

# MONA OFFSHORE WIND PROJECT

## Environmental Statement

### Volume 7, Annex 5.6: Settings assessment (onshore infrastructure)

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Image of an offshore wind farm

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**Document status**

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### Glossary

Term	Meaning
Designated historic asset	A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield, Registered Historic Landscape or Conservation Area designated under the relevant legislation.
Historic asset	An identifiable component of the historic environment. It may consist or be a combination of an archaeological site, a historic building or area, historic park and garden or a parcel of historic landscape. Nationally important historic assets will normally be designated.
Historic environment	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 landscaped and planted or managed flora.
Setting of a historic asset	The setting of an historic asset includes the surroundings in which it is understood, experienced and appreciated embracing present and past relationships to the surrounding landscape. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
Significant view	Significant views are identified in the Register of Parks and Gardens of Special Historic Interest as part of the registration process.

### Acronyms

Acronym	Description
CIfA	Chartered Institute for Archaeologists
PEIR	Preliminary Environmental Information Report
TAN	Technical Advice Note
NG	National Grid
ZTV	Zone of Theoretical Visibility

### Units

Unit	Description
km	Kilometres
kV	Kilovolt
m	Metres
m <sup>2</sup>	Square metres

# 1 Settings assessment (onshore infrastructure)

## 1.1 Introduction

- 1.1.1.1 This document presents the results of the assessment of potential impacts and effects arising from changes within the settings of designated historic assets as a result of the construction, operations and maintenance and decommissioning of the onshore elements of the Mona Offshore Wind Project.
- 1.1.1.2 The onshore elements of the Mona Offshore Wind Project are located in Conwy and Denbighshire, North Wales and comprise:
- The Mona Landfall to the west of Abergele
  - The Onshore Substation to the southwest of St Asaph
  - The Mona Onshore Cable Corridor approximately 15 km in length, that links the Mona Landfall to the Onshore Substation
  - The Mona 400 kV Grid Connection Cable Corridor, approximately 1 km in length linking the Onshore Substation to the Bodelwyddan National Grid Substation.
- 1.1.1.3 These elements are included in the Mona Onshore Development Area together with the construction compounds, accesses and other land that would be temporarily or permanently occupied during the construction, operations and maintenance and decommissioning of the Mona Offshore Wind Project.
- 1.1.1.4 The settings assessment has examined data from a number of sources, principally the Cadw website (Cof Cymru), in order to identify designated historic assets within defined study areas.
- 1.1.1.5 Provision of this settings assessment within the Environmental Statement was described within the Preliminary Environmental Information Report (PEIR) prepared for the Mona Offshore Wind Project (paragraph 19.14.1.4 of Volume 3, Chapter 19: Historic environment, of the PEIR). It was not possible to produce a similar level of assessment for the PEIR as the design of key elements such as the Onshore Substation had not progressed to the necessary level at that time.

## 1.2 Designated historic assets study area

- 1.2.1.1 The historic environment designated historic assets study area was agreed with relevant stakeholders through the Scoping process. It comprises the Mona Onshore Development Area and the following, and is shown on Figure 1 and Figure 2:
- Designated historic assets of the highest significance (e.g. Scheduled Monuments, Grade I and II\* listed buildings, Grade I and II\* Registered Parks and Gardens of Special Historic Interest and Landscapes of Special Historic Interest,) – 1 km from the Mona Onshore Development Area and also a 5 km radius centred on the Onshore Substation
  - Other designated historic assets (e.g. Grade II listed buildings, Grade II Registered Parks and Gardens of Special Historic Interest and Conservation Areas) – 1 km from the Mona Onshore Development Area.

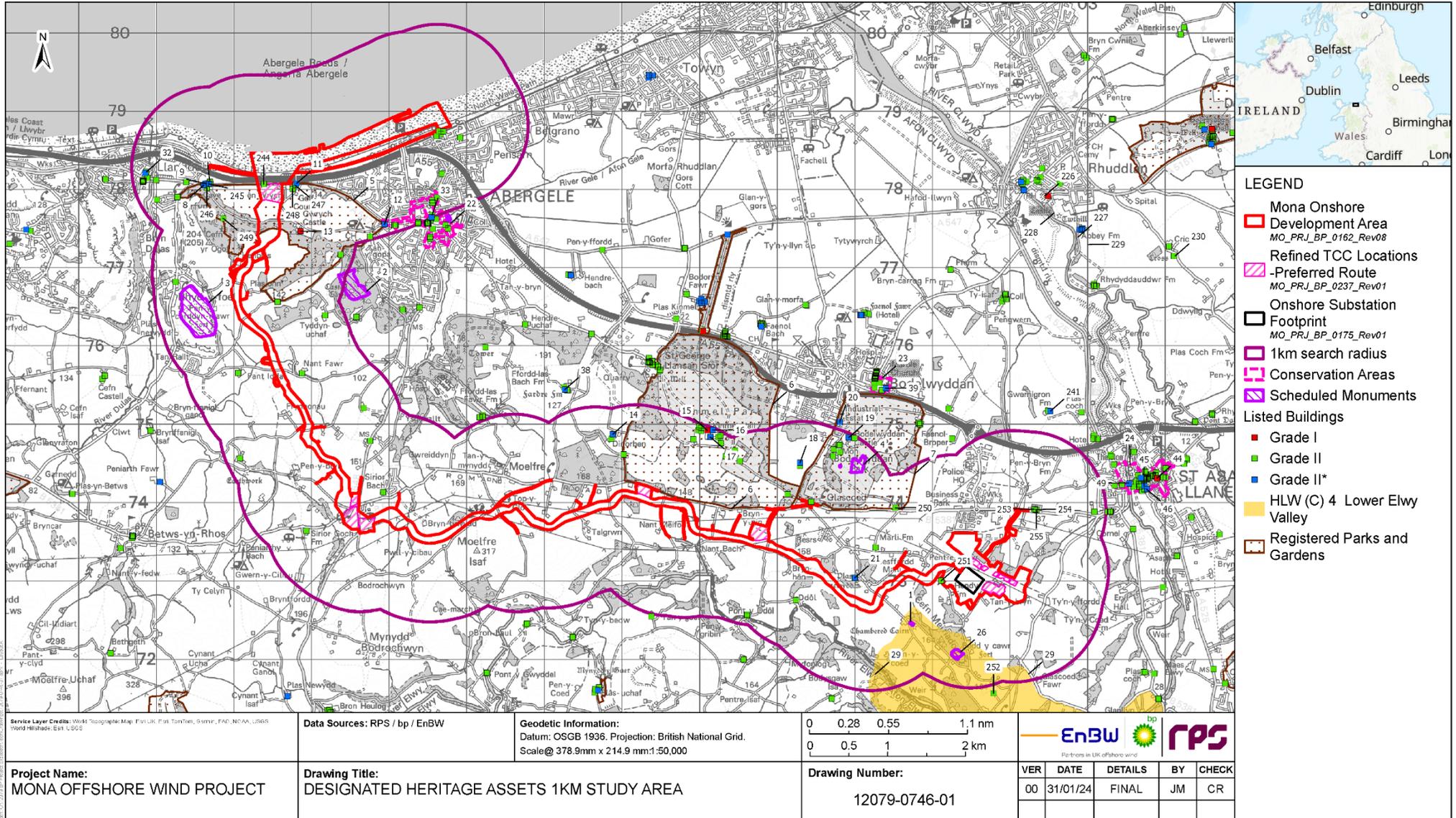


Figure 1: Designated heritage assets 1 km study area

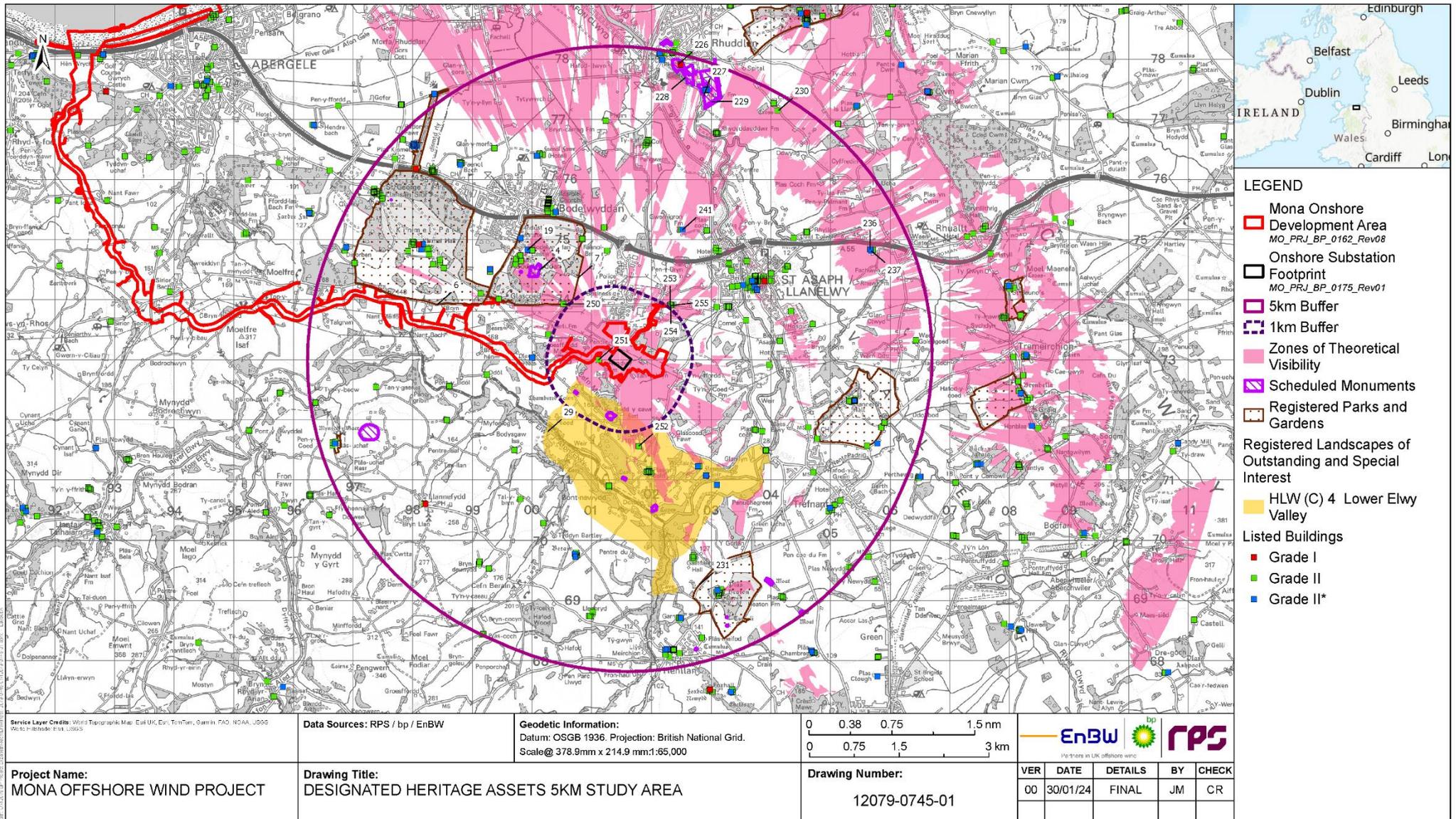


Figure 2: Designated historic assets 5 km study area

## 1.3 Methodology

- 1.3.1.1 This settings assessment has been prepared with reference to appropriate guidance and ‘good practice’ advice including that presented in the Chartered Institute for Archaeologists’ *Standard and Guidance for Historic Environment Desk Based Assessment* (ClfA 2020).
- 1.3.1.2 This settings assessment has been prepared in accordance with a written specification that was submitted to, and agreed by, the Clwyd-Powys Archaeological Trust (see Appendix A). It should be noted that the written specification includes project information which has been superseded since the time that document was prepared.
- 1.3.1.3 The historic environment study area (see section 1.2) was used for the purposes of data collection and, where appropriate, material beyond the designated historic assets study area has also been examined.
- 1.3.1.4 The appraisal of desk-based information has been augmented by site walkovers in June 2022, September 2023, and October 2023. The site walkovers assisted in informing the assessment of potential changes within the settings of designated historic assets within the defined study area.
- 1.3.1.5 Within Volume 7, Annex 5.1: Desk based assessment of the Environmental Statement, each identified historic asset (with the exception of most Grade II listed buildings) has been allocated a unique site number cross referenced to figures and appendices comprising tables of historic assets. Where relevant these unique site numbers are used within this settings assessment.
- 1.3.1.6 With two exceptions, those being with regard to the Gwrych Castle Grade II\* Registered Historic Park and Garden (Site 5) and associated Grade II listed Gwrych Estate Boundary Wall (Site 244), all proposed impacts on the heritage significance of designated historic assets would be non-physical and would derive from changes within the setting of the assets in question. The effects of the physical impacts on the Gwrych Castle Grade II\* Registered Historic Park and Garden (Site 5) and associated Grade II listed Gwrych Estate Boundary Wall (Site 244) are assessed in Section 5.10 of Volume 3, Chapter 5: Historic environment of the Environmental Statement.
- 1.3.1.7 Planning Policy and guidance appropriate to the historic environment are set out in detail in Volume 7, Annex 5.2; Historic environment policy and guidance of the Environmental Statement and summarised within Volume 3, Chapter 5: Historic environment of the Environmental Statement. For immediate reference, the key guidance relevant to undertaking settings assessments in Wales is set out within the Setting of Historic Assets in Wales (Cadw, 2017).
- 1.3.1.8 This guidance document focuses on the management of change within the setting of historic assets. It explains what setting is, how it contributes to the significance of a historic asset, and why it is important, in order to aid practitioners with the implementation of Welsh national policies and guidance relating to the historic environment.
- 1.3.1.9 In the Conservation Principles document (Cadw, 2011), setting was defined as: ‘*The surroundings in which an historic asset is experienced, its local context, embracing present and past relationships to the adjacent landscape*’.
- 1.3.1.10 This definition has been updated in Technical Advice Note 24 (TAN24) to: ‘*The setting of a historic asset includes the surroundings in which it is understood, experienced and appreciated, embracing present and past relationships to the surrounding landscape*’.

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*Its extent is not fixed and may change as the asset and its surroundings evolve. Setting is not a historic asset, though land within a setting may contain other historic assets'* (Welsh Government, 2017, Annex D).

- 1.3.1.11 The definition is repeated in recent guidance regarding the issue of the settings of historic assets in Wales (Cadw, 2017), which makes the following points:
- Setting usually extends beyond the property boundary of an individual historic asset
  - Intangible factors such as function, sensory perceptions or historical, artistic, literary and scenic associations can be important in understanding settings, as well as physical elements within the surroundings of the asset
  - When development is proposed there is a need to assess the historic assets that may be affected and understand how their settings contribute to the significance of these assets.
- 1.3.1.12 The 2017 document goes on to outline a four-stage approach to decision-taking, as follows:
- 1) Identify which historic assets and their settings could be affected by a proposed development;
  - 2) Define and analyse the setting of each historic asset and assess whether, how and to what degree the setting contributes to the heritage significance of the asset;
  - 3) Evaluate the effects of the proposed development, whether beneficial or harmful, on that heritage significance; and
  - 4) Consider options to mitigate or improve potential impacts on that heritage significance.
- 1.3.1.13 The guidance also states that the introduction of offsetting or compensatory proposals, such as public access or interpretation panels, will not reduce the impact of the development within the setting of the historic asset, and thus should not be accepted as mitigation. However, these may be considered when the decision-making body weighs up the benefits of the scheme.
- 1.3.1.14 Although assessments of changes within the settings of historic assets can involve non-visual issues such as noise, odour and vibration, it is usually the visual aspects of a development that form the major part of the assessment.
- 1.3.1.15 The existence of direct lines of sight between the historic asset and the proposed development is an important factor in judging the visual impact of the development. However, it is possible for changes within the setting to occur even when such a relationship does not exist. For example, views towards a listed building from a frequently visited location, such as a park or a public footpath, may be affected by the presence of a larger development, even if the development is not directly visible from the building itself.
- 1.3.1.16 An assessment of visual impacts on the historic assets and their settings needs to consider a wide variety of factors including the location of the asset within the physical landscape, its relationship with contemporary and non-contemporary features within that landscape and the location, size and character of the proposed development in relation to these factors.
- 1.3.1.17 The assessment then needs to balance the impact of these various considerations based on informed professional judgment. Assessment of visual impacts can be undertaken in accordance with the procedures expressed in the Guidelines for

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Landscape and Visual Impact Assessment 3<sup>rd</sup> Edition (Landscape Institute, 2013). If there is the potential for changes within the setting of historic assets due to noise or other impacts than these would be considered using appropriate procedures.

- 1.3.1.18 There should also be consideration of the sensitivity to change of the setting of a historic asset. This requires examination of the current setting with regard to identifying elements that contribute to the heritage significance of the asset, elements that make a neutral contribution to the heritage significance of the asset and elements that make a negative contribution to (i.e. detract from) the heritage significance of the asset.

## 1.4 Scoping

- 1.4.1.1 Not all designated historic assets within the settings study area would be affected by the Mona Offshore Wind Project. Through a consideration of the Mona Offshore Wind Project in context to distance, elevation, function and designation status of an asset, in addition to factoring in the results of the site walkovers, assessment of intervisibility, and in combination with professional opinion, it has been possible to scope out a substantial number of designated historic assets from a requirement for further assessment. This scoping has also been informed by the production of a Zone of Theoretical Visibility (ZTV) for the Onshore Substation (see Figure 2).

- 1.4.1.2 Table 1.1 presents the results of the scoping exercise and corresponds to Stage 1 of the process for assessment of settings as set out in the Cadw guidance (Cadw, 2017b), but has necessarily involved some aspects of Stages 2 and 3 (definition of setting and initial impact assessment) in order to better validate the exercise and justify the inclusion or exclusion of assets for more detailed assessment. The locations of designated historic assets are shown on Figure 1 and Figure 2. Stages 3 and 4 of the assessment process are considered in detail within sections 1.7 to 1.9 of this assessment document.

- 1.4.1.3 Table 1.2 reviews the settings of the historic assets that have been scoped into the assessment.

**Table 1.1: Summary of designated historic assets potentially affected by the Mona Offshore Wind Farm.**

Site No.	Site Name	Distance (Approx.)	Heritage Significance	Scoped In/Out	Comments
8.	Tan-yr-Ogof Lodge including adjoining walls and towers to south, east and west. Grade II* Listed Building.	650 m (from Onshore Cable Corridor)	Architectural Value, Historic Value and Evidential Value	In	Included as asset located within close proximity to Onshore Cable Corridor and compound, with partial intervisibility.
9.	Plas Tan-yr-Ogof including adjoining walls and arches to east and west. Grade II* Listed Building.	650 m (from Onshore Cable Corridor)	Architectural Value, Historic Value and Evidential Value	In	Included as asset located within close proximity to Onshore Cable Corridor and compound, with partial intervisibility.
10.	Tan-yr-Ogof Farmhouse including adjoining arch	650 m (from Onshore Cable Corridor)	Architectural Value, Historic Value and	In	Included as asset located within close proximity to Onshore Cable Corridor and compound, with partial intervisibility.

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Site No.	Name	Distance (Approx.)	Heritage Significance	Scoped In/Out	Comments
	and walls to east. Grade II* Listed Building.		Evidential Value		
245.	Stable and Cart House Range at Tan-yr-Ogof Farm. Grade II Listed Building.	650 m (from Onshore Cable Corridor)	Architectural Value, Historic Value and Evidential Value	In	Included as asset located within close proximity to Onshore Cable Corridor and compound, with partial intervisibility.
246.	Northern Towers. Grade II Listed Building.	650 m (from Onshore Cable Corridor)	Architectural Value, Historic Value and Evidential Value	In	Included as asset located within close proximity to Onshore Cable Corridor and compound, with partial intervisibility.
244.	Gwrych Estate Boundary Wall from Tan-yr-Ogof to Gwrych Lodge Grade II Listed Building.	0 m (asset crossed by Onshore Cable Corridor)	Architectural Value, Historic Value and Evidential Value	In	Included as asset is located within the Onshore Cable Corridor.
11.	Hen Wrych Lodge including adjoining crenellated boundary walls and towers. Grade II* Listed Building.	100 m (from Onshore Cable Corridor)	Architectural Value, Historic Value and Evidential Value	In	Included as asset located within close proximity to Onshore Cable Corridor and compound, with partial intervisibility.
247.	Hen Wrych. Grade II Listed Building.	100 m (from Onshore Cable Corridor)	Architectural Value, Historic Value and Evidential Value	In	Included as asset located within close proximity to Onshore Cable Corridor and compound, with partial intervisibility.
248.	Barn, Agricultural Range and associated garden walls and towers at Hen Wrych Farm. Grade II Listed Building.	100 m (from Onshore Cable Corridor)	Architectural Value, Historic Value and Evidential Value	In	Included as asset located within close proximity to Onshore Cable Corridor and compound, with partial intervisibility.
249.	Lady Eleanor's Tower. Grade II Listed Building.	400 m (from Onshore Cable Corridor)	Architectural Value, Historic Value and Evidential Value	In	Included as asset located within close proximity to Onshore Cable Corridor and compound, with partial intervisibility.
5.	Gwrych Castle Grade II* Registered Historic Park and Garden (GD58).	0 m (asset crossed by Onshore Cable Corridor)	Aesthetic Value, Historic Value, Evidential Value, and Communal Value	In	Included as asset located within the Onshore Cable Corridor and would be impacted both non-physically and physically by the proposals.

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Site No.	Site Name	Distance (Approx.)	Heritage Significance	Scoped In/Out	Comments
13.	Gwrych Castle including attached walls and towers and Stable Block. Grade I Listed Building.	240 m (from Onshore Cable Corridor)	Architectural Value, Historic Value, Evidential Value, and Communal Value	In	Included as asset located within close proximity to Onshore Cable Corridor and compound, with potential partial intervisibility from restricted parts of the castle. Existing topography would prevent direct intervisibility. Cable route and compound likely to be located within the wider setting of the asset.
3.	Pen-y-Corrdyn-Mawr hillfort (SM DE008). Scheduled Monument.	275 m (from Onshore Cable Corridor)	Evidential Value, and Aesthetic Value	In	Included as there would be direct intervisibility with the Onshore Cable Corridor due to asset being located on high ground.
6.	Kinmel Park Grade II* Registered Historic Park and Garden (GD54).	0 m (asset adjacent to Onshore Cable Corridor) 2.2 km (from Onshore Substation)	Evidential Value, Historic Value, and Aesthetic Value	In	Included as asset located within close proximity to Onshore Cable Corridor and a construction compound, with potential partial intervisibility with the Onshore Substation.
7.	Bodelwyddan Castle Grade II Registered Historic Park and Garden (C2).	1 km (from Onshore Substation)	Evidential Value, Historic Value, and Aesthetic Value	In	Included as asset located within close proximity to Onshore Cable Corridor and a construction compound, with potential partial intervisibility with the Onshore Substation.
250.	Bryn Celyn Lodge on Bodelwyddan Park Boundary. Grade II Listed Building.	500 m (from Onshore Cable Corridor) 1.1 km (from Onshore Substation)	Architectural Value and Evidential Value	In	Included as asset located within proximity proposed access road and potential intervisibility with Onshore Substation.
21.	Plas Newydd. Grade II* Listed Building.	170 m (from Onshore Cable Corridor)	Architectural Value and Evidential Value	In	Included as asset located within proximity to Onshore Cable Corridor and Onshore Substation.
251.	Pentre Meredydd. Grade II Listed Building.	0 m (asset adjacent Onshore Substation)	Architectural Value and Evidential Value	In	Included as asset is located adjacent to Onshore Substation.
252.	Church of St Mary. Grade II Listed Building.	1.2 km (from Onshore Substation)	Architectural Value, Communal Value, and Evidential Value	In	Included as asset is has potential intervisibility with the Onshore Substation.
29.	Lower Elwy Valley. Registered Landscape of Special Historic Interest.	550 m (from Onshore Substation)	Historical Value and Aesthetic Value	In	Included as asset has potential intervisibility with Onshore Substation.

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Site No.	Name	Distance (Approx.)	Heritage Significance	Scoped In/Out	Comments
253.	Former Coach House, Stables & Outbuildings to Staverton & Southcroft. Grade II Listed Building.	75 m (from Onshore Cable Corridor) 1.1 km (from Onshore Substation)	Architectural Value and Evidential Value	In	Included as asset located within proximity of proposed access road and Onshore Substation.
254.	Staverton. Grade II Listed Building.	75 m (from Onshore Cable Corridor) 1.1km (from Onshore Substation)	Architectural Value and Evidential Value	In	Included as asset located within proximity of proposed access road and Onshore Substation.
255.	Southcroft including North Cottage. Grade II Listed Building.	75 m (from Onshore Cable Corridor) 1.1 km (from Onshore Substation)	Architectural Value and Evidential Value	In	Included as asset located within proximity of proposed access road and Onshore Substation.
226.	Castell Rhuddlan. Scheduled Monument and Grade I Listed Building.	4.8 km (from Onshore Substation)	Architectural Value, Historic Value, Evidential Value, and Communal Value	In	Included as asset has potential intervisibility with Onshore Substation.
228.	Twthill. Scheduled Monument.	4.8 km (from Onshore Substation)	Evidential Value, Historical Value, Communal Value, and Aesthetic Value	In	Included as asset has potential intervisibility with Onshore Substation.

**Table 1.2: Summary of designated historic assets and their setting and consideration of further assessment due to potential impacts to the setting and significance of the asset.**

Site No.	Name	Preliminary Site Visit Observations	Considered For Further Assessment
8/9/10 /245/ 246.	232 - Tan-yr-Ogof Lodge including adjoining walls and towers to south, east and west. Grade II* Listed Building. 19040 - Plas Tan-yr-Ogof including adjoining walls and arches to east and west. Grade II* Listed Building. 19041 - Tan-yr-Ogof Farmhouse including adjoining	The Tan-yr-Ogof Farmhouse and Lodge groups of Grade II and II* buildings are located a short distance to the west of the Onshore Cable Corridor and construction compound with a degree of intervisibility with the proposals. The two groups of buildings lie either side of the A547 road, with the southern group lying within the Gwrych Castle Historic Park and Garden. Although partly located outside of the Park and Garden, the group as a whole contribute to the setting and Group Value to the Park and Garden as a whole due to being a contemporary element of the Gwrych Castle Estate and architecturally tied into the Gothic design of the estate's	Yes; the construction of the Onshore Cable Corridor and compound would occur within the rural parkland setting of the assets, with a degree of shared intervisibility, which is anticipated to result in a degree of non-physical impact to the heritage significance of such assets.

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Site No.	Name	Preliminary Site Visit Observations	Considered For Further Assessment
	<p>arch and walls to east. Grade II* Listed Building.</p> <p>19042 - Stable and Cart House Range at Tan-yr-Ogof Farm. Grade II Listed Building.</p> <p>19043 - Northern Towers. Grade II Listed Building.</p>	<p>buildings. Despite the dividing presence of the A547 road the setting of the group is very much informed by the existing rural landscape and the landscape of the Park and Garden. This setting contributes to the Architectural and Historic Values of the group.</p>	
244.	19044 – Gwrych Estate Boundary Wall from Tan-yr-Ogof to Gwrych Lodge Grade II Listed Building.	The Gwrych Estate Boundary Wall Grade II Listed Building is located adjacent to the A547 roads defining part of the north boundary of the Gwrych Castle Historic Park and Garden. Although the wall has clear Group Value with the wider Park and Garden, the setting is limited to where the wall can be viewed from both within the park and from the A547 road. This setting principally contributes to the Architectural Value of the asset as to where the scale and design of the walls can be appreciated.	Yes; although the Onshore Cable Corridor would be inserted below the wall using trenchless technology, there would be direct physical impacts to the wall related to proposals to widen an access point, also non-physical visual impacts within the setting of the asset from the surface construction works and the proposed presence of a construction compound a short distance to the south of the wall.
11/ 247/ 248.	<p>19039 - Hen Wrych Lodge including adjoining crenellated boundary walls and towers. Grade II* Listed Building.</p> <p>19038 - Hen Wrych. Grade II Listed Building.</p> <p>275 - Barn, Agricultural Range and associated garden walls and towers at Hen Wrych Farm. Grade II Listed Building.</p>	The Hen Wrych Lodge group of Grade II and II* Listed Buildings is located a short distance to the east of the Onshore Cable Corridor and construction compound with a degree of intervisibility with the proposals. The group of buildings lie within the Gwrych Castle Historic Park and Garden. The group as a whole contribute to the setting and Group Value to the Park and Garden as a whole due to being a contemporary element of the Gwrych Castle Estate and architecturally tied into the Gothic design of the estate's buildings. The setting of the group is very much informed by the existing rural landscape and the landscape of the Park and Garden. This setting contributes to the Architectural and Historic Values of the group.	Yes; the construction of the Onshore Cable Corridor and compound would occur within the rural parkland setting of the assets, with a degree of shared intervisibility, which is anticipated to result of a degree of non-physical impact to the heritage significance of such assets.
249.	19036 - Lady Eleanor's Tower. Grade II Listed Building.	Lady Eleanor's Tower Grade II Listed Building is a 20 <sup>th</sup> century folly tower to the east of the Onshore Cable Corridor and construction compound, positioned on a prominent ridge of wooded high ground overlooking the north part of the Gwrych Castle Estate. Located within the Gwrych Castle Historic Park and Garden the tower contributes to its Group Value. The setting of this prominent asset is extensive as it was designed to be appreciated from both within the park and from a distance to the north overlooking the sea, as such this setting contributes strongly to the	Yes; the construction of the Onshore Cable Corridor and compound would occur within the setting of the asset, with a strong degree of shared intervisibility, which is anticipated to result of a degree of non-physical impact to the heritage significance of the asset.

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Site No.	Name	Preliminary Site Visit Observations	Considered For Further Assessment
		Architectural and Historic Values of the asset.	
5.	PGW(Gd) 58(CON) - Gwrych Castle Grade II* Registered Historic Park and Garden.	The Register entry for the Gwrych Castle Grade II* Registered Historic Park and Garden describes the setting as ' <i>on rising ground overlooking the sea and is surrounded by parkland and gardens which provide a setting for the castle.</i> ' Land use within the Park and Garden varies between pastoral land, woodland and a modern golf course. The key focus of the Park and Garden's setting are the views from the castle and woodland looking north out to sea, which principally contributes to the full suite of values associated with the asset. The Park and Garden is strongly defined towards the coast by its high stone boundary wall, and Tan-yr-Ogof Farmhouse and Hen Wrych Lodge building groups providing strong Group Value, and contributing to the appreciation and setting of the asset.	Yes; the development proposals include the construction of the Onshore Cable Corridor and construction compound within the area covered by the Park and Garden. On this basis the proposals would have both a direct physical impact and an indirect visual impact to the setting and significance of the asset.
13.	231 - Gwrych Castle including attached walls and towers and Stable Block. Grade I Listed Building.	Gwrych Castle Grade 1 Listed Building is the focus of the Gwrych Castle Grade II* Listed Historic Park and Garden, with clear historical ties of ownership. Constructed into a ridge of woodland, the visual focus of the 19 <sup>th</sup> century castle is through an arc from north to east, primarily encompassing the modern golf course adjacent to the castle, albeit with long views in this direction as well. This setting contributes significantly to the Architectural, Historic and Communal Values of the asset. Due to the historic ownership and association with the estate itself, land principally within the Park and Garden also contributes to the asset's Historic Value.	Yes; although there is anticipated to be extremely limited intervisibility between the asset and Onshore Cable Corridor and compound, the direct impacts proposed with the associated Park and Garden would need to be assessed as to the potential to cause harm.
3.	100491 - Pen-y-Corrdyn-Mawr hillfort (SM DE008). Scheduled Monument.	The Pen-y-Corrdyn-Mawr hillfort occupies an area of prominent high ground above the Dulas River Valley to the west and lower ground east towards Abergele. The predominantly rural and wooded landscape which surrounds the hillfort is likely to reflect the contemporary setting of the hillfort when originally constructed and in use, albeit with a stronger wooded component. On this basis the wider rural and wooded landscape strongly contributes to the Evidential Value and Aesthetic Value associated with the asset.	Yes; due to the proximity of the Onshore Cable Corridor within the setting of the asset, and associated intervisibility between the two locations, it is anticipated that the construction works associated with the Onshore Cable Corridor would enviably impact the setting and significance of the asset in some form.
6.	PGW(Gd) 54(CON) - Kinmel Park Grade II* Registered Historic Park and Garden.	Kinmel Park Grade II* Registered Historic Park and Garden is located to the north of the Onshore Cable Corridor and northwest of the Onshore Substation. The focus of the Park and Garden is the central Grade I Listed Kinmel Hall, which along with the	Yes; there could potentially be a degree of intervisibility, at distance, between the asset and upper elements of the Onshore Substation, which may generate visual impacts towards the asset.

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Site No.	Name	Preliminary Site Visit Observations	Considered For Further Assessment
		<p>other numerous listed buildings within the Park and Garden provide significant Group Value. As an 18<sup>th</sup> and 19<sup>th</sup> century planned landscape the Park and Garden is designed to be primarily appreciated from Kinmel Hall and within the grounds of the Park and Garden, itself strongly defining its setting and principally contributing to the asset's Evidential, Historic and Aesthetic Values. The wider rural setting reinforces the landscape context of the Park and Garden and provides a degree of tranquillity, although this rural tranquillity has been eroded in modern times by the construction of the A55 road, the expansion of the settlement at Bodelwyddan, the Kinmel Park Industrial Estate, and the introduction of extensive number of pylons and power infrastructure. The wider rural setting contributes to the Aesthetic Value to a lesser degree.</p>	
7.	PGW(C)2(DEN) - Bodelwyddan Castle Grade II Registered Historic Park and Garden.	<p>Bodelwyddan Grade II Registered Historic Park and Garden is located to the north of the Onshore Cable Corridor and northwest of the Onshore Substation. The focus of the Park and Garden is the central Grade II* Listed Bodelwyddan Castle, which along with the other numerous listed buildings within the Park and Garden provide significant Group Value. As an 18<sup>th</sup> and 19<sup>th</sup> century planned landscape the Park and Garden is designed to be primarily appreciated from Bodelwyddan Castle and within the grounds of the Park and Garden, itself strongly defining its setting and principally contributing to the asset's Evidential Value, Historic Value, and Aesthetic Value. Extensive views from the Park and Garden of the wider landscape to the north and east are noted. The wider rural setting reinforces the landscape context of the Park and Garden and provides a degree of tranquillity, although this rural tranquillity has been eroded in modern times by the construction of the A55 road, the expansion of the settlement at Bodelwyddan, local industrial estates, and the introduction of extensive number of pylons and power infrastructure. The wider rural setting contributes to the Aesthetic Value to a lesser degree.</p>	<p>Yes; there could potentially be a degree of intervisibility, at distance, between the asset and upper elements of the Onshore Substation, which may generate visual impacts.</p>
250.	80738 - Bryn Celyn Lodge on Bodelwyddan Park Boundary. Grade II Listed Building.	<p>The Grade II Listed Bryn Celyn Lodge is set within a rural environment primarily influenced by its location positioned between the B5381 road and the Bodelwyddan Castle Historic Park and Garden, with the immediately surrounding agricultural land contributing to its setting.</p>	<p>Yes; the proximity of the Onshore Substation access road has the potential to impact the heritage significance of the asset.</p>

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Site No.	Name	Preliminary Site Visit Observations	Considered For Further Assessment
		<p>Such elements of the setting contribute to the Architectural and Evidential Values of the asset.</p> <p>The surrounding vegetation and topography limit any distant views.</p>	
21.	153 - Plas Newydd. Grade II* Listed Building.	<p>The Grade II* Listed Plas Newydd is set within a rural environment comprising of small county lanes, local footpaths, and agricultural fields. The house has a direct relationship to its surrounding rural setting which contributes to the Architectural and Evidential Values of the asset. The surrounding vegetation and topography limit any distant views.</p>	<p>No; setting is limited by the immediate topography and vegetation. As such there is no anticipated intervisibility between the asset and the Onshore Cable Corridor, with the proposed development lying outside the setting of the asset.</p>
251.	19929 - Pentre Meredydd. Grade II Listed Building.	<p>The Grade II Listed Building of Pentre Meredydd is located a short distance to the south of the Onshore Substation location. The building is set within a rural environment comprising of small county lanes, local footpaths, and agricultural fields. The building has a direct relationship to its surrounding rural setting their surroundings which contributes Architectural and Evidential Values of the asset. The contribution to the heritage significance of the asset which the setting makes appears to be compromised by the thick surrounding curtilage boundary vegetation which masks the majority of this single storey structure from wider view.</p>	<p>Yes; the proximity of the Onshore Substation has the potential to impact the heritage significance of the asset.</p>
252.	19924 - Church of St Mary. Grade II Listed Building.	<p>The Grade II Listed Church of St Mary is located at a distance to the south east of the Onshore Substation. The church is deliberately located in a prominent location with extended views to the north and east, although views to the north are heavily broken up by intervening vegetation. Such views contribute to the setting of the buildings, as the church was positioned to best utilise such views with this setting contributing to the Architectural Value and associated significance of the structure.</p>	<p>Yes; potential intervisibility with the Onshore Substation has the potential to impact the heritage significance of the asset.</p>
29.	Lower Elwy Valley Registered Historic Landscape.	<p>The Lower Elwy Valley Registered Historic Landscape is located to the southeast of the Onshore Substation. This contained landscape is closely defined by the gorge of the River Elwy as it rounds Cefn Meiriadog, The valley's narrow floor gently rises from about 50 m above Ordnance Datum in the west, while its densely wooded sides rise steeply up the surrounding low hills between 100 m and 150 m above Ordnance Datum. As such, the setting of the Historic Landscape is fairly contained, although there are a</p>	<p>Yes; extended views of the Onshore Substation have the potential to impact the heritage significance of the asset.</p>

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Site No.	Name	Preliminary Site Visit Observations	Considered For Further Assessment
		limited number of more extensive views northwards along the north boundary of the asset. Such longer views are likely to provide a limited contribution to the Historical and Aesthetic Values, and the associated heritage significance of the asset.	
253/ 254/ 255.	1444 – Former Coach House, Stables & Outbuildings to Staverton & Southcroft. Grade II Listed Building. 1442 – Southcroft including North Cottage. Grade II Listed Building. 1443 – Staverton. Grade II Listed Building.	Group of Grade II Listed Buildings centred on Staverton, each now in domestic residential use. The buildings are located at a distance to the northeast of the Onshore Substation. The setting of the buildings is informed by the B5381 on which the buildings front onto, as well as the fields on the opposite of the road which contribute to the immediate rural setting. This setting contributes to the Architectural Value of the assets. More extended views to the south incorporate elements of modern power infrastructure.	Yes; the proximity of the Onshore Substation access road, and elements of the Onshore Substation itself, has the potential to impact the heritage significance of the asset.
226/ 228.	FL004/ 14977 - Castell Rhuddlan. Scheduled Monument and Grade I Listed Building. FL015 - Twthill. Scheduled Monument.	Castell Rhuddlan Scheduled Monument/Grade I Listed Building and Twthill Scheduled Monument are prominent Medieval fortifications located adjacent to one another in the town of Rhuddlan at an extensive distance north of the Onshore Substation. Views south from these assets take in the flat coast plain, as well as the rising ground south of the A55 road. As these structures were built to dominate and project power across the immediate landscape, such extensive views would certainly fall into the wider setting of the assets and contribute to the Aesthetic and Architectural Values which contribute to the heritage significance of both assets.	Yes; distant views of the Onshore Substation within the wider setting of the assets have the potential to impact their heritage significance.

## 1.5 Key parameters for assessment

- 1.5.1.1 The assessment presented in sections 1.7 to 1.9 in relation to historic assets within the settings study area represent a worst-case scenario for each individual asset.
- 1.5.1.2 In terms of change in the contribution that setting makes to the heritage significance of historic assets, factors to be considered are the magnitude of change as influenced by height, proximity and extent of the proposals or other infrastructure as well as composition. Relatively minor changes to design could, in some cases, make substantial differences to the assessed magnitude of change. Conversely, large changes within the setting can be acceptable where there is no or minimal loss in the contribution of that setting to the heritage significance of the asset, and no consequent reduction in that asset's overall heritage significance, nor in the way that it is understood and appreciated.

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1.5.1.3 The maximum design scenarios identified in Table 1.3 have been selected as those having the potential to result in the greatest effect on an identified receptor or receptor group.

**Table 1.3: Maximum Design Scenario**

Potential Effect	Maximum Adverse Scenario Assessed	Justification
<b>Construction</b>		
<p>Visibility of Onshore Substation and other onshore construction works, also construction noise, lighting and dust (so as to cause harm to the heritage significance of a historic asset due to the change within its setting).</p>	<p>Site preparation works including installation of temporary access roads, working areas and construction compounds.</p>	<p>Visual and audible effects would likely increase with proximity.</p>
	<p>Landfall activities including the Anchor Zone, trenchless technique works, and landfall exit pit, construction of Transition Joint Bays (TJB), installation of offshore export cables, installation of and jointing to onshore export cables.</p>	
	<p>Onshore Cable Corridor covering a distance of approximately 15 km. The temporary and permanent width of the Onshore Cable Corridor would be 74 m during construction. In localised stretches of the route, the total width of the Onshore Cable Corridor may increase to 100 m (e.g. trenchless technique crossings). Cable trenching would involve a maximum of four trenches.</p>	
	<p>Trenchless crossing techniques to be used at crossing points. Drilling compounds or launch and receptor pits to be set up at suitable locations adjacent to each obstacle within the onshore cable corridor.</p>	
	<p>Joint bays required approximately every 750 m along the Onshore Cable Corridor cable, resulting in a maximum of 80 pits. The area of each joint bay would be 200 m<sup>2</sup>. The maximum number of link boxes along the Onshore Cable Corridor is 80 (based on a distance of 750 m between each link box on up to four trenches).</p>	
<b>Operations and Maintenance</b>		
<p>Visibility of Onshore Substation, also operational noise and lighting (so as to cause harm to the heritage significance of a historic asset due to the change within its setting).</p>	<p>The maximum footprint of the Onshore Substation will measure up to 65,000 m<sup>2</sup>: this area will include the substation buildings and the earthworks to create the platform. The Onshore Substation will comprise up to four buildings. The maximum dimensions of the main building are 15 m high, 80 m wide and 140 m long.</p> <p>Access to the substation will be via a new permanent access road measuring up to 15 m wide (including associated services) and 0.8 km in length.</p>	<p>The ZTV associated with the tallest elements of the Onshore Substation has been utilised as these would be the most visually intrusive element of the Onshore Substation at medium to long distance.</p>
<b>Decommissioning</b>		
<p>Visibility of plant and equipment required for decommissioning, also noise, lighting and dust.</p>	<p>Demolition of the Onshore Substation and removal of access road, in addition to removal of onshore export cables via the link boxes.</p>	<p>Vehicle movements and demolition activity are anticipated to be limited in comparison to construction phase.</p>

## 1.6 Mitigation measures

1.6.1.1 Mitigation measures that were identified and adopted as part of the project are set out in Table 1.4.

**Table 1.4: Mitigation measures in relation to cultural heritage**

Parameter	Mitigation Measures
<b>Construction</b>	
Onshore Cable Corridor, Construction Compounds, and Onshore Substation.	<p>The construction design includes the use of trenchless technology to avoid removal of trees within the registered historic park and garden at Gwrych Castle and the historic wall along the north boundary of this park and garden (at the point where the onshore cables cross the line of the wall).</p> <p>Use of sensitively designed hoarding, dust suppression, and traffic management plans to minimise construction impacts.</p> <p>Reinstatement of work areas, including landscaping such as hedgerow replacement.</p>
<b>Operation</b>	
Onshore Substation.	Scheme of landscape mitigation, incorporating extensive planting to mature over time.
<b>Decommissioning</b>	
Onshore Cable Corridor, Construction Compounds, and Onshore Substation.	Use of sensitively designed hoarding, dust suppression, and traffic management plans to minimise decommissioning impacts.

## 1.7 Indirect effects on heritage significance during the construction phase

### Pen-y-Corrdyn-Mawr hillfort (Site 3)

- 1.7.1.1 Pen-y-Corrdyn-Mawr hillfort Scheduled Monument is of **high** sensitivity/value. Its heritage significance is primarily derived from its aesthetic and evidential values. Evidential value derives from the existing earthworks, while aesthetic value derives from appreciating those earthworks within the extensive setting of the hillfort. Due to the prominent location of the hillfort, this setting extends across the fields present within lower ground to the east where the Onshore Cable Corridor would be constructed.
- 1.7.1.2 The construction of the Onshore Cable Corridor would take place within the setting of Pen-y-Corrdyn-Mawr hillfort, although the works would occupy one small part of the extensive setting of the asset, at a moderate distance. As a result, a temporary effect could arise from activities involving construction activity, noise and dust. The magnitude of impact is considered to be **negligible adverse**, resulting in a temporary reversible **minor adverse** effect prior to mitigation.
- 1.7.1.3 Mitigation in the form of noise and dust suppression would minimise the disturbance caused by the works, resulting in a temporary residual effect of **minor adverse** significance.

### Gwrych Estate Boundary Wall from Tan-yr-Ogof to Gwrych Lodge (Site 244)

- 1.7.1.4 The Grade II listed boundary wall is of **medium** sensitivity/value. The construction of the Onshore Cable Corridor and compound in relation to this section of the boundary wall may result in a non-physical impact on the heritage significance of the asset. Due to the visual disturbance generated by the proposed construction works occurring in close proximity to the wall (including traffic movement) and also noise and dust, there would be an adverse impact on the ability to appreciate the architectural value of the asset. The magnitude of impact is considered to be **negligible adverse**, with the significance of effect prior to mitigation assessed as **negligible adverse**.
- 1.7.1.5 Mitigation in the form of sensitively designed hoarding, dust and noise suppression, and appropriately managed traffic plans would reduce the visual distraction and disturbance caused by the works, resulting in a temporary residual effect of **negligible adverse** significance.
- 1.7.1.6 The effects of the physical impacts on the Grade II listed Gwrych Estate Boundary Wall (Site 244) are assessed in Section 5.10 of Volume 3, Chapter 5: Historic environment of the Environmental Statement.

### Gwrych Castle including attached walls and towers and Stable Block (Site 5)

- 1.7.1.7 Gwrych Castle Grade I Listed Building is of **high** sensitivity/value. Its heritage significance derives from being one of the finest examples of a 19<sup>th</sup> century Romantic castellated mansion in Britain, imbuing the Grade I Listed building with great architectural and evidential value. The highly documented history of the building, including its numerous owners, also lends it great historical value, while being an accessible tourist attraction lends significant communal value. The principal setting of the castle relates to its structured views to the north and northeast across the modern golf course and out over the sea, which contributes strongly to the asset's architectural value, while the wider setting relating to the Gwrych Castle Estate and the Historic Park and Garden, contributes more to the historical value of the asset as there is limited or no intervisibility from the castle to the wider estate.
- 1.7.1.8 The construction of the Onshore Cable Corridor and compound would occur within 300 m to the northwest of the asset, although any intervisibility between Gwrych Castle and the works is anticipated to be negligible or non-existent. As such, any adverse impacts would be associated with the wider setting and effects on the legibility of the historic estate layout in which the castle is situated within. Due to the visual disturbance generated by the proposed construction works within the wider setting (including traffic movement, noise and dust), there would be an adverse impact on the ability to appreciate the historical value of the asset. The magnitude of impact is considered to be **low adverse**, with the significance of effect prior to mitigation assessed as **minor adverse**.
- 1.7.1.9 Mitigation in the form of sensitively designed hoarding, dust and noise suppression, and appropriately managed traffic plans would minimise the visual distraction and disturbance caused by the works, resulting in a temporary effect of **minor adverse** significance.

### Lady Eleanor's Tower (Site 249)

- 1.7.1.10 Lady Eleanor's Tower Grade II Listed Building is of **medium** sensitivity/value. Its significance is derived from its architectural, historical and evidential values as a prominently placed folly within the Gwrych Castle Estate, although being a later 20<sup>th</sup> century addition to the estate. The setting of the tower, with extensive views of the north part of the estate, and out across the Irish Sea, contributes to the architectural and historical values of the asset.
- 1.7.1.11 The construction of the Onshore Cable Corridor and compound would occur within proximity of the asset, with the tower's position allowing clear and direct views of the works. Due to the visual disturbance generated by the proposed construction works within the wider setting (including traffic movement) and also noise and dust, there would be an adverse impact on the ability to appreciate the architectural and historical value of the asset. The magnitude of impact is considered to be **negligible adverse**, resulting in a temporary reversible **negligible** effect prior to mitigation.
- 1.7.1.12 Mitigation in the form of sensitively designed hoarding, noise and dust suppression, and appropriately managed traffic plans would reduce the visual distraction and disturbance caused by the works, resulting in a temporary residual effect of **negligible adverse** significance.

### Plas Tan-yr-Ogof including adjoining walls and arches to E and W (Site 9), Tan-yr-Ogof Farmhouse including adjoining arch and walls to E (Site 10), Stable and Cart House Range at Tan-yr-Ogof Farm (Site 245), Tan-yr-Ogof Lodge including adjoining walls and towers to S, E and W (Site 8), and Northern Towers (Site 246).

- 1.7.1.13 Plas Tan-yr-Ogof and Tan-yr-Ogof Lodge are Grade II\* Listed Buildings, while the Tan-yr-Ogof Farmhouse, Stables and Cart House Range, and Northern Towers, are all Grade II Listed Buildings. Collectively these two groups of buildings are of **high** sensitivity/value. Their heritage significance is primarily derived from their architectural, historical and evidential values. Despite the two groups being separated by the A547 road, they both share similar characteristics. Both groups were built at a similar time in the 19<sup>th</sup> century to serve the Gwrych Castle Estate and were constructed in the same Romantic style as Gwrych Castle itself, all of which is represented by the said values. The setting of the buildings is closely associated within the historic extent of the Gwrych Castle Estate, contributing to their historical value, as well as with the area around the A547 road and adjacent fields from where the form and design of the buildings can be seen, and this contributes to their architectural value.
- 1.7.1.14 The construction of the Onshore Cable Corridor and compound would occur within proximity of the assets to the east, with the flat ground and dispersed vegetation allowing a degree of intervisibility between the two locations. Due to the visual disturbance generated by the proposed construction works within the historic Gwrych Castle Estate setting (including traffic movement) as well as noise and dust, there would be an impact on the ability to appreciate the architectural and historical values of the assets. The magnitude of impact is considered to be **negligible adverse**, resulting in a temporary reversible **minor adverse** effect prior to mitigation.
- 1.7.1.15 Mitigation in the form of sensitively designed hoarding, dust and noise suppression, and appropriately managed traffic plans would reduce the visual distraction and disturbance caused by the works, resulting in a temporary residual effect of **minor adverse** significance.

## Hen Wrych Lodge including adjoining crenellated boundary walls and towers (Site 11), Hen Wrych (Site 247), and Barn, Agricultural Range and associated garden walls and towers at Hen Wrych Farm (Site 248)

- 1.7.1.16 Hen Wrych Lodge is a Grade II\* Listed Building, while Hen Wrych and ancillary buildings and walls of Hen Wrych Farm are Grade II Listed. Collectively this group of listed buildings are of **high** sensitivity/value. Their heritage significance is primarily derived from their architectural, historical and evidential values. The Lodge was built in the 19<sup>th</sup> century to serve the Gwrych Castle Estate and was constructed in the same Romantic style as Gwrych Castle itself. Hen Wrych Farm and associated buildings are older, with their values also associated with their age and their integration with the 19<sup>th</sup> century estate. The setting of the buildings is closely associated within the historic extent of the Gwrych Castle Estate, contributing to their historical value, as well as with the area around the A547 road and adjacent fields from where the form and design of the buildings can be seen, and this contributes to their architectural value.
- 1.7.1.17 The construction of the Onshore Cable Corridor and compound would occur within proximity of the assets to the east, with the flat ground and dispersed vegetation allowing a degree of intervisibility between the two locations. Due to the visual disturbance generated by the proposed construction works within the historic Gwrych Castle Estate setting (including traffic movement) as well as noise and dust, there would be an impact on the ability to appreciate the architectural and historical values of the assets. The magnitude of impact is considered to be **negligible adverse**, resulting in a temporary reversible **minor adverse** effect prior to mitigation.
- 1.7.1.18 Mitigation in the form of sensitively designed hoarding, dust and noise suppression, and appropriately managed traffic plans would reduce the visual distraction and disturbance caused by the works, resulting in a temporary residual effect of **minor adverse** significance.

## Kinmel Park (Site 6)

- 1.7.1.19 Kinmel Park Grade II\* Registered Historic Park and Garden is of **high** sensitivity/value. Its heritage significance is primarily derived from its historical, aesthetic, and evidential values. The estate is located between the A55 and B5381 roads approximately 2.2 km to the northwest of the Onshore Substation location. The focus of the park and its setting is the Grade Listed I Kinmel Hall and the multiple other associated listed buildings and structures, which share significant group value with the Historic Park and Garden. As a planned 18<sup>th</sup> and 19<sup>th</sup> century landscape, the park is designed to be viewed and appreciated from the hall which principally contributes to the significance of the asset by informing the historical, aesthetic, and evidential values associated with the park and garden. The wider rural setting reinforces the landscape context of the park and garden and provides a degree of tranquillity, although this rural tranquillity has been eroded in modern times by the construction of the A55 road, the expansion of settlement at Bodelwyddan, and the establishment of the Kinmel Park Industrial Estate. As such, this rural setting contributes to a lesser degree towards the aesthetic value of the asset.
- 1.7.1.20 Intervisibility between Kinmel Park and the Onshore Substation location is severely limited, with intervening topography and vegetation preventing direct views. During the construction phase it is possible that the construction cranes could potentially be visible from restricted areas of the park. Due to the frequency of existing modern infrastructure within the view, and the general illegibility of such elements at this

distance, it is unlikely the visual intrusion of the Onshore Substation would be noticeable. The magnitude of impact is considered to be **no change**.

1.7.1.21 No mitigation is proposed or considered necessary.

### **Bodelwyddan Castle (Site 7)**

1.7.1.22 Bodelwyddan Castle Grade II Registered Historic Park and Garden is of **high** sensitivity/value as a result of its association with a number of listed buildings. Its heritage significance is primarily derived from its historical, aesthetic, and evidential values. The estate's position and situation are very similar to that of the adjacent Kinmel Park, located between the A55 and B5381 roads and approximately a kilometre away, at its closest, to the northwest of the Onshore Substation location. The focus of the park and its setting is the Grade II\* Listed Bodelwyddan Castle and the multiple other associated listed buildings and structures, with which share significant group value with the Historic Park and Garden. As a planned 18<sup>th</sup> and 19<sup>th</sup> century landscape, the park is designed to be viewed and appreciated from the hall which principally contributes to the significance of the asset by informing the historical, aesthetic, and evidential values associated with the park and garden. The topography within the park and garden allows for more extended views across the landscape to the southeast and towards the Onshore Substation, although any such views are generally contained to the southeast corner of the asset with existing woodland and vegetation principally masking views of the proposals from the remainder of the asset. This southeast corner of the park and garden is in use as pasture and, with the exception of the park's boundary wall and lodge, lacks any key features which contribute to the asset's heritage significance.

1.7.1.23 The wider rural setting to the southeast of the Historic Park and Garden reinforces the landscape context of the asset and provides a degree of rural tranquillity, although this has been eroded in modern times by the construction of the adjacent industrial estate and associated infrastructure. As such, this rural setting contributes to a lesser degree to the aesthetic value of the asset.

1.7.1.24 It is possible that the taller elements of the Onshore Substation construction equipment, such as cranes, could potentially be visible from some areas of the park, resulting to a degree of visual intrusion which would be seen in context with the other modern power infrastructure in this direction. On this basis, the magnitude of impact is considered to be **negligible adverse**, resulting in a temporary reversible **minor adverse** effect prior to mitigation.

1.7.1.25 No mitigation is proposed therefore the residual significance of effect would be **minor adverse**.

### **Staverton (Site 254), Former Coach House, Stables & Outbuildings to Staverton & Southcroft (Site 253), Southcroft including North Cottage (Site 255)**

1.7.1.26 Staverton, its outbuildings, and Southcroft are all Grade II Listed Buildings and are of **medium** sensitivity/value. Their heritage significance is derived from their architectural and evidential values. This group of buildings were originally constructed during the 18<sup>th</sup> century with later Victorian alterations, and in use as residential properties. The setting of the buildings is informed by the B5381 road which the buildings front onto, as well as the fields on the opposite of the road which contribute to their immediate rural setting. Although the road is modern in form and there are numerous elements of

modern infrastructure to be seen to the south, this setting would have been very similar in general form when the properties were originally built. The setting of these buildings contributes to their architectural value and understanding.

- 1.7.1.27 Construction of the Onshore Substation is likely to take place at a distance of approximately 1.1 km from the building group and is unlikely to be noticeable. The construction of the Onshore Substation access road would also take place approximately 25 m to the west of these assets, within the setting of these buildings, resulting in a temporary effect which could arise from activities involving construction activity, traffic, noise and dust. The magnitude of impact is considered to be **negligible adverse**, with the significance of effect prior to mitigation assessed as **negligible adverse**.
- 1.7.1.28 Mitigation in the form of sensitively designed hoarding, dust and noise suppression, and appropriately managed traffic plans would reduce the visual distraction and disturbance caused by the works, resulting in a temporary residual effect of **negligible adverse** significance.

### **Pentre Meredydd (Site 251)**

- 1.7.1.29 Pentre Meredydd Grade II Listed Building is of **medium** sensitivity/value. Its heritage significance is primarily derived from its architectural and evidential values. The asset is located immediately adjacent to the south boundary of the Onshore Substation location and would be affected by the construction of the Onshore Substation. Pentre Meredydd is a single storey, sub-medieval hall-house, currently unoccupied, of partly-rendered rubble construction with pitched thatched roof covered by corrugated iron sheeting. Due to the limited height of the building in comparison to the tall, well-vegetated property boundary, full appreciation of the listed building is difficult. The asset's principal setting is focused within the property boundary this contributes the greater weight of heritage significance to the asset's architectural value. Some significance is drawn from the building's wider rural setting, but to a much lesser degree due to the current limited awareness of the asset beyond its immediate curtilage. When the asset was constructed in the sub-medieval period, the surrounding landscape is likely to have been more heavily wooded, with such woodland gradually cleared over time to facilitate increased agricultural activity. Although modified, this immediate rural setting assists in informing the rural context within which the building has existed since the initial construction.
- 1.7.1.30 The construction of the Onshore Substation would take place within the wider rural setting of the listed building, with a temporary impact arising from construction activity including traffic as well as noise and dust. Due to the location of the asset, views which incorporate both the construction works and the asset would be restricted, although the works would be on a scale where the awareness of such works taking place would be inescapable. Due to this construction within the wider setting of the asset, and the associated visual and audible intrusions distracting from the appreciation of the asset, the magnitude of impact is considered to be **medium adverse**, resulting in a temporary reversible **moderate adverse** effect prior to mitigation.
- 1.7.1.31 Mitigation in the form of sensitively designed hoarding, dust and noise suppression, and appropriately managed traffic plans would reduce the visual distraction and disturbance caused by the works, however the resulting temporary residual effect would remain of **moderate adverse** significance.

### Church of St. Mary (Site 252)

- 1.7.1.32 The Church of St. Mary Grade II Listed Building is of **medium** sensitivity/value, and is located 1.2 km to the south of the Onshore Substation. Its heritage significance is primarily derived from its architectural and evidential values. As a place of worship there is also associated communal value. This late 19<sup>th</sup> century church is located on a prominent rise overlooking the Vale of Clwyd to the north and east. The rural setting of the church, especially to the north and east where the views are more extensive, contributes to the heritage significance of the asset. Intervisibility between the two locations is restricted by thick vegetation, including the woodland at Bryn Meiriadog and Coed Celyn, both in proximity to the asset and to the Onshore Substation. This would place the Onshore Substation at the very limit of the appreciated setting of the asset.
- 1.7.1.33 The presence of the Onshore Substation may negatively impact the architectural value of the asset due to the introduction of a substantial modern structure within its setting, albeit at a distance of 1.2 km. This would result in a limited degree of harm to the asset's heritage significance. On this basis, the magnitude of impact is considered to be **negligible adverse**, with the consequent significance of effect prior to mitigation assessed as temporary reversible **minor adverse**.
- 1.7.1.34 No mitigation is proposed therefore the residual significance of effect would be **minor adverse**.

### Bryn Celyn Lodge on Bodelwyddan Park Boundary (Site 250)

- 1.7.1.35 Bryn Celyn Lodge Grade II Listed Building is of **medium** sensitivity/value. Its heritage significance is primarily derived from its architectural and evidential values. The asset comprises an entrance lodge situated on the south boundary of the Bodelwyddan estate. The lodge has group value with the estate wall and is a well-preserved example of an early 19<sup>th</sup> century gate lodge. Some of the heritage significance of the asset is derived from its setting although this is considered to largely comprise the Bodelwyddan Estate; limited further heritage significance is derived from its wider surroundings with the exception of the immediate road frontage and adjacent fields.
- 1.7.1.36 The construction of the Onshore Substation access road would take place within the setting of Bryn Celyn Lodge. The magnitude of impact is considered to be **low adverse**, resulting in a temporary reversible **minor adverse** effect prior to mitigation.
- 1.7.1.37 Mitigation in the form of sensitively designed hoarding, dust and noise suppression, and appropriately managed traffic plans would reduce the visual distraction and disturbance caused by the works, resulting a temporary residual effect of **minor adverse** significance.

### Castell Rhuddlan Scheduled Monument and Grade I Listed Building (Site 226) and Twthill Scheduled Monument (Site 228)

- 1.7.1.38 Castell Rhuddlan Scheduled Monument/Grade I Listed Building and Twthill Scheduled Monument are assets of **high** sensitivity/value. Their significance is primarily derived from their architectural/aesthetic, historical and evidential values. Both sites facilitate public access and interpretative materials, so therefore have demonstrable communal value as well. Both assets are prominent Medieval fortifications located adjacent to one another in the town of Rhuddlan at a distance of approximately 4.8 km from the Onshore Substation. Views south from these assets take in the flat coastal plain, as

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well as the rising ground south of the A55 road. As these structures were built to dominate and project power across the immediate landscape, such extensive views would certainly fall into the wider setting of the assets and inform the aesthetic and architectural values which contribute to the heritage significance of both assets.

- 1.7.1.39 Due to the extensive distance between the two assets and the proposed development, it is unlikely that the form of the completed Onshore Substation would be unduly noticeable and would sit within a view already containing numerous modern buildings and infrastructure.
- 1.7.1.40 At worst, any intervisibility between the construction of the Onshore Substation and the assets would have a very limited impact on the architectural/aesthetic values of the assets. On this basis, the magnitude of impact in each case is considered to be **negligible adverse**, resulting in a temporary reversible **minor adverse** effect prior to mitigation.
- 1.7.1.41 No mitigation is proposed therefore the residual significance of effect would be **minor adverse**.

### Lower Elwy Valley Historic Landscape (Site 29)

- 1.7.1.42 The Lower Elwy Valley Historic Landscape is of **high** sensitivity/value. Its heritage significance is primarily derived from its historical and aesthetic values. The asset is located to the south east of the Onshore Substation. This contained landscape is closely defined by the gorge of the River Elwy as it rounds Cefn Meiriadog, with the focus of its heritage significance being the caves within the gorge from which remains of archaeological and geological importance have been recovered. The setting of the Historic Landscape is fairly contained, although there are a limited number of more extensive views north along the north boundary of the asset. Such longer views are likely to provide a very limited contribution to the values and the associated heritage significance of the asset. Any potential intervisibility between the asset and the proposals would occur at a distance of approximately 550 m, restricted to the higher ground within the historic landscape along its central north aspect. Any intervisibility at this location would be limited due to the intervening topography and vegetation, restricting any views to the upper elements of the Onshore Substation.
- 1.7.1.43 The presence of taller elements such as cranes during the construction of the Onshore Substation would negatively impact the aesthetic value of the asset due to the presence of additional modern structures within the wider setting of the asset, causing a very limited degree of harm to the asset's heritage significance. On this basis, the magnitude of impact is considered to be **negligible adverse**, resulting in a long-term but potentially reversible **minor adverse** effect prior to mitigation.
- 1.7.1.44 No mitigation is proposed therefore the residual significance of effect would be minor adverse.

## 1.8 Indirect effects on heritage significance during the operations and maintenance phase

### Kinmel Park (Site 6)

- 1.8.1.1 As discussed above, Kinmel Park Grade II\* Registered Historic Park and Garden is of **high** sensitivity/value with its heritage significance is primarily derived from its historical, aesthetic, and evidential values. The historic asset is located approximately 2.2 km to the northwest of the Onshore Substation.

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- 1.8.1.2 Intervisibility between Kinmel Park and the Onshore Substation location is severely limited, with intervening topography and vegetation preventing direct views. It is possible that the tallest elements of some of the Onshore Substation could potentially be visible from restricted areas of the park. Due to the frequency of existing modern infrastructure within the view, and the general illegibility of such elements at this distance, it is unlikely the visual intrusion of the Onshore Substation would be noticeable. The magnitude of impact is considered to be **no change**.
- 1.8.1.3 No mitigation is proposed or considered necessary.

### Bodelwyddan Castle (Site 7)

- 1.8.1.4 As noted previously, Bodelwyddan Castle Grade II Registered Historic Park and Garden is of **high** sensitivity/value as a result of its association with a number of listed buildings. Its heritage significance is primarily derived from its historical, aesthetic, and evidential values.
- 1.8.1.5 It is possible that the taller elements of the Onshore Substation could potentially be visible from some areas of the park, resulting to a degree of visual intrusion which would be seen in context with the other modern power infrastructure in this direction. On this basis, the magnitude of impact is considered to be **negligible adverse**, resulting in a **minor adverse** effect prior to mitigation.
- 1.8.1.6 Mitigation in the form of landscape planting around the Onshore Substation would minimise the visual impact in views from and across the park and garden, although it is anticipated that the full effect would not be achieved until the landscape planting has matured at year 15. Once the landscape planting has matured, the residual magnitude of impact would be **no change**.

### Staverton (Site 254), Former Coach House, Stables & Outbuildings to Staverton & Southcroft (Site 253), Southcroft including North Cottage (Site 255)

- 1.8.1.7 Staverton, its outbuildings, and Southcroft are all Grade II Listed Buildings and are of **medium** sensitivity/value. The Onshore Substation is located approximately 1.1 km from the Staverton group of Grade II Listed Buildings group and, as discussed above, would be outside of the group's immediate setting.
- 1.8.1.8 It is possible that the tallest elements of some of the Onshore Substation could potentially be visible from these assets. Due to the frequency of existing modern infrastructure within the view to the south of this group of listed buildings, it is unlikely the visual intrusion in the views from or across these assets would vary noticeably from that already present. The magnitude of impact is considered to be **no change**.
- 1.8.1.9 No mitigation is proposed or considered necessary.

### Pentre Meredydd (Site 251)

- 1.8.1.10 As discussed above, the Pentre Meredydd Grade II Listed Building is of **medium** sensitivity/value, with its heritage significance derived from its architectural and evidential values. Due to the proximity of the operational Onshore Substation, the development would not only compromise part of the asset's acknowledged rural setting but cause a substantial visual impact when viewing the building from the south. The existing boundary vegetation around the asset would screen out some aspects of the development in the view from the listed building, but not in views from the west in

which the asset and the Onshore Substation would both be clearly visible. Visualisations have been developed for views of the onshore infrastructure, which are presented in Volume 7, Annex 6.5: Landscape and seascape figures - onshore development of the Environmental Statement. Figures 3 to 6 provide visualisations relevant to the Pentre Meredydd Grade II Listed Building.

- 1.8.1.11 The presence of the Onshore Substation would negatively impact the aesthetic value of the asset due to the presence of modern structures within its setting. There could also be noise impacts which could cause additional harm to the asset's heritage significance. On this basis, the magnitude of impact is considered to be **medium adverse**, resulting in a long-term but potentially reversable **moderate adverse** effect prior to mitigation.
- 1.8.1.12 Mitigation in the form of landscape planting and earthwork construction would minimise the visual and audible impact on the heritage significance of the asset, although it is anticipated that the full effect would not be achieved until the landscape planting has matured at year 15. Once the landscape planting has matured, there would be a residual **low adverse** magnitude of impact resulting in an effect of **minor adverse** significance, which would be long term but potentially reversable.

### **Church of St. Mary (Site 252)**

- 1.8.1.13 The Church of St. Mary Grade II Listed Building is of **medium** sensitivity/value, and is located 1.2 km to the south of the Onshore Substation. Its heritage significance is primarily derived from its architectural and evidential values. As a place of worship there is also associated communal value.
- 1.8.1.14 The presence of the Onshore Substation may negatively impact the architectural value of the asset due to the introduction of a substantial modern structure within its setting. This would result in a limited degree of harm to the asset's heritage significance. On this basis, the magnitude of impact is considered to be **negligible adverse**, with the consequent significance of effect prior to mitigation assessed as **minor adverse**.
- 1.8.1.15 Mitigation in the form of landscape planting would minimise the visual impact on the heritage significance of the asset, although it is anticipated that the full effect would not be achieved until the landscape planting has matured at year 15. Once the landscape planting has matured, there would be a residual effect of **negligible adverse** significance which would be long term but potentially reversable.

### **Castell Rhuddlan Scheduled Monument and Grade I Listed Building (Site 226) and Twthill Scheduled Monument (Site 228)**

- 1.8.1.16 As discussed previously, Castell Rhuddlan Scheduled Monument/Grade I Listed Building and Twthill Scheduled Monument are assets of **high** sensitivity/value. Their significance is primarily derived from their architectural, aesthetic, historical and evidential values. Both assets are located approximately 4.8 km to the north of the Onshore Substation.
- 1.8.1.17 At worst, any intervisibility between the Onshore Substation and the assets would have a very limited impact on the architectural and aesthetic values of the assets. On this basis, the magnitude of impact in each case is considered to be **negligible adverse**, resulting in a long-term but potentially reversable **minor adverse** effect prior to mitigation.
- 1.8.1.18 Mitigation in the form of landscape planting would reduce the visual impact on the heritage significance of the assets, although it is anticipated that the full effect would

not be achieved until the landscape planting has matured at year 15. Once the landscape planting has matured, the magnitude of impact would be **no change**.

### **Lower Elwy Valley Historic Landscape (Site 29)**

- 1.8.1.19 The Lower Elwy Valley Historic Landscape is of **high** sensitivity/value and is located approximately 550 m to the southeast of the Onshore Substation. Its heritage significance is primarily derived from its historical and aesthetic values.
- 1.8.1.20 The presence of the Onshore Substation would negatively impact the aesthetic value of the asset due to the presence of additional modern structures within the wider setting of the asset, causing a very limited degree of harm to the asset's heritage significance. On this basis, the magnitude of impact is considered to be **negligible adverse**, resulting in a long-term but potentially reversible **minor adverse** effect prior to mitigation.
- 1.8.1.21 Mitigation in the form of landscape planting would minimise the visual impact towards the asset, although it is anticipated that the full effect would not be achieved until the landscape planting has matured at year 15. Once the landscape planting has matured, the residual magnitude of impact would be **no change**.

## **1.9 Indirect effects on heritage significance during the decommissioning phase**

- 1.9.1.1 Following consideration of the maximum adverse design scenario associated with the decommissioning phase, in combination with the mitigation proposals, it is considered that all such effects would be the same as, or lower than, those recorded for the construction phase.

## **1.10 Summary**

- 1.10.1.1 An assessment of potential impacts and effects arising from changes within the settings of designated historic assets as a result of the construction, operations and maintenance and decommissioning of the onshore elements of the Mona Offshore Wind Project has been undertaken and presented within this document.
- 1.10.1.2 Table 1.5 presents a summary of the potential impacts, measures adopted as part of the project and residual effects in respect to the historic environment. The impacts assessed comprise:
  - The impact of construction of the onshore transmission assets on the significance of designated historic assets as a result of change within their setting
  - The impact of operations and maintenance of the Onshore Substation on the significance of designated historic assets as a result of change within their setting
  - The impact of decommissioning of the onshore transmission assets on the significance of designated historic assets as a result of change within their setting.
- 1.10.1.3 Overall it is concluded that there would be the following significant effect arising from the Mona Offshore Wind Project during the construction, operations and maintenance or decommissioning phases:

## MONA OFFSHORE WIND PROJECT

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- An effect of **moderate adverse** significance in relation to the Grade II listed building known as Pentre Meredydd. This would occur during construction of the Onshore Substation and would reduce over time as a result of the landscape planting, becoming **minor adverse** once the planted vegetation reaches maturity (by year 15).
- 1.10.1.4 Effects of up to **minor adverse** significance would occur during the construction and operations and maintenance of the Onshore Substation in relation to a small number of additional designated historic assets. These effects would reduce over time as a result of the landscape planting, becoming **negligible adverse** or **no change** once the planted vegetation reaches maturity.
- 1.10.1.5 Effects of up to **minor adverse** significance would occur during construction and decommissioning in relation to several other designated historic assets, although in each case the impacts would be short-term and fully reversible. Some mitigation measures can be provided such as noise and dust suppression, but these measures would not reduce the impact to the extent that the significance of the effect would be altered to a level lower than **minor adverse**.
- 1.10.1.6 The assessment of impacts and effects presented above represents a worst case scenario, with a precautionary approach taken for the magnitude of any impacts.

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**Table 1.5: Summary of potential effects arising from changes within the setting of designated historic assets.**

Asset	Phase <sup>a</sup>			Magnitude of impact	Sensitivity of the asset	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D						
Pen-y-Corrdyn-Mawr hillfort.	✓		✓	C. Negligible	High	Minor adverse	Noise and dust suppression.	Minor adverse	None
				D. Negligible	High	Minor adverse	Noise and dust suppression.	Minor adverse	None
Gwrych Estate Boundary Wall from Tan-yr-Ogof to Gwrych Lodge.	✓		✓	C. Negligible	Medium	Negligible adverse	Hoarding, noise and dust suppression, traffic management.	Negligible adverse	None
				D. Negligible	Medium	Negligible adverse	Hoarding, noise and dust suppression, traffic management.	Negligible adverse	None
Gwrych Castle including attached walls and towers and Stable Block.	✓		✓	C. Low	High	Minor adverse	Hoarding, noise and dust suppression, traffic management.	Minor adverse	None
				D. Low	High	Minor adverse	Hoarding, noise and dust suppression, traffic management.	Minor adverse	None
Lady Eleanor's Tower.	✓		✓	C. Negligible	Medium	Negligible adverse	Hoarding, noise and dust suppression, traffic management.	Negligible adverse	None
				D. Negligible	Medium	Negligible adverse	Hoarding, noise and dust suppression, traffic management.	Negligible adverse	None
Plas Tan-yr-Ogof, Tan-yr-Ogof Farmhouse, Stabe and Cart-House at Tan-yr-Ogof Farm, Tan-yr-Ogof Lodge and Northern Towers.	✓		✓	C. Negligible	High	Minor adverse	Hoarding, noise and dust suppression, traffic management.	Minor adverse	None
				D. Negligible	High	Minor adverse	Hoarding, noise and dust suppression, traffic management.	Minor adverse	None

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Asset	Phase <sup>a</sup>			Magnitude of impact	Sensitivity of the asset	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D						
Hen Wrych Lodge, Hen Wrych, and Barn, Agricultural Range and associated garden walls and towers at Hen Wrych Farm.	✓		✓	C. <b>Negligible</b>	<b>High</b>	<b>Minor adverse</b>	Hoarding, noise and dust suppression, traffic management.	<b>Minor adverse</b>	None
				D. <b>Negligible</b>	<b>High</b>	<b>Minor adverse</b>	Hoarding, noise and dust suppression, traffic management.	<b>Minor adverse</b>	None
Kinmel Park Registered Historic Park and Garden.	✓	✓	✓	C. <b>No change</b>	<b>High</b>	<b>No change</b>	N/A	<b>No change</b>	None
				O: <b>No change</b>	<b>High</b>	<b>No change</b>	N/A	<b>No change</b>	None
				D. <b>No change</b>	<b>High</b>		N/A	<b>No change</b>	None
Bodelwyddan Castle Registered Historic Park and Garden.	✓	✓	✓	C. <b>Negligible</b>	<b>High</b>	<b>Minor adverse</b>	N/A	<b>Minor adverse</b>	None
				O: <b>Negligible</b>	<b>High</b>	<b>Minor adverse</b>	Landscape planting around substation.	<b>No change</b>	None
				D. <b>Negligible</b>	<b>High</b>	<b>Minor adverse</b>	N/A	<b>Minor adverse</b>	None
Staverton, Former Coach House Stables and Outbuildings, and Southcroft.	✓	✓	✓	C. <b>Negligible</b>	<b>Medium</b>	<b>Negligible adverse</b>	Hoarding, noise and dust suppression, traffic management.	<b>Negligible adverse</b>	None
				O: <b>No change</b>	<b>Medium</b>	<b>No change</b>	Landscape planting around substation.	<b>No change</b>	None
				D. <b>Negligible</b>	<b>Medium</b>	<b>Negligible adverse</b>	Hoarding, noise and dust suppression, traffic management.	<b>Negligible adverse</b>	None

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Asset	Phase <sup>a</sup>			Magnitude of impact	Sensitivity of the asset	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D						
Pentre Meredydd.	✓	✓	✓	C. <b>Medium</b>	<b>Medium</b>	<b>Moderate adverse</b>	Hoarding, noise and dust suppression, traffic management.	<b>Moderate adverse</b>	None
				O: <b>Medium</b>	<b>Medium</b>	<b>Moderate adverse</b>	Landscape planting around substation.		None
				D. <b>Negligible</b>	<b>Medium</b>	<b>Negligible adverse</b>	Hoarding, noise and dust suppression, traffic management.	<b>Minor adverse</b>	None
Church of St Mary.	✓	✓	✓	C. <b>Negligible</b>	<b>Medium</b>	<b>Minor adverse</b>	N/A	<b>Minor adverse</b>	None
				O: <b>Negligible</b>	<b>Medium</b>	<b>Minor adverse</b>	Landscape planting around substation.	<b>Negligible adverse</b>	None
				D. <b>Negligible</b>	<b>Medium</b>	<b>Negligible adverse</b>	N/A	<b>Negligible adverse</b>	None
Bryn Celyn Lodge.	✓		✓	C. <b>Low</b>	<b>Medium</b>	<b>Minor adverse</b>	Hoarding, noise and dust suppression, traffic management.	<b>Minor adverse</b>	None
				D. <b>Negligible</b>	<b>Medium</b>	<b>Negligible adverse</b>	Hoarding, noise and dust suppression, traffic management.	<b>Negligible adverse</b>	None
Castell Rhuddlan and Twthill.	✓	✓	✓	C. <b>Negligible</b>	<b>High</b>	<b>Minor adverse</b>	N/A	<b>Minor adverse</b>	None
				O: <b>Negligible</b>	<b>High</b>	<b>Minor adverse</b>	Landscape planting around substation.	<b>No change</b>	None

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Asset	Phase <sup>a</sup>			Magnitude of impact	Sensitivity of the asset	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D						
				D. Negligible	High	Minor adverse	N/A	Minor adverse	None
Lower Elwy Valley Landscape of Special Historic Interest.	✓	✓	✓	C. Negligible	High	Minor adverse	N/A	Minor adverse	None
				O: Negligible	High	Minor adverse	Landscape planting around substation.	No change	None
				D. Negligible	High	Minor adverse	N/A	Minor adverse	None

<sup>a</sup> C=construction, O=operations and maintenance, D=decommissioning

## **1.11 References**

Cadw, (2011) Conservation Principles for the Sustainable Management of the Historic Environment in Wales.

Cadw, (2017) Setting of Historic Assets in Wales.

Chartered Institute for Archaeologists (CIfA) (2014 updated 2020) Standard and Guidance for Historic Environment Desk Based Assessment. Online, available at: CIfAS&GDBA\_2.pdf (archaeologists.net – accessed 26/01/23).

Landscape Institute, (2013) Guidelines for Landscape and Visual Impact Assessment

Welsh Government, (2017) Technical Advice Note 24: The Historic Environment.

## Appendix A: Written Specification

# MONA OFFSHORE WIND PROJECT ONSHORE CABLE ROUTE

Specification for a Historic Environment Desk-Based Assessment

JAC27767  
Mona Offshore Wind  
Project Onshore Cable  
Route  
V2  
March 2023

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# 1 INTRODUCTION

- 1.1 This Specification has been prepared by [redacted] Senior Associate Director at RPS Group, on behalf of bp/EnBW. It details the methodology and sources that will be used in order to produce a Historic Environment Desk-based Assessment (DBA) in relation to the onshore and intertidal elements of the proposed Mona Offshore Wind Project which cover an area between the coast at Abergele, and the immediate environs of St. Asaph (see Figure 1). The route of the onshore cable corridor shown in Figure 1 is most likely that which will be taken forward to the Preliminary Environmental Information Report (PIER) review process, although there is potential for the route of the onshore cable corridor to be modified prior to this event.
- 1.2 The onshore elements of the proposed scheme are located in Conwy and Denbighshire (North Wales) and comprise:
- a single possibly landfall sites near Abergele;
  - a potential substation locations to the west of St Asaph;
  - an onshore cable route, approximately 12 km in length, that links the landfall site to the potential substation locations; and
  - a shorter cable route that links the scheme substation to the National Grid Bodelwyddan substation.
- 1.3 It is intended that the DBA will initially be used to support the Preliminary Environmental Information Report (PIER) consultation process. It will subsequently be updated to become an appendix to a Historic Environment chapter within an Environmental Statement (ES) which will accompany an application for a Development Consent Order (DCO).
- 1.4 The draft DBA will be submitted to the local planning authority's archaeological advisor in order to inform the need for further field investigations, the results of which may be required to be made available prior to the determination of the DCO application.
- 1.5 This document details the methods and staffing for the production of the DBA and has been written in accordance with the relevant Standard and Guidance documents published by the Chartered Institute for Archaeologists (CIfA).

## The Study Site

- 1.6 The extent of the study area will be as that shown in Figure 1.
- 1.7 The underlying basal geology across the majority of the study area varies. In the western and central part of the study area this is primarily recorded as Clwyd Limestone Group and Ffernant Mudstone Formation, while Warwickshire Group is more dominant in the eastern study area. In terms of superficial deposits, tidal clays, sands and silts of Holocene date are present near the coastline in the west, while intermittent superficial till is present elsewhere within the study area.

## 2 AIMS AND METHODS

2.1 The DBA will:

- Characterise the historic environment and the archaeological potential within the study area;
- Identify any known historic assets that may be physically affected during the construction and use of the proposed development; and
- Identify any designated historic assets whose significance may be affected by a change in their setting resulting from the construction and use of the proposed development.

2.2 A separate report for the PEIR will identify the relevant historic environment legislation, planning policy and guidance.

2.3 The DBA will examine the historic landscape character within the study site, in addition to undertaking an assessment of hedgerows which would be considered 'important' under the archaeological and historical criteria defined in the Hedgerow Regulations 1997.

2.4 Sources to be consulted as part of the DBA include:

- Databases of designated historic assets held by Cadw;
- Records held by the National Monuments Record for Wales (NMRW) and the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW);
- The Regional Historic Environment Record (HER) maintained by Clwyd-Powys Archaeological Trust (CPAT);
- Records and maps held by North East Wales Archives (where relevant records additional to those held by CPAT are identified);
- Historic Ordnance Survey mapping;
- British Geological Survey;
- National Library of Wales
- National Resources Wales (NRW) Lidar data
- Tithe Online <https://places.library.wales/>
- Welsh Government Air Photos Online <http://aerialphotos.wales.gov.uk/>
- Denbighshire County Archives; and
- Other readily available relevant published sources

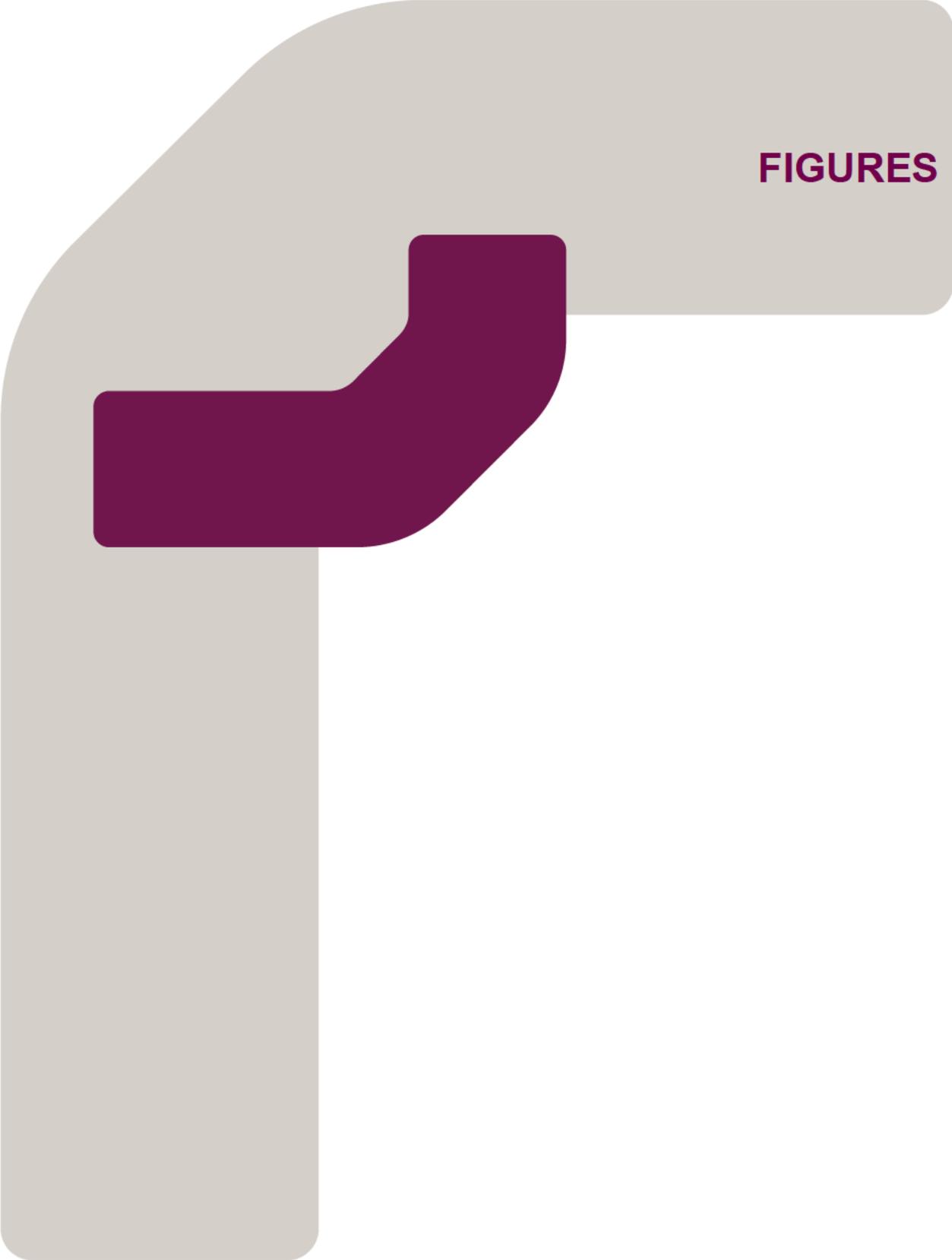
2.5 The DBA assessment will be augmented through a walkover survey undertaken by an experienced researcher. This survey will aim to confirm the location and condition of any known historic assets within or directly adjacent to the study site, and to identify any previously unrecorded features of potential archaeological interest. Designated historic assets whose settings could potentially be affected by the proposed development will be visited and their current settings will be recorded. Where such assets are not accessible, adjacent public land will be visited.

2.6 The results of the DBA will be presented in a stand-alone report that will contain the results of the assessment. It will identify historic assets within the defined study area, and will be illustrated with plans showing the location of historic assets, historic mapping and other relevant information.

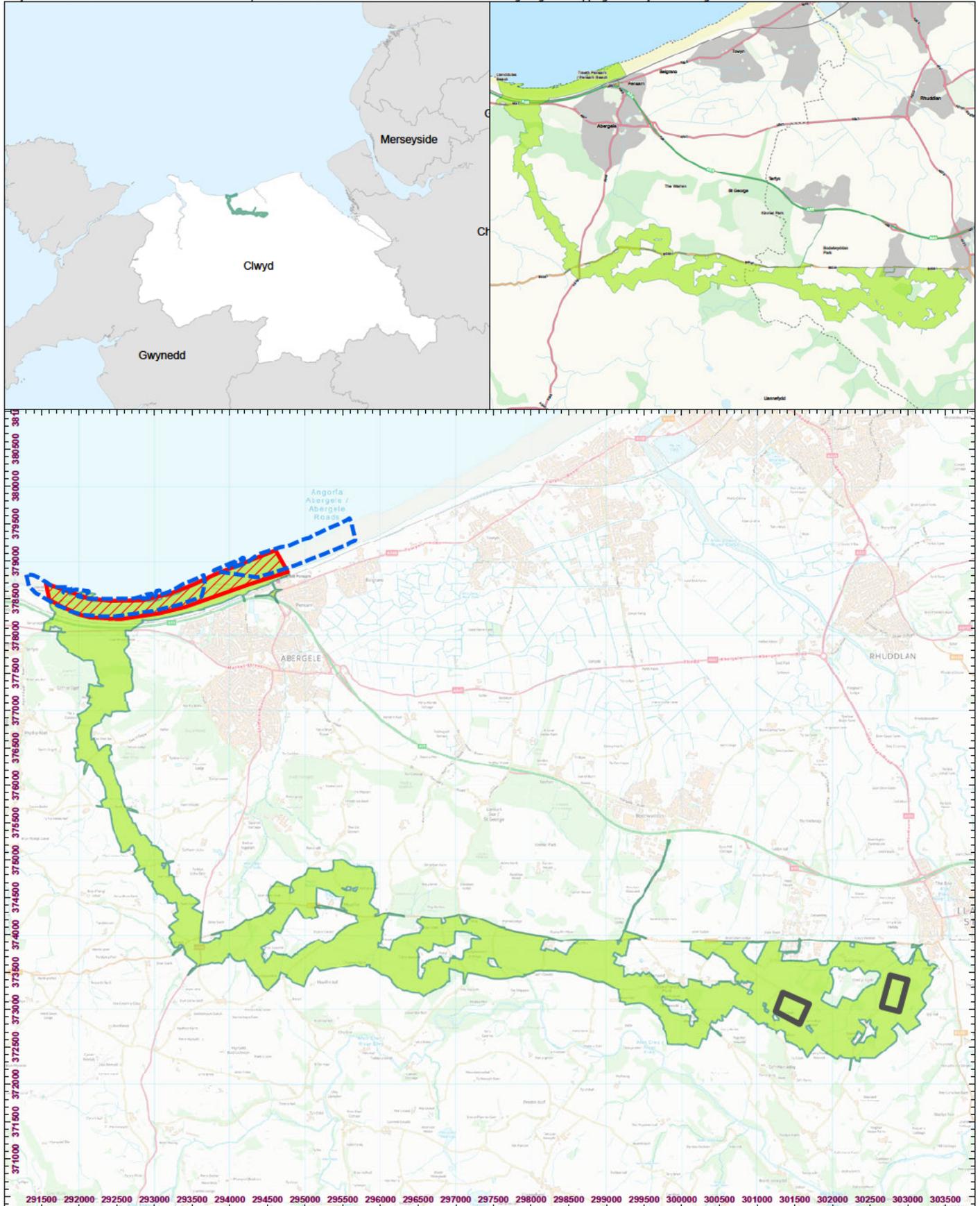
- 2.7 Regarding data management, a high resolution PDF digital copy of the DBA will be issued to the CPAT HER via <https://cpat.org.uk/heddos.html>, as well as the National Monuments Record held by the RCAHMMW in Aberystwyth. In the event of new records being created, data will be formatted in order to facilitate incorporation into the HER maintained by CPAT, with the full digital archive also being issued to the National Monuments Record.
- 2.8 The data incorporated within the DBA will be archived in line with the requirements set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) (2018)*, in addition to the DBA containing a bilingual summary.

### 3 STANDARDS AND PERSONEL

- 3.1 The DBA will be carried out in general accordance with the ClfA *Standard and Guidance for Historic Environment Desk-Based Assessment* (October 2020 update).
- 3.2 The preparation of the DBA will be undertaken by [REDACTED] BSc (Hons) MA MCIfA. [REDACTED] has extensive experience of the preparation of DBAs prepared with regard to proposed developments, several of which have fallen within the curatorship of the Welsh Archaeological Trusts.



**FIGURES**



-  Intertidal Area
-  Mona Proposed Onshore Development Area BP-GBR-MONA-DAT-0079
-  Onshore Substation Indicative Footprint BP-GBR-MONA-DAT-0079
-  Intertidal Survey Areas



0 1,000 2,000m  
Scale at A4: 1:70,000



Figure 1  
Proposed Cable Route



[rpsgroup.com](http://rpsgroup.com)