historic asset or from the disassociation of an asset from its setting.
Medium	Loss of significance arising from partial disturbance or inappropriate alteration of asset which will adversely affect its importance. Change to the key characteristics of an asset's setting, which gives rise to harm to the significance of the asset but which still allows its archaeological, architectural or historic interest to be appreciated.
Low	Minor loss to or alteration of an asset which leaves its current significance largely intact. Minor and short-term changes to setting which do not affect the key characteristics and in which the historical context remains substantially intact.
Negligible	Minor alteration of an asset which does not affect its significance in any discernible way. Minor and short term or reversible change to setting which does not affect the significance of the asset.

7.8.6 The matrix in **Table 7.14** has been prepared to guide the assessment of whether effects on the historic environment for the purposes of EIA are to be considered significant or not. The classification of the effect is judged on the relationship of the magnitude of impact to the assessed heritage significance of the resource. As a general rule, major and moderate effects (shaded in **Table 7.14**) are considered to be significant and minor and negligible effects are considered to be not significant. However, professional judgement is applied, where appropriate, to determine significance of effect.

Table 7.14 Significance evaluation matrix

		Heritage Significance of Receptor			
		Negligible	Low	Medium	High
Magnitude	Negligible	Negligible	Negligible	Minor	Minor
	Low	Negligible	Minor	Minor	Moderate
	Medium	Minor	Minor	Moderate	Major
	High	Minor	Moderate	Major	Major

7.9 Preliminary Assessment of the Historic Environment effects

Construction Phase Direct Disturbance

Wind Farm development

Sub-surface archaeology

- 7.9.1 Limited intrusive groundworks would take place in specific areas across the Site, including:
- up-grading of existing tracks and construction of new access tracks and passing places inter-linking the turbine locations and substation;
 - temporary site compounds;
 - wind turbine foundations;
 - wind turbine crane hard standing, with adjacent blade storage areas;
 - cable trenches; and
 - switchroom and substation compound.
- 7.9.2 Invasive works of this nature would adversely affect any surviving sub-surface archaeological remains, reducing or removing their ability to be further interpreted. This would result in, at worst, a loss of archaeological interest in specific areas of the Site.
- 7.9.3 The Site has a history of pastoral use, as well as including areas of open ground. An assessment of the available data has identified very low density post-medieval and modern recorded archaeological remains.
- 7.9.4 To reduce potential archaeological impacts and mitigation, the design of the Proposed Development has avoided the locations of the post-medieval cairns, field boundary walls and all non-designated assets known within the Site boundary.

Grid Connection

- 7.9.5 Very limited intrusive groundworks would take place in specific localised areas of wooden pole construction and therefore significant effects are considered unlikely.
- 7.9.6 As the cable is to be buried underground outside of the Site boundary, there is potential for some limited direct impacts to unknown historic assets.

Construction Phase Effects on Setting

Wind Farm development

- 7.9.7 The Proposed Development is located at a sufficient distance (a minimum of 800m) from the scoped in designated historic assets to ensure that no visual, noise or dust impacts will arise during the construction period. Any effects on setting would therefore arise from visual changes only. These would be similar to those of the operational phase, with construction period changes being at their greatest toward the completion of construction. Therefore, the potential for effects arising from changes to setting during construction period are not distinguishable from operational period effects and are considered in that section.

Grid Connection

- 7.9.8 The grid connection from the Site to the wider national grid is proposed to be an overhead line to the south-eastern boundary of the Site towards Upper Boat and then a buried cable that in the majority follows modern road routes to the connection point. There are no designated historic assets located within the indicative corridor for the grid connection. One listed building is located within the 500m study area, the grade II Church of St Illtyd (Cadw 25541) that is located 87m to the south-west of the corridor of the grid connection. Two scheduled monuments, Pen-y-Coedcae Roman Camp (Cadw 2891) and Tomen y Clawdd medieval motte (Cadw 3466) are within the 500m study area, located 100m to the north-east and 77m to the south of the corridor of the grid connection respectively.
- 7.9.9 There would be no impacts on the heritage significance of these assets during the construction phase and no effects would arise.

Operational Phase Impacts

Wind Farm development

Sub-surface archaeology

- 7.9.10 The construction phase of the Proposed Development would have completely or partially removed any sub-surface archaeological remains as a result of ground works or other construction activities. As a result, there would be no additional effects in the operational phase.

Effects on the setting of historic assets

- 7.9.11 There would be no impact or a negligible magnitude of impact to the identified historic assets and as such the significance of effects on the setting of the historic assets is summarised in **Table 7.16** with a rationale provided in each case.

7.10 Preliminary assessment of cumulative (inter-project) effects

- 7.10.1 The potential effects of the Proposed Development cannot be considered in isolation.
- 7.10.2 There are a number of operational, consented or proposed wind energy developments within the general vicinity of the development site (**Figure 6.4**).
- 7.10.3 Those assets where it was determined that there was no change, or that the effect of the Proposed Development would be negligible, have not been considered within the cumulative assessment, as significant cumulative effects are unlikely to occur.

7.11 Preliminary significance conclusions

- 7.11.1 A summary of the results of the Preliminary Historic Environment assessment is provided in **Table 7.15** to **Table 7.16**.

Table 7.15 Summary of significance of effects during the construction phase

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
Trig Pillar (TP5050), Mynydd-Y-Glyn (intact) (GGAT08528m)	Low	Low	Minor	The asset is of local significance and would not be directly impacted by the proposed wind farm, however, to ensure works don't encroach into the area of the asset it would be temporarily fenced off.
Hafod, Rhiwgarn (GGAT01740m)	Low	Low	Minor	The asset is of local significance and would not be directly impacted by the Proposed Development, however, to ensure works don't encroach into the area of the asset it would be temporarily fenced off.
Post-medieval cairns	Low	Low	Minor	The asset is of local significance and would not be directly impacted by the Proposed Development, however, to ensure works don't encroach into the area of the asset it would be temporarily fenced off.
Stone field boundary walls	Low	Low	Minor	The assets are of local significance and would be avoided by the designs of the Proposed Development.

1. The sensitivity/importance/value of a receptor is defined using the criteria set out in **Section 7.8** and is defined as [negligible, low, medium, and high].
2. The magnitude of change on a receptor resulting from activities relating to the development is defined using the criteria set out in **Section 7.8** and is defined as [negligible, low, medium and high].
3. The significance of the environmental effects is based on the combination of the sensitivity/importance/value of a receptor and the magnitude of change and is expressed as major (significant), moderate (significant) or minor/negligible (not significant), subject to the evaluation methodology outlined in **Section 7.8**.

Table 7.16 Summary of significance of effects during the operational phase

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
Sub-surface archaeological remains	Low	None	None	The construction phase of the Proposed Development would have removed any sub-surface archaeological remains in areas of impact. As a result, there would be no additional effects in the operational phase.
Scheduled monument: Pontypridd Bridge (Cadw 2230)	High	None	None	The Proposed Development would introduce turbines within approximately 3.40 km of the monument and the ZTV indicates that blade tips may be visible. However, the Pontypridd Bridge is in a heavily developed area with the modern Pontypridd Library building blocking any views towards the Site. The monument has a local setting in Pontypridd town which will not be affected.
Scheduled monument: Ring cairn and standing stones (Cadw 3766)	High	Negligible	Minor (Not significant)	The Ring cairn and standing stones are situated within an overgrown and wooded area of open space on high ground in Pontypridd. The Proposed Development would introduce turbines within approximately 3.86 km of the monument and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. This would potentially introduce a new element into views from the monument to the south-west but not would alter views in other directions. The overgrown and wooded location of the monument would screen or filter views toward the turbines and so limit effects to its setting.
Scheduled monument: Y Garreg Siglo Bardic Complex (Cadw 1487)	High	Negligible	Minor (Not significant)	Y Garreg Siglo Bardic Complex is located within an area of open space on high ground with a southerly aspect which has views to the east partially obscured by trees. The Proposed Development would introduce turbines within approximately 4km of the monument and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. This would introduce a new element in partially obscured views to the east but would not affect views in other directions.

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
Scheduled monument: Carn-y-Wiwer Cairnfield and platforms (Cadw 2279)	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 4km of the monument and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. Carn-y-Wiwer Cairnfield and platforms is located within an area of moorland on high ground with a south-westerly aspect across the Rhondda Fach valley. This would introduce a new element into views from the monument to the south but would not alter views in other directions or the principal view across the Rhondda Fach valley to the south-west.
Scheduled monument: Pen-y-Coedcae Roman Camp (Cadw 2891)	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 2.58km of the monument and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. This would introduce a new element into views from the monument to the north-west but would not alter views in other directions.
Scheduled monument: Lle'r Gaer (Cadw 3110)	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 2.39km of the monument and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. This would introduce a new element into views from the monument to the north-west but would not alter views in other directions.
Scheduled monument: Ventilation Furnace, Trehafod (Cadw 613)	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 1.51km of the monument and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. The monument is located within a thickly wooded area which obscures views towards the Site.
Listed Buildings, Grade II-II*: Former Lewis Merthyr Colliery Group. Former Lewis Merthyr Colliery lamproom and fan house (Cadw 13119),	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 1.23km of the Former Lewis Merthyr Colliery which is located on the periphery of the ZTV at the base of the Rhondda River valley, with an enclosed, localised setting in Trehafod.

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
<p>Former Lewis Merthyr Colliery Bertie pithead, headframe, tram circuit and tippler (Cadw 13120), Former Lewis Merthyr Colliery Trefor pithead and headframe (Cadw 13121), Former Lewis Merthyr Colliery Trefor winding engine house (Cadw 13122), Former Lewis Merthyr Colliery fanhouse (Cadw 13123), Former Lewis Merthyr Colliery Bertie winding engine house (Cadw 13124), Former Lewis Merthyr Colliery chimney (Cadw 17126).</p>				
<p>Listed Building, Grade II: Cymmer Independent Chapel (also known as Hen Capel Y Cymmer) (Cadw 13129)</p>	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 1.27km of the chapel and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. However, this would not affect the setting of the chapel within the town of Porth.
<p>Listed Building, Grade II: Church of St John (Cadw 17110)</p>	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 1.14km of the church and the ZTV indicates theoretical visibility of at least some of the turbines to tip height. However, this would not affect the localised setting of the church within the town of Porth, especially as the church frontage is accessed from the north and west.
<p>Listed Building, Grade II*: Castellau House (Cadw 13503)</p>	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 2.87 km of the Castellau House and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. However, this would not affect the settings of the house as it has a localised rural setting in its own grounds, with a front facing to the south.

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
Listed building, Grade II: Castellau Congregational Chapel (Cadw 23948), Gates, piers, boundary walls and bridge at Castellau Congregational Chapel (Cadw 23949)	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 3.62 km of Castellau Congregational Chapel and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. However, this would not affect the localised setting of the Chapel in the hamlet of Castellau.
Listed building, Grade II: Treferig Isha (Cadw 24276)	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 2.33 km of Treferig Isha and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. However, this would not affect the setting of the house within a localised rural setting surrounded by associated small, irregular fields.
Listed building, Grade II: Castellau Ganol (Cadw 24279)	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 1.98 km of Castellau Ganol and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. However, this would not affect the setting of the farmhouse within a wooded area and associated small, irregular fields.
Listed building, Grade II: Pant y Ddraenan (Cadw 24280)	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 2.02 km of Pant y Ddraenan and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. However, this would not affect the setting of the farmhouse within a wooded area and associated small, irregular fields.
Conservation Area: Troedrhiw-Trwyn	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 2.17km south-west of the conservation area and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. However, this would not affect the localised setting of the conservation area, which is on a steeply sloping hillside with a south-easterly aspect.

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
Conservation Area: Graigwen, Pontypridd	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 2.86km south-west of the conservation area and the ZTV indicates theoretical visibility of at least some of the turbines to hub height. However, this would not affect the localised setting of the conservation area, which is on a steeply sloping hillside with a south-easterly aspect.
Conservation Area: Pontypridd Town Centre	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 2.84km south-west of the conservation area. The ZTV indicates partial theoretical visibility of at least some of the turbines to tip height. This would not affect the localised setting of the conservation area, which is within the urban centre of the town.
Historic Park and Garden, Grade II. Pontypridd: Ynysangharad Park (GM3)	High	Negligible	Minor (Not significant)	The Proposed Development would introduce turbines within approximately 3.17km south-west of the park. The ZTV indicates partial theoretical visibility of at least some of the turbines to tip height. This would not affect the localised setting of the park, which is within the urban centre of the town.

1. The sensitivity/importance/value of a receptor is defined using the criteria set out in **Section 7.8** and is defined as negligible, low, medium, and high.
2. The magnitude of change on a receptor resulting from activities relating to the development is defined using the criteria set out in **Section 7.8** and is defined as negligible, low, medium, and high.
3. The significance of the environmental effects is based on the combination of the sensitivity/importance/value of a receptor and the magnitude of change and is expressed as major (significant), moderate (significant) or minor/negligible (not significant), subject to the evaluation methodology outlined in **Section 7.8**.