

# MONA OFFSHORE WIND PROJECT

## Environmental Statement

### Volume 3, Chapter 6: Landscape and visual resources (F02)

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Image of an offshore wind farm

**MONA OFFSHORE WIND PROJECT**

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### Deadline 7 Changes

This document has been updated at Deadline 7 of the Mona Offshore Wind Project examination in order to address the errata included in Errata Sheet (REP4-088).

This document has been updated at Deadline 7 of the Mona Offshore Wind Project examination in order to reflect the change to the Order Limits, forming the Change Request, which was accepted by the Examining Authority on 19 December 2024.

The following figures have been updated to reflect the updated onshore order limits change:

- Figure 6.1: LVIA study area – Mona onshore transmission assets
- Figure 6.2: ZTV of Mona Onshore Substation with nationally and locally designated landscapes
- Figure 6.3: LANDMAP Visual and Sensory Aspect Areas with zone of theoretical visibility of Mona Onshore Substation
- Figure 6.4: Viewpoint Location Plan with Mona Onshore Substation zone of theoretical visibility
- Figure 6.5: Illustrative Landscape and Ecology Strategy Plan
- Figure 6.6: Existing or proposed onshore windfarms located within 45 km of the Mona Onshore Substation.
- Figure 6.7: Major Developments located within 1 km of the Mona Onshore Development Area.
- Figure 6.10: Cumulative ZTV of Mona Onshore Substation with North Wales offshore wind farms.

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Annex 6.6	Tree survey and Arboricultural Impact Assessment

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# Glossary

Term	Meaning
Access land	Land designated as open access as defined in the Countryside and Rights of Way Act 2000 (the CROW Act).
Characteristics	Elements, or combinations of elements, which make a contribution to distinctive landscape character.
Designated landscapes	Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in development plans or other documents.
Effect	Best practice guidance defines effect as the change resulting from an impact (which is defined as ' <i>the action being taken</i> ') (e.g. the effect of erecting a building/structure or removing a tree on seascape/landscape character or views/visual amenity) (GLVIA3, pages 8-9).
Elements/components	Individual parts of a thing (e.g. different elements of a landscape which make up the whole, such as, for example, trees, hedgerows and buildings).
Feature	Prominent elements in the landscape, such as tree clumps, church towers or wooded skylines.
Green infrastructure	Networks of green spaces and watercourses and water bodies that connect rural areas, villages, towns and cities.
Heritage	The historic environment and especially valued assets and qualities, such as historic buildings and cultural traditions.
Landscape and Ecological Management Plan (LEMP)	An outline Landscape and Ecological Management Plan has been prepared for the application. It includes details of the landscape mitigation works required for the onshore elements (cable route and substation) and the maintenance and management of the proposed mitigation and any enhancement proposals.
Impact	Best practice guidance defines impact as ' <i>the action being taken</i> ' (as opposed to the change resulting from the action) e.g. a tree being removed or building/structure being erected (GLVIA3, pages 8-9).
Key characteristics	Elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
Landform	The shape and form of the land surface which has resulted from combinations of geology, geomorphology, slope, elevation and physical processes.
LANDMAP	LANDMAP is a complete all-Wales GIS based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent data set.
LANDMAP Aspect Areas	LANDMAP comprises five spatially related datasets: Geological Landscape; Landscape Habitats; Visual & Sensory; Historic Landscape; and, Cultural Landscape Services. LANDMAP Aspect Areas define the character within each layer.
Landscape	An area, as perceived by people, the character of which is a result of the action and interaction of natural and/or human factors.
Landscape character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
Landscape Character Areas	These are single unique areas which are the discrete geographical areas of a particular landscape type.

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Term	Meaning
Landscape Character Assessment	The process of identifying and describing variation in the character of the landscape and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscape distinctive. The process results in the production of a Landscape Character Assessment.
Landscape Character Type	These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation, historical land use, and settlement pattern.
Landscape effects	Effects on the landscape as a resource in its own right.
Landscape quality (condition)	A measure of physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
Landscape receptors	Defined aspects of the landscape resource that have the potential to be affected by the proposal.
Landscape value	The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons
Magnitude (of impact)	A term that combines judgements about the size and scale of the impact or change, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long-term in duration.
Photomontage	A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs of the existing landscape.
Seascape	The visual and physical conjunction of land and sea which combines maritime, coast and hinterland character.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor.
Significance (of effect)	A judgement of the environmental effect resulting from a combination of the sensitivity of the receptor and the magnitude of the impact of a proposed development.
Special Qualities	A term usually used in relation to National Parks or Areas of Outstanding Natural Beauty. It is given to those qualities for which the area is designated.
Susceptibility	The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.
Townscape	The character and composition of the built environment including the buildings and the relationships between them, the different types of urban open space, including green spaces, and the relationship between buildings and open spaces.
Tranquillity	A state of calm and quietude associated with peace, considered to be a significant feature in the landscape.
Visual amenity	The overall pleasantness of the views people enjoy in their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.
Visual effects	Effects on specific views and on general visual amenity experienced by people.
Visual receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal.

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Term	Meaning
Visualisation	A computer simulation, photomontage or other technique illustrating the predicted appearance of a proposed development.
Zone of Theoretical Visibility	A map, usually digitally produced, showing areas of land within which, a development is theoretically visible.

## Acronyms

Acronym	Description
AIA	Arboricultural Impact Assessment
AOD	Above Ordnance Datum
AONB	Areas of Outstanding Natural Beauty (now National Landscapes)
CCBC	Conwy County Borough Council
CEA	Cumulative Effects Assessment
CNP	Critical National Priority (infrastructure)
CoCP	Code of Construction Practice
DCC	Denbighshire County Council
DCO	Development Consent Order
DCFW	Design Commission for Wales
EIA	Environmental Impact Assessment
EWG	Expert Working Group
GLVIA3	Guidelines for Landscape and Visual Impact Assessment: Third Edition
LEMP	Landscape and Ecological Management Plan
LI	Landscape Institute
LPA	Local Planning Authority
LVIA	Landscape and Visual Impact Assessment
MCA	Marine Character Area
MDS	Maximum Design Scenario
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
NCA	National Character Area (England)
NCR	National Cycle Route
NL	National Landscapes (previously Areas of Outstanding Natural Beauty)
NLCA	National Landscape Character Area (Wales)
NPS	National Policy Statement
NRW	Natural Resources Wales
NSIP	Nationally Significant Infrastructure Project

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Acronym	Description
OFTO	Offshore Transmission Owner regime
PEIR	Preliminary Environmental Information Report
PRoW	Public Right of Way
RIGS	Regionally Important Geological/Geomorphological Site
RPaG	Registered Park and Garden
RPA	(Tree) Root Protection Areas
SLA	Special Landscape Area
SSSI	Site of Special Scientific Interest
SSZ	Seascape Sensitivity Zone (Welsh territorial waters)
TGN	Technical Guidance Note
ZTV	Zone of Theoretical Visibility

## Units

Unit	Description
%	Percentage
km	Kilometres
m	Metres
m <sup>2</sup>	Square Metres

## 6 Landscape and visual resources

### 6.1 Introduction

#### 6.1.1 Overview

6.1.1.1 This chapter of the Environmental Statement presents the assessment of the potential impact of the Mona Offshore Wind Project on landscape and visual resources, comprising a Landscape and Visual Impact Assessment (LVIA). Specifically, this chapter considers the potential impact of the Mona Offshore Wind Project landward of Mean Low Water Springs (MLWS) during the construction, operations and maintenance, and decommissioning phases. The effects of the offshore infrastructure of the Mona Offshore Wind Project are assessed separately in Volume 2, Chapter 8: Seascape and visual resources.

6.1.1.2 This chapter also draws upon information contained within Volumes 6 and 7 of the Environmental Statement, referenced as follows:

- Volume 7, Annex 6.1: Landscape and visual resources planning policy context
- Volume 7, Annex 6.2: Landscape and seascape character baseline technical report
- Volume 7, Annex 6.3: Visual baseline technical report - onshore development
- Volume 7, Annex 6.4: Landscape, seascape and visual resources impact assessment methodology
- Volume 7, Annex 6.5: Landscape visualisations
- Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment (AIA)
- Volume 6, Annex 8.5: Internationally and nationally designated landscape study.

6.1.1.3 It also draws upon the Outline Code of Construction Practice (CoCP) (Document Reference J26) and the Outline Arboricultural Method Statement (Document Reference J26.18).

#### 6.1.2 Study areas

6.1.2.1 The LVIA onshore study areas (Figure 6.1) comprises the area of land to be temporarily and permanently occupied during construction, operations and maintenance and decommissioning of the onshore elements of the Mona Offshore Wind Project, as well as areas of the sea, together with:

- 1 km buffer from the Mona Onshore Development Area
- 10 km buffer from the Mona Onshore Substation.

6.1.2.2 These LVIA onshore study area extents are formulated in accordance with relevant best practice guidance and were discussed in the LVIA workshop, held in September 2022) (Table 6.7). Natural Resources Wales (NRW) agreed in its scoping response that the Seascape, Landscape and Visual Impact Assessment study areas (both onshore and offshore) set out in the Mona Scoping Report were appropriate (Table 6.8).

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### 6.2 Legislative and policy context

#### 6.2.1 Overview

6.2.1.1 The legislative and policy context for the Mona Offshore Wind Project onshore study area is set out in Volume 1, Chapter 2: Policy and legislative context of the Environmental Statement. Specific policy relevant to landscape and visual resources is set out in Volume 7, Annex 6.1: Landscape and visual resources planning policy context of the Environmental Statement, a short summary of which is provided within this chapter.

#### 6.2.2 Legislation

6.2.2.1 National government policy and underpinning legislation is summarised in Table 6.1 together with how and where it has been considered in this chapter.

**Table 6.1: Summary of national government legislation and policy relevant to landscape, seascape and visual resources.**

Summary of national legislation and policy	How and where considered in the Environmental Statement
<b>Primary legislation</b>	
National Parks and Access to the Countryside Act 1949 Relevance: Nationally designated landscapes fall within the Mona onshore transmission assets study areas.	The effect on the Clwydian Range and Dee Valley National Landscape (NL) is assessed in section 6.10.2. Effects of the Mona Offshore Wind Project on the special qualities of internationally and nationally designated landscapes are assessed in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.
Environment Act 1995 Relevance: Nationally designated landscapes fall within the Mona onshore transmission assets study areas.	The effect on the Clwydian Range and Dee Valley NL is assessed in section 6.10.2 and Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.
Countryside and Rights of Way Act (CRoW) 2000 Relevance: Access Land (mountain, moor, heath and down) is designated under the CRoW Act 2000. There are areas of Access Land within the Mona onshore transmission assets study area (Table 6.14, Viewpoint 18).	The effect on the Clwydian Range and Dee Valley NL are assessed in section 6.10.2. The effect on land within the LVIA onshore study area designated as Access Land is addressed in the impact assessment in section 6.10.1. Effects of the Mona Offshore Wind Project on the special qualities of internationally and nationally designated landscapes are assessed in section 6.10.1 and Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.
The Marine and Coastal Access Act 2009 Relevance: Areas of the sea fall within the Mona onshore transmission assets study areas.	The effect on land adjacent to the coast within the LVIA onshore study area is addressed in the impact assessment in section 6.10, where appropriate.
<b>Planning policy</b>	
National Policy Statements	Discussed in section 6.2.4, Table 6.2 and Table 6.3.
Welsh National Marine Plan (Welsh Government, 2019)	
Planning Policy Wales - Edition 11 (Welsh Government, 2021b and 2023)	

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Summary of national legislation and policy	How and where considered in the Environmental Statement
Future Wales: The National Plan 2040 (Welsh Government, 2021a)	Policies are set out in Volume 7, Annex 6.1: Planning policy context, of the Environmental Statement and discussed in sections 6.2.5, 6.2.6 and Table 6.4 and Table 6.5.

### 6.2.3 Planning policy context

6.2.3.1 The Mona Offshore Wind Project will be located in Welsh offshore waters (beyond 12 nautical miles (nm) from the Welsh coast) and inshore waters, with the onshore infrastructure located wholly within Wales, as set out in Volume 1, Chapter 1: Introduction, of the Environmental Statement. The Mona Offshore Wind Project is an offshore generating station located in Welsh waters and is a Nationally Significant Infrastructure Project (NSIP) as defined by Section 15(3) of the Planning Act 2008 (the 2008 Act). As such, there is a requirement to submit an application for a Development Consent Order (DCO) to the Planning Inspectorate to be decided by the Secretary of State for the Department for Energy Security and Net Zero.

### 6.2.4 National Policy Statements

6.2.4.1 There are currently six energy National Policy Statements (NPSs), three of which contain policy relevant to offshore wind development and the Mona Offshore Wind Project, specifically:

- Overarching NPS for Energy (NPS EN-1) which sets out the UK Government's policy for the delivery of major energy infrastructure (Department for Energy Security & Net Zero, January 2024)
- NPS for Renewable Energy Infrastructure (NPS EN-3) (Department for Energy Security & Net Zero, January 2024)
- NPS for Electricity Networks Infrastructure (NPS EN-5) (Department for Energy Security & Net Zero, January 2024).

6.2.4.2 NPS EN-1 includes guidance on general matters to be considered in the assessment of energy-related infrastructure. These are summarised in Table 6.2. NPS EN-1 also highlights a number of factors relating to the determination of an application and in relation to mitigation. These are summarised in Table 6.3.

6.2.4.3 NPS EN-3 principally relates to policies associated with the assessment of the generating infrastructure and decision making in relation to seascape and visual effects. Policies are included where there are links with the onshore assessment. These are summarised in Table 6.2. NPS EN-3 also highlights a number of factors relating to the determination of an application and in relation to mitigation. These are summarised in Table 6.3.

6.2.4.4 NPS EN-5 includes guidance on those matters that are to be considered in the onshore assessment of electrical networks and transmission infrastructure. These are summarised in Table 6.2. NPS EN-5 also highlights a number of factors relating to the determination of an application and in relation to mitigation. These are summarised in Table 6.3.

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**Table 6.2: Summary of the NPS EN-1, NPS EN-3 and NPS EN-5 provisions relevant to landscape and visual resources.**

Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<p><b>NPS EN-1</b></p> <p>Energy NSIP proposals, whether onshore or offshore, should seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, or the wider environment where possible. [Paragraph 4.6.6 of NPS EN-1]</p>	<p>The Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) has been designed with input from the following disciplines: landscape architecture, arboriculture, ecology, hydrology, and the historic environment.</p> <p>Opportunities have been taken to both mitigate and enhance the existing landscape, this includes areas of habitat creation.</p> <p>The Illustrative Landscape and Ecology Strategy Plan will be secured through an Outline Landscape and Ecological Management Plan (Outline LEMP) (Document Reference J22) as a requirement of the DCO.</p>
<p>In addition to delivering biodiversity net gain, developments may also deliver wider environmental gains and benefits to communities relevant to the local area, and to national policy priorities, such as:</p> <ul style="list-style-type: none"> <li>• reductions in GHG emissions</li> <li>• reduced flood risk</li> <li>• improvements to air or water quality</li> <li>• climate adaptation</li> <li>• landscape enhancement</li> <li>• increased access to natural greenspace, or</li> <li>• the enhancement, expansion or provision of trees and woodlands.</li> </ul> <p>The scope of potential gains will be dependent on the type, scale, and location of specific projects. Applicants should look for a holistic approach to delivering wider environmental gains and benefits through the use of nature-based solutions and Green Infrastructure. [Paragraph 4.6.13 NPS EN-1]</p>	<p>In addition to the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5), a Biodiversity Benefit and Green Infrastructure Statement has been prepared (Document Reference J7).</p> <p>As set out previously, opportunities have been taken to both mitigate and enhance the existing landscape this includes areas of habitat creation.</p>
<p>The Environment Act 2021 mandated the preparation of Local Nature Recovery Strategies (LNRs) across England. They are a new system of spatial strategies for nature recovery and will play a major role in providing detail on the best locations to create, enhance and restore nature and deliver wider environmental benefits. LNRs will also agree priorities for nature recovery and map the most valuable existing areas for nature. They will be critical in delivering new government targets for species abundance and habitat creation commitments, as well as other pressing environmental outcomes for water and flood risk, carbon and tree planting and woodland creation. LNRs will also drive the creation of a Nature Recovery Network (NRN), a major commitment in the government’s 25 Year Environment Plan. [Paragraph 4.6.14 NPS EN-1]</p>	

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Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<p>Applications for development consent should be accompanied by a statement demonstrating how opportunities for delivering wider environmental net gains have been considered, and where appropriate, incorporated into proposals as part of good design (including any relevant operational aspects) of the project.</p> <p>[Paragraph 4.6.25 NPS EN-1]</p>	
<p>Applying good design to energy projects should produce sustainable infrastructure sensitive to place, including impacts on heritage, efficient in the use of natural resources, including land-use, and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. It is acknowledged, however that the nature of energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area.</p> <p>[Paragraph 4.7.2 of NPS EN-1]</p>	<p>A summary description of the Mona Onshore Development Area is described in Table 6.19 and detailed in the Design Principles Document (Document Reference J3), in addition to the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).</p> <p>The Design Commission for Wales (DCFW), Denbighshire County Council, NRW, Denbighshire County Council, Cadw and The Woodland Trust have been consulted on the design, where further details of the Illustrative Landscape and Ecology Strategy Plan were presented and discussed (refer to Table 6.7). The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP.</p>
<p>Whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, landform and vegetation. Furthermore, the design and sensitive use of materials in any associated development such as electricity substations will assist in ensuring that such development contributes to the quality of the area. Applicants should also, so far as is possible, seek to embed opportunities for nature inclusive design within the design process.</p> <p>[Paragraph 4.7.6 of NPS EN-1]</p>	
<p>Applicants should demonstrate that proposals have a high level of climate resilience built-in from the outset and should also demonstrate how proposals can be adapted over their predicted lifetimes to remain resilient to a credible maximum climate change scenario. These results should be considered alongside relevant research which is based on the climate change projections.</p> <p>[Paragraphs 4.10.11 of NPS EN-1]</p>	<p>The landscape mitigation and enhancement includes the creation of woodland and restoration of historic field boundaries, as well as the creation of wildflower meadows. The restoration of the field boundaries will create connectivity and restore isolated trees to their appropriate/relevant setting.</p> <p>An Outline LEMP has been prepared (Document Reference J22) and will be secured as a Requirement of the DCO. A LEMP is a document that sets out the management guidelines for the landscape and ecological mitigation and enhancement.</p>
<p>Irreplaceable habitats are habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity.</p> <p>[Paragraph 5.4.14 of NPS EN-1]</p> <p>Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland<sup>183</sup>. Keepers of Time, the government's policy for ancient and</p>	<p>A tree survey and AIA has been undertaken for the Mona Onshore Development Area and is presented in Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment, of the Environmental Statement.</p> <p>Ancient Woodland, veteran trees and their root protection areas (RPA) have been avoided by the direct impacts of the Onshore Cable Corridor and Onshore Substation.</p>

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Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<p>native trees and woodlands in England sets out the government's commitment to maintain and enhance the existing area of ancient woodland, maintain and enhance the existing resource of known ancient and veteran trees, excluding natural losses from disease and death, and to increase the percentage of ancient woodland in active management. Ancient and veteran trees found outside ancient woodland are also particularly valuable. Other types of irreplaceable habitats include blanket bog, limestone pavement, coastal sand dunes, spartina salt marsh swards, Mediterranean saltmarsh scrub, and lowland fen.</p> <p>[Paragraph 5.4.15 of NPS EN-1]</p>	<p>Tree RPAs will be clearly marked and fenced off during construction. The operation and maintenance of the Onshore Substation and Onshore Cable Corridor should not necessitate the removal of trees or encroachment on any tree RPAs. In the unlikely event that work near a retained tree is required, a method statement for that work would be agreed with the relevant tree officer. These tree protection measures are also detailed in Volume 7, Annex 6.6 and the Outline CoCP (Document Reference J26).</p>
<p>Applicants should include measures to mitigate fully the direct and indirect effects of development on ancient woodland, ancient and veteran trees or other irreplaceable habitats during both construction and operational phase.</p> <p>[Paragraph 5.4.32 of NPS EN-1]</p> <p>Applicants should consider any reasonable opportunities to maximise the restoration, creation, and enhancement of wider biodiversity, and the protection and restoration of the ability of habitats to store or sequester carbon as set out under Section 4.6.</p> <p>[Paragraph 5.4.33]</p>	<p>A tree survey and AIA has been undertaken for the Mona Onshore Development Area and is presented in Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment, of the Environmental Statement. An Outline Arboricultural Method Statement has been prepared which sets out measures for the protection of trees during the construction period (Document Reference J26.18).</p> <p>Ancient Woodland, veteran trees and their RPAs have been avoided by the direct impacts of the Onshore Cable Corridor and Onshore Substation.</p> <p>Tree RPAs will be clearly marked and fenced off during construction. The operation and maintenance of the Onshore Substation and Onshore Cable Corridor should not necessitate the removal of trees or encroachment on any tree RPAs. In the unlikely event that work near a retained tree is required, a method statement for that work would be agreed with the relevant tree officer. These tree protection measures are also detailed in Volume 7, Annex 6.6 and the Outline CoCP (Document Reference J26).</p>
<p>Applicants should include appropriate avoidance, mitigation, compensation and enhancement measures as an integral part of the proposed development. In particular, the applicant should demonstrate that:</p> <ul style="list-style-type: none"> <li>• During construction, they will seek to ensure that activities will be confined to the minimum areas required for the works</li> <li>• The timing of construction has been planned to avoid or limit disturbance</li> <li>• During construction and operation best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised, including as a consequence of transport access arrangements</li> <li>• Habitats will, where practicable, be restored after construction works have finished</li> <li>• Opportunities will be taken to enhance existing habitats rather than replace them, and where practicable, create new habitats of value within the site landscaping proposals. Where habitat creation is required as mitigation, compensation, or enhancement, the location and quality will be of key importance. In this regard habitat creation should be focused on areas where the most ecological and ecosystems benefits can be realised</li> </ul>	<p>A summary description of the Mona Onshore Development Area is described in Table 6.19 and detailed in the Design Principles Document (Document Reference J3) in addition to the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP.</p> <p>Opportunities have been taken to both mitigate and enhance the existing landscape, this includes areas of habitat creation.</p>

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Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<p>• Mitigations required as a result of legal protection of habitats or species will be complied with.</p> <p>[Paragraph 5.4.35 of NPS EN-1]</p>	
<p>The landscape and visual effects of energy projects will vary on a case by case basis according to the type of development, its location and the landscape setting of the proposed development. In this context, references to landscape should be taken as covering seascape and townscape where appropriate.</p> <p>[Paragraph 5.10.1 NPS EN-1]</p> <p>Landscape effects arise not only from the sensitivity of the landscape but also the nature and magnitude of change proposed by the development, whose specific siting and design make the assessment a case-by-case judgement.</p> <p>[Paragraph 5.10.4 of NPS EN-1]</p>	<p>A summary description of the Mona Onshore Development Area is described in Table 6.19 and detailed in the Design Principles Document (Document Reference J3), in addition to the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP.</p> <p>The consideration of alternatives and site-selection process for the components of the Mona Offshore Wind Farm are outlined and detailed in Volume 1, Chapter 4: Site Selection and Consideration of Alternatives, of the Environmental Statement.</p> <p>Landscape effects of the Mona Onshore Development Area are described and assessed in section 6.10.</p>
<p>Virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape, but there may also be beneficial landscape character impacts arising from mitigation.</p> <p>[Paragraph 5.10.5 of NPS EN-1]</p>	<p>Details of the designed-in mitigation measures adopted as part of the Mona Offshore Wind Project are summarised in Table 6.20. An Illustrative Landscape and Ecological Strategy Plan (Figure 6.5) has been produced together with an Outline LEMP (Document Reference J22).</p>
<p>Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.</p> <p>[Paragraph 5.10.6 of NPS EN-1]</p>	<p>The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP (Document Reference J22).</p>
<p>All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites.</p> <p>[Paragraph 5.10.13 of NPS EN-1]</p>	<p>The visual effects of Onshore Substation are considered in section 6.11.</p>
<p>Coastal areas are particularly vulnerable to visual intrusion because of the potential high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast.</p> <p>[Paragraph 5.10.15 of NPS EN-1]</p>	<p>All cables are buried. The Onshore Substation is 7.93 km from the coast/mean high water springs (MHWS). The Onshore Substation is on a platform that is cut into the topography and uses land-modelling and woodland to help screen close views. Visualisations of the Onshore Substation have been prepared from representative viewpoints around within the Onshore Substation study area (see Figure 6.4 for representative viewpoint locations). The visualisations are in Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement.</p>
<p>The applicant should carry out a landscape and visual impact assessment and report it in the ES, including cumulative effects (see section 4.3). Several guides have been produced to assist in addressing landscape issues.</p> <p>[Paragraph 5.10.16 of NPS EN-1]</p>	<p>Guidance documents used in the assessment are set out section 6.4.1 and explained in detail within Volume 7, Annex 6.4: Landscape, seascape and visual resources impact assessment methodology, of the Environmental Statement.</p>
<p>The landscape and visual assessment should include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project. The applicant's</p>	<p>Relevant landscape and seascape character information, used to inform the assessment is contained within Volume 7, Annex 6.2: Landscape and seascape baseline technical report, of the</p>

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Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<p>assessment should also take account of any relevant policies based on these assessments in local development documents in England and local development plans in Wales.</p> <p>[Paragraph 5.10.17 of NPS EN-1]</p> <p>For seascapes, applicants should consult the Seascape Character Assessment and the Marine Plan Seascape Character Assessments, and any successors to them.</p> <p>[Paragraph 5.10.18 of NPS EN-1]</p>	<p>Environmental Statement. Planning policy used to inform the assessment is outlined in Volume 7, Annex 6.1: Landscape and visual resources planning policy context, of the Environmental Statement.</p>
<p>The applicant should consider landscape and visual matters in the early stages of siting and design, where site choices and design principles are being established. This will allow the applicant to demonstrate in the ES how negative effects have been minimised and opportunities for creating positive benefits or enhancement have been recognised incorporated into the design, delivery and operation of the scheme.</p> <p>[Paragraph 5.10.19 of NPS EN-1]</p> <p>Applicants should consider how landscapes can be enhanced using landscape management plans, as this will help to enhance environmental assets where they contribute to landscape quality.</p> <p>[Paragraphs 5.10.24 of NPS EN-1]</p>	<p>Specific consideration has been given to the siting and design of the substation at early stages within the design process to mitigate adverse effects and to enhance the landscape. This has been detailed in Volume 1, Chapter 4: Site Selection and Consideration of Alternatives, of the Environmental Statement. An Illustrative Landscape and Ecological Strategy Plan has been produced (Figure 6.5) together with an Outline LEMP (Document Reference J22).</p> <p>The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP.</p>
<p>The assessment should include the effects on landscape components and character during construction and operation. For projects which may affect a National Park, or an NL, the assessment should include effects on the natural beauty and special qualities of these areas.</p> <p>[Paragraph 5.10.20 of NPS EN-1]</p>	<p>Assessment of effects on landscape components, character, views and visual amenity (including light pollution) during construction, operations and maintenance, and decommissioning are assessed in section 6.10.</p> <p>The Onshore Substation will be visible from the Clwydian Range and Dee Valley NL. The indirect landscape impacts and direct visual impacts are documented in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement. The effects are summarised in section 6.10.2 and 6.10.3.</p>
<p>The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include light pollution effects, including on dark skies, local amenity, and nature conservation.</p> <p>[Paragraph 5.10.21 of NPS EN-1]</p> <p>The assessment should also address the landscape and visual effects of noise and light pollution, and other emissions (see Section 5.2 and Section 5.7), from construction and operational activities on residential amenity and on sensitive locations, receptors and views, how these will be minimised.</p> <p>[Paragraph 5.10.22 of NPS EN-1]</p>	<p>The Onshore Substation will not be lit at night. Should maintenance work be required during hours of darkness emergency lighting will be used.</p>
<p>In considering visual effects it may be helpful for applicants to draw attention, in the supporting evidence to their applications, to any examples of existing permitted infrastructure they are aware of with a similar magnitude of impact on sensitive receptors. This may assist the Secretary of State in judging the weight they should give to the assessed visual impacts of the proposed development.</p> <p>[Paragraph 5.10.25 of NPS EN-1]</p>	<p>The Awel y Môr Offshore Wind Farm onshore cable corridor and onshore substation (approximately 1 km to the north of the Onshore Substation - Figure 6.7) have been permitted, as part of the Awel y Môr Offshore Wind Farm Development Consent Order. The Awel y Môr Offshore Wind Farm has been granted consent for one onshore substation.</p>

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Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<p>Reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project. However, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function – for example, electricity generation output. There may, however, be exceptional circumstances, where mitigation could have a very significant benefit and warrant a small reduction in function. In these circumstances, the Secretary of State may decide that the benefits of the mitigation to reduce the landscape and/or visual effects outweigh the marginal loss of function.</p> <p>[Paragraph 5.10.26 of NPS EN-1]</p> <p>Adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within its development site and wider setting. The careful consideration of colours and materials will support the delivery of a well-designed scheme, as will sympathetic landscaping and management of its immediate surroundings.</p> <p>[Paragraph 5.10.27 of NPS EN-1]</p>	<p>An Illustrative Landscape and Ecological Strategy Plan has been developed (Figure 6.5) together with an Outline LEMP (Document Reference J22) which illustrate the landscape and visual mitigation associated with the project. Details of both the proposed landscape and the substation buildings are included in a Design Principles Document (Document Reference J3).</p> <p>The Illustrative Landscape and Ecological Strategy Plan (Figure 6.5) includes plans to restore existing and some historic hedgerows.</p> <p>The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP.</p> <p>The design evolution and site-selection process are detailed in Volume 1, Chapter 4: Site Selection and Consideration of Alternatives, of the Environmental Statement.</p>
<p>Depending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off site. For example, filling in gaps in existing tree and hedge lines may mitigate the impact when viewed from a more distant vista.</p> <p>[Paragraph 5.10.28 of NPS EN-1]</p>	<p>The effects on the character of the landscape, including the features, elements and characteristics that make up that character are considered in section 6.10 of this chapter.</p> <p>The Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) has been designed with input from the following disciplines: landscape architecture; arboriculture; ecology; hydrology and historic environment.</p> <p>Opportunities have been taken to both mitigate and enhance the existing landscape, this includes areas of habitat creation.</p> <p>The effects on land use are assessed in Volume 3, Chapter 7: Land use and recreation, of the Environmental Statement.</p>
<p>An energy infrastructure project will have a direct effect on the existing use of the proposed site and may have indirect effects on the use, or planned use, of land in the vicinity for other types of development. Given the likely locations of energy infrastructure projects there may be particular effects on open space including green and blue infrastructure.</p> <p>[Paragraph 5.11.1 of NPS EN-1]</p>	<p>A full tree survey and AIA for the Mona Onshore Development Area has been undertaken and is included in Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment, of the Environmental Statement.</p> <p>Hedgerow restoration and woodland planting is proposed as part of the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) and set out in an Outline LEMP (Document Reference J22). The Design Principles Document (Document Reference J3) also details the landscape proposals for the project.</p>
<p>Existing trees and woodlands should be retained wherever possible. In the EIP, the Government committed to increase the tree canopy and woodland cover to 16.5% of total land area of England by 2050. The applicant should assess the impacts on, and loss of, all trees and woodlands within the project boundary and develop mitigation measures to minimise adverse impacts and any risk of net deforestation as a result of the scheme. Mitigation may include, but is not limited to, the use of buffers to enhance resilience, improvements to connectivity, and improved woodland management. Where woodland loss is unavoidable, compensation schemes will be required, and the long-term</p>	

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Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<p>management and maintenance of newly planted trees should be secured. [Paragraph 5.11.27 of NPS EN-1]</p>	
<p>Where a project has a sterilising effect on land use (for example in some cases under transmission lines) there may be scope for this to be mitigated through, for example, using or incorporating the land for nature conservation or wildlife corridors or for parking and storage in employment areas. [Paragraph 5.11.29 of NPS EN-1]</p>	<p>No overhead lines are proposed as part of the Mona onshore infrastructure. An attenuation pond and ecological mitigation is proposed and shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) where the existing 400 kV overhead lines cross the Mona Onshore Development Area, to the north of the Onshore Substation. Woodland can't be planted in these areas due to the danger of falling trees on high voltage lines.</p>
<p>Public rights of way, National Trails, and other rights of access to land are important recreational facilities for example for walkers, cyclists and horse riders. The Secretary of State should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails, other rights of way and open access land and, where appropriate, to consider what opportunities there may be to improve or create new access. In considering revisions to an existing right of way, consideration should be given to the use, character, attractiveness, and convenience of the right of way. [Paragraph 5.11.30 of NPS EN-1]</p>	<p>This chapter includes an assessment of all the onshore infrastructure associated with the Mona Onshore Development Area at section 6.11.1. An Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) has been developed together with the Outline LEMP (Document Reference J22) to minimise, and mitigate the effects of the Mona onshore development, as well as enhance the environment in and around the Mona Onshore Development Area, where possible. The landscape proposals are summarised in Table 6.20 as well as being detailed in the Design Principles Document (Document Reference J3).</p>
<p>The Secretary of State should consider whether the mitigation measures put forward by an applicant are acceptable and whether requirements or other provisions in respect of these measures should be included in any grant of development consent. [Paragraph 5.11.31 of NPS EN-1]</p>	<p>The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP (Document Reference J22).</p>
<p><b>NPS EN-3</b></p>	
<p>When considering applications for CNP [critical national priority] Infrastructure in sites with nationally recognised designations (such as SSSIs, National Nature Reserves, National Parks, the Broads, Areas of Outstanding Natural Beauty, Registered Parks and Gardens, and World Heritage Sites), the Secretary of State will take as the starting point that the relevant tests in Sections 5.4 and 5.10 of EN-1 have been met, and any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by the urgent need for this type of infrastructure [Paragraph 2.3.6 of NPS EN-3]</p>	<p>The Mona Offshore Wind Project is CNP Infrastructure. The Mona onshore transmission infrastructure has no direct effects on National Parks or National Landscapes. The Mona Onshore Cable Corridor passes through Gwyrch Castle Registered Park and Garden (RPaG) (using both trenched and trenchless techniques to ensure there are no impacts to the woodland within the RPaG. This is detailed in Volume 5, Chapter 4.3: Onshore crossing schedule, of the Environmental Statement. Parts of the Onshore Substation would be visible from the Clwydian Range and Dee Valley NL, as well as Bodelwyddan RPaG (Figure 6.2). These areas have the potential to be indirectly affected. The effects on these landscapes are considered in 6.10.2 and 6.10.3. The effects on the special qualities of the Clwydian Range and Dee Valley NL are considered in detail in Volume 6, Annex 8.5:</p>

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Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<p>Proposals for renewable energy infrastructure should demonstrate good design, particularly in respect of landscape and visual amenity, opportunities for co-existence/co-location with other marine and terrestrial uses, and in the design of the project to mitigate impacts such as noise and effects on ecology and heritage.</p> <p>[Paragraph 2.5.2 of NPS EN-3]</p>	<p>Internationally and nationally designated landscapes study, of the Environmental Statement.</p> <p>The Design Principles Document (Document Reference J3) details the aims of and rationale behind the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) sets out long-term management objectives for the landscape and ecological strategy within the Mona Onshore Development Area.</p>
<p>As part of the LVIA, photomontages will be required. Viewpoints to be used for the LVIA should be selected in consultation with the statutory consultees at the EIA Scoping stage.</p> <p>[Paragraph 2.8.210 of NPS EN-3]</p>	<p>Photomontages of the onshore development have been produced from representative viewpoints. These are presented in Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement. Photomontages of the offshore development are also presented in Volume 6, Annex 8.6: Seascape visualisations, of the Environmental Statement.</p>
<p>Where appropriate, cumulative LVIA should be undertaken in accordance with the policy on cumulative assessment outlined in Section 5.10.16-17 of EN-1.</p> <p>[Paragraph 2.8.212 of NPS EN-3]</p>	<p>A cumulative impact assessment has been undertaken and is presented in section 6.14.</p>
<p><b>NPS EN-5</b></p>	
<p>Cumulative adverse landscape and visual impacts may arise where new overhead lines are required along with other related developments such as substations, wind farms, and/or other new sources of generation.</p> <p>[Paragraph 2.9.10 of NPS EN-5]</p>	<p>The cumulative effects of the onshore elements of the Mona Offshore Wind Project are considered in section 6.14.</p> <p>No overhead lines are proposed as part of this project. All electrical cabling will be underground.</p>
<p>Landscape and visual benefits may arise through the reconfiguration, rationalisation, or undergrounding of existing electricity network infrastructure. Though mitigation of the landscape and visual impacts arising from overhead lines and their associated infrastructure is usually possible, it may not always be so, and the impossibility of full mitigation in these cases does not countermand the need for overhead lines.</p> <p>[Paragraph 2.9.11 of NPS EN-5]</p>	<p>The mitigation and enhancement proposed within the Mona Onshore Development Area will also assist in softening the views of the existing overhead powerlines and existing substations. The landscape proposals will also increase connectivity and assist in enhancing landscape character, in line with the LANDMAP Aspect Area management guidelines.</p>
<p>The Horlock Rules – guidelines for the design and siting of substations – were established by National Grid in 2009 in pursuance of its duties under Schedule 9 to the Electricity Act 1989. These principles should be embodied in applicants’ proposals for the infrastructure associated with new overhead lines.</p> <p>In brief, the Horlock Rules state that applicants should:</p> <ul style="list-style-type: none"> <li>• Consider environmental issues from the earliest stage to balance the technical benefits and capital cost requirements for new developments against the consequential environmental effects in order to keep adverse effects to a reasonably practicable minimum.</li> <li>• Seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections.</li> </ul>	<p>An Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) has been developed together with the Outline LEMP (Document Reference J22) to mitigate and minimise the effects of the proposed onshore infrastructure. The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP as a requirement of the DCO.</p> <p>Volume 1, Chapter 4: Site Selection and Consideration of Alternatives, of the Environmental Statement includes a detailed overview of the site selection process.</p> <p>This chapter includes an assessment of all the onshore infrastructure associated with the Mona Onshore Development Area at sections 6.10 and 6.11.</p>

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Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<ul style="list-style-type: none"> <li>• Protect as far as reasonably practicable areas of local amenity value, important existing habitats and landscape features including ancient woodland, historic hedgerows, surface and ground water sources and nature conservation areas.</li> <li>• Take advantage of the screening provided by land form and existing features and the potential use of site layout and levels to keep intrusion into surrounding areas to a reasonably practicable minimum</li> <li>• Keep the visual, noise and other environmental effects to a reasonably practicable minimum</li> <li>• Consider the land use effects of the proposal when planning the siting of substations or extensions</li> <li>• Consider the options available for terminal towers, equipment, buildings and ancillary development appropriate to individual locations, seeking to keep effects to a reasonably practicable minimum.</li> <li>• Use space effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation</li> <li>• Make the design of access roads, perimeter fencing, earth-shaping, planting and ancillary development an integral part of the site layout and design, so as to fit in with the surroundings</li> <li>• In open landscape especially, high voltage line entries should be kept, as far as possible, visually separate from low voltage lines and other overhead lines so as to avoid a confusing appearance</li> <li>• Study the inter-relationship between towers and substation structures and background and foreground features so as to reduce the prominence of structures from main viewpoints. Where practicable the exposure of terminal towers on prominent ridges should be minimised by siting towers against a background of trees rather than open skylines.</li> </ul> <p>[Paragraphs 2.9.18 to 2.9.19 of NPS EN-5]</p>	
<p>In addition to good design in accordance with the Holford and Horlock rules (please see paragraphs 2.9.16 – 2.9.19), and the consideration of undergrounding or rerouting the line where possible, the principal opportunities for mitigating adverse landscape and visual impacts of electricity networks infrastructure are:</p> <ul style="list-style-type: none"> <li>• Consideration of network reinforcement options (where alternatives exist) which may allow improvements and/or extensions to an existing line rather than the building of an entirely new line;</li> <li>• Selection of the most suitable type and design of support structure in order to minimise the overall visual impact on the landscape. In particular, ensuring that towers are of the smallest possible footprint and internal volume; and</li> <li>• The rationalisation, reconfiguration, and/or undergrounding of existing electricity networks infrastructure in the vicinity of the proposed development.</li> </ul> <p>[Paragraph 2.10.5 of NPS EN-5]</p>	<p>No overhead lines are proposed as part of this project. All electrical cabling will be underground.</p>

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Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<p>Additionally, there are more specific measures that might be taken, and which the Secretary of State could mandate through DCO requirements if appropriate, as follows:</p> <ul style="list-style-type: none"> <li>• Landscape schemes, comprising off-site tree and hedgerow planting, are sometimes used for larger new overhead line projects to mitigate potential landscape and visual impacts, softening the effect of a new above ground line whilst providing some screening from important visual receptors. These may be implemented with the agreement of the relevant landowner(s), or the developer may compulsorily acquire the land or land rights in question. Advice from the relevant statutory authority may also be needed; and</li> <li>• Screening, comprising localised planting in the immediate vicinity of residential properties and principal viewpoints can also help to screen or soften the effect of the line, reducing the visual impact from a particular receptor.</li> </ul> <p>[Paragraph 2.10.6 of NPS EN-5]</p>	<p>A summary description of the Mona Onshore Development Area is described in Table 6.19</p> <p>The Design Principles Document (Document Reference J3) details the aims of and rationale behind the landscape proposals, which are shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) together with the Outline LEMP (Document Reference J22). The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP, which will be a requirement of the DCO.</p>

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**Table 6.3: Summary of NPS EN-1, NPS EN-3, NPS EN-5 policy on decision making relevant to landscape, seascape, and visual resources.**

Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<p><b>NPS EN-1</b></p> <p>The duty to seek to further the purposes of nationally designated landscapes also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. In these locations, projects should be designed sensitively given the various siting, operational, and other relevant constraints. The Secretary of State should be satisfied that measures which seek to further the purposes of the designation are sufficient, appropriate and proportionate to the type and scale of the development. [Paragraph 5.10.8 of NPS EN-1]</p> <p>The Secretary of State has a duty of to have regard to the statutory purposes of National Parks and AONBs in Wales when making decisions about development schemes within England which affect designated landscapes in Wales. Similar regard should also be had in relation to schemes in England which have impacts on National Parks and National Scenic Areas in Scotland. [Paragraph 5.10.9 of NPS EN-1]</p> <p>Outside nationally designated areas, there are local landscapes that may be highly valued locally. Where a local development document in England or a local development plan in Wales has policies based on landscape or waterscape character assessment, these should be paid particular attention. However, locally valued landscapes should not be used in themselves to refuse consent, as this may unduly restrict acceptable development. [Paragraph 5.10.12 of NPS EN-1]</p>	<p>No elements of the Mona Offshore Wind Project are located within any designated landscapes.</p> <p>A Zone of Theoretical Visibility (ZTV) exercise has been undertaken for the highest element of the onshore infrastructure, the Onshore Substation (Volume 7, Annex 6.3: Visual baseline technical report, of the Environmental Statement). This confirmed that the onshore elements of the Mona Offshore Wind Project will be visible from the Clwydian Range and Dee Valley NL. The indirect impacts are summarised in section 6.10.2. A detailed study of the effects of the onshore development on the special qualities of these areas has been undertaken within Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.</p> <p>The cable route corridor passes through locally designated Special Landscape Area (SLA) Rhyd y Foel to Abergele using both trenched or trenchless technology.</p>
<p>All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. [Paragraph 5.10.13 of NPS EN-1]</p> <p>The Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project. [Paragraph 5.10.14 of NPS EN-1]</p> <p>Coastal areas are particularly vulnerable to visual intrusion because of the potential high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast. [Paragraph 5.10.15 of NPS EN-1]</p>	<p>The visual assessment of the Mona onshore transmission assets, including the Onshore Substation is at section 6.11.</p>

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Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
<p>Adaptation measures should be required to be implemented at the time of construction where necessary and appropriate to do so. However, where they are necessary to deal with the impact of climate change, and that measure would have an adverse effect on other aspects of the project and/or surrounding environment (for example coastal processes), the Secretary of State may consider requiring the applicant to keep the need for the adaptation measure under review, and ensure that the measure could be implemented should the need arise, rather than at the outset of the development (for example increasing height of existing, or requiring new, sea walls). [Paragraph 4.10.19 of NPS EN-1]</p>	<p>Once construction compounds have been removed and remediation has taken place, the landscape and ecological mitigation/restoration can take place (see Design Principles Document (Document Reference J3)).</p>
<p>The scale of energy projects means that they will often be visible across a very wide area. The Secretary of State should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project. [Paragraph 5.10.35 of NPS EN-1]</p> <p>In reaching a judgment, the Secretary of State should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the Secretary of State considers reasonable. [Paragraph 5.10.36 of NPS EN-1]</p>	<p>The effects of the temporary and permanent elements of the Mona onshore transmission assets on the landscape are assessed in section 6.10. The visual effects of the project are assessed in section 6.11.</p>
<p>The Secretary of State should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by appropriate mitigation. [Paragraph 5.10.37 of NPS EN-1]</p> <p>The Secretary of State should consider whether requirements to the consent are needed requiring the incorporation of particular design details that are in keeping with the statutory and technical requirements for landscape and visual impacts. [Paragraph 5.10.38 of NPS EN-1]</p>	<p>An Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) has been developed together with an Outline LEMP (Document Reference J22) and a Design Principles Document (Document Reference J3). The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP, which will be a requirement of the DCO.</p>

**MONA OFFSHORE WIND PROJECT**

Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the Environmental Statement
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<b>NPS EN-3</b>	
<p>Assessment of environmental effects of transmission infrastructure and any proposed offshore or Onshore Substations should assess effects both alone and cumulatively with other existing and proposed infrastructure.<sup>40</sup></p> <p>[Paragraph 2.8.72 of NPS EN-3]</p> <p>The applicant should assess the effects of the offshore transmission and any associated infrastructure on the marine, coastal and onshore environment.</p>	<p>The cumulative effects of the development at the landfall, Onshore Cable Corridor and Onshore Substation site on landscape and visual resources are considered in section 6.14.</p>
<p>Where the applicant does not know the precise location of the offshore transmission cables and any associated infrastructure, a corridor should be identified within which the specific infrastructure is proposed to be located.</p> <p>[Paragraphs 2.8.68 to 2.8.69 of NPS EN-3]</p>	<p>The effects on landscape and visual resources of the work at the landfall, Onshore Cable Corridor and Onshore Substation within the Mona Onshore Development Area are considered in sections 6.10 and 6.11.</p>
<p>The Secretary of State should assess the proposal in accordance with the policy set out in the landscape and visual impacts Section 5.10 of EN-1</p> <p>[Paragraph 2.8.349 of NPS EN-3]</p>	<p>The assessment of the Mona Offshore Wind Project has considered the likely significance of effects, arising from the onshore elements, considering each phase of the development process. The likely significance of effects has informed the design development of the scheme and is outlined in this chapter. Refer to Table 6.24 and Table 6.25 for the summary of potential environmental effects.</p>

<b>NPS EN-5</b>	
<p>There will usually be a degree of flexibility in the location of the development's associated substations, and applicants should consider carefully their placement in the local landscape, as well as their design.</p> <p>[Paragraph 2.2.8 of NPS EN-5]</p> <p>In particular, the applicant should consider such characteristics as the local topography, the possibilities for screening of the infrastructure and/or other options to mitigate any impacts. (See Section 2.10 of NPS EN-5 and Section 5.10 in EN-1.)</p> <p>[Paragraph 2.2.9 of NPS EN-5]</p>	<p>The selection of the Onshore Substation location was in the first instance dictated by the grid connection offer of a connection at Bodelwyddan National Grid Substation. Several locations in the vicinity were investigated for feasibility and suitability. Two locations were taken forward and assessed at Preliminary Environmental Information Report (PEIR). The final selection was made after further engineering and environmental considerations (specifically landscape, ecology, hydrology and historic environmental). The micro-siting of the Onshore Substation has been shaped by further environmental and engineering considerations (refer to Volume 1, Chapter 4: Site selection, of the Environmental Statement).</p>

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<b>Summary of NPS EN-1, EN-3 and EN-5 provision</b>	<b>How and where considered in the Environmental Statement</b>
<p>When planning and evaluating the proposed development's contribution to environmental and biodiversity net gain, it will be important – for both the applicant and the Secretary of State – to supplement the generic guidance set out in EN-1 (Section 4.6) with recognition that the linear nature of electricity networks infrastructure can allow for excellent opportunities to:</p> <ul style="list-style-type: none"> <li>i. reconnect important habitats via green corridors, biodiversity stepping zones, and reestablishment of appropriate hedgerows; and/or</li> <li>ii. connect people to the environment, for instance via footpaths and cycleways constructed in tandem with environmental enhancements.</li> </ul> <p>[Paragraph 2.5.1 of NPS EN-5]</p>	<p>An Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) has been developed together with the Outline LEMP (Document Reference J22) to minimise and mitigate the effects of the Mona Onshore Development Area, as well as enhance the environment in and around this area, where possible. The landscape proposals are summarised in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP, which will be a requirement of the DCO.</p>
<p>The Secretary of State should be satisfied that the development, so far as is reasonably possible, complies with the Holford and Horlock Rules (please see paragraphs 2.9.16 - 2.9.19) or any updates to them.</p> <p>[Paragraph 2.11.2 of NPS EN-5]</p>	<p>Details on the Onshore Substation design and landscape mitigation are set out in the Design Principles Document (Document Reference J3). Details of the landscape and ecological mitigation and enhancement are shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) together with the Outline LEMP (Document Reference J22). The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP, which will be a requirement of the DCO.</p>

**6.2.5 Welsh National Marine Plan**

6.2.5.1 The assessment of potential changes to landscape, seascape and visual resources has also been made with consideration to the specific policies set out in the Welsh National Marine Plan (Welsh Government, 2019). Key provisions are set out in Table 6.4, along with details as to how these have been addressed within the assessment. Further detail on the policies is provided in Volume 7, Annex 6.1: Landscape and visual resources planning policy context, of the Environmental Statement.

**Table 6.4: Welsh National Marine Plan relevant to landscape, seascape and visual resources.**

<b>Policy</b>	<b>How and where considered in the Environmental Statement</b>
<b>Welsh National Marine Plan</b>	
SOC_06: Designated landscapes	<p>No element of the onshore infrastructure of the Mona Offshore Wind Project lies within a nationally designated landscape.</p> <p>The LVIA onshore study area of Mona Offshore Wind Project, onshore infrastructure, includes the Clwydian Range and Dee Valley NL.</p> <p>The onshore elements of the Mona Offshore Wind Project will be visible from the Eryri National Park and the Clwydian Range and Dee Valley NL. The indirect impacts are summarised in sections 6.10.1 and 6.10.2. A detailed study of the effects of the onshore development on the special qualities of these areas has been undertaken and is at Environmental Statement Volume 6, Annex 8.5: Internationally and nationally designated landscapes study.</p>
SOC_07: Seascapes	<p>The assessment of the onshore components of the Mona Offshore Wind Project on landscape, seascape and visual resources and receptors is considered in sections 6.10 and 6.11 and summarised in Table 6.24.</p>

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Policy	How and where considered in the Environmental Statement
GOV_01: Cumulative effects	Cumulative effects are considered in section 6.14 and summarised in Table 6.25.
GOV_02: Cross-border and plan compatibility	Cross-border and transboundary impacts are considered in section 6.15.
ELC_01a: Low carbon energy (supporting) wind	The onshore elements of the Mona Offshore Wind Project are located in north Wales.

### 6.2.6 Welsh National Planning Policy

6.2.6.1 The assessment of potential changes to landscape, seascape and visual resources has also been made with consideration to the specific policies set out in Planning Policy Wales: Edition 11 (2021) and Future Wales: The National Plan 2040 (2021). Key provisions are set out in Table 6.5 along with details as to how these have been addressed within the assessment.

**Table 6.5: Welsh Planning Policy relevant to landscape, seascape and visual resources.**

Policy	Key provisions	How and where considered in the Environmental Statement
Planning Policy Wales (paragraphs 6.3.5 to 6.3.11)	Maximising environmental protection and limiting environmental impact on National Parks and Areas of Outstanding Natural Beauty	<p>No elements of the Mona Offshore Wind Project lie within internationally or nationally designated landscapes. However, the LVIA study area for both onshore and offshore elements include areas of internationally and/or nationally designated areas of land. For the onshore transmission assets, these are assessed in sections 6.10.1 and 6.10.2.</p> <p>The onshore elements of the Mona Offshore Wind Project will be visible from the Clwydian Range and Dee Valley NL. The indirect impacts are summarised in sections 6.10.1 and 6.10.2.</p> <p>A detailed study of the effects of the onshore development on the special qualities of the Clwydian Range and Dee Valley NL has been undertaken and is in Volume 6, Annex 8.5: Internationally and nationally designated landscape study, of the Environmental Statement.</p> <p>The policies relevant to the Mona Offshore Wind Project are set out in Volume 7, Annex 6.1: Landscape and visual resources planning policy context, of the Environmental Statement.</p>
Planning Policy Wales (paragraph 6.3.20)	Advocates the use of LANDMAP assessments to inform development management decisions, landscape character assessment, design and landscape sensitivity studies.	The effects on the different aspect areas are assessed in section 6.10.5. The LANDMAP Aspect Areas relevant to the onshore elements of the Mona Offshore Wind Project are identified and reviewed in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement.
Planning Policy Wales (paragraph 6.4.26)	Ancient woodland and semi-natural woodlands and individual ancient, veteran and heritage trees are irreplaceable natural resources, and have significant landscape, biodiversity and cultural value. Such trees and woodlands should be afforded protection from development which would	A tree survey and AIA has been undertaken for the Mona Onshore Development Area and is presented in Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment, of the Environmental Statement.

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Policy	Key provisions	How and where considered in the Environmental Statement
	<p>result in their loss or deterioration unless there are significant and clearly defined public benefits; this protection should prevent potentially damaging operations and their unnecessary loss. In the case of a site recorded on the Ancient Woodland Inventory, authorities should consider the advice of NRW. Planning authorities should also have regard to the Ancient Tree Inventory.</p>	<p>Ancient Woodland, veteran trees and their root protection areas RPAs have been avoided by the direct impacts of the Onshore Cable Corridor and Onshore Substation.</p> <p>Tree RPAs will be clearly marked and fenced off during construction. The operation and maintenance of the Onshore Substation and Onshore Cable Corridor should not necessitate the removal of trees or encroachment on any tree RPAs. In the unlikely event that work near a retained tree is required, a method statement for that work would be agreed with the relevant tree officer. These tree protection measures are also detailed in Volume 7, Annex 6.6 and the Outline CoCP (Document Reference J26).</p>
<p>Annex to Heads of Planning Letter Dated 11 October 2023: Addressing the Nature Emergency through the Planning System: Updated National Planning Policy for Chapter 6 of Planning Policy Wales</p>	<p>The Annex includes updates on</p> <ul style="list-style-type: none"> <li>• Distinctive and Natural Place-making and Well-being</li> <li>• Distinctive and Natural Trends</li> <li>• Distinctive and Natural linkages</li> <li>• Green Infrastructure</li> <li>• Biodiversity and Ecological Networks</li> </ul> <p>As well as a section on Implementing the Section 6 Duty: The DECCA (Diversity, Extent, Condition, Connectivity, Adaptation) Framework.</p> <p>Green Infrastructure Statement:</p> <p>‘A green infrastructure statement should be submitted with all planning applications. There are multiple ways of incorporating green infrastructure, depending on the needs and opportunities a site presents, and the green infrastructure assessment should be referred to, as appropriate, in order to ascertain local priorities. .... Wider landscape measures, such as the creation of species rich meadows, woodlands and the improvement of linkages between areas of biodiversity value should be considered for larger scale development. In most cases the green infrastructure statement should highlight any baseline data considered and surveys and assessments undertaken, including but not limited to, habitats and species surveys, arboriculture surveys and assessments, sustainable drainage statements, landscape and ecological management plans, ....’</p> <p>Trees, Woodlands and Hedgerows:</p> <p>‘Permanent removal of trees, woodland and hedgerows will only be permitted where it would achieve significant and clearly defined public benefits. Where individual or groups of trees and hedgerows are removed as part of a</p>	<p>Design details on the Onshore Substation are set out in the Design Principles Document (Document Reference J3). Details of the landscape and ecological mitigation and enhancement are shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) together with the Outline LEMP (Document Reference J22). In addition, a Biodiversity Benefit and Green Infrastructure Statement has been prepared (Document Reference J7).</p> <p>A tree survey and AIA has been undertaken for the Mona Onshore Development Area and is presented in Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment, of the Environmental Statement. An Outline Arboricultural Method Statement has been prepared which sets out measures for the protection of trees during the construction period (Document Reference J26.18).</p> <p>Ancient Woodland and veteran trees and their RPA have been avoided by the Mona onshore transmission assets.</p> <p>Tree RPAs will be clearly marked and fenced off during construction. The operation and maintenance of the Onshore Substation and Onshore Cable Corridor should not necessitate the removal of trees or encroachment on any tree RPAs. In the unlikely event that work near a retained tree is required a method statement for that work would be agreed with the relevant tree officer.</p>

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Policy	Key provisions	How and where considered in the Environmental Statement
	<p>proposed scheme, planning authorities must first follow the step-wise approach as set out in paragraph 6.4.21. Where loss is unavoidable developers will be required to provide compensatory planting (which is proportionate to the proposed loss as identified through an assessment of green infrastructure value including biodiversity, landscape value and carbon capture). Replacement planting shall be at a ratio equivalent to the quality, environmental and ecological importance of the tree(s) lost and this must be preferably onsite, or immediately adjacent to the site, and at a minimum ratio of at least three trees of a similar type and compensatory size planted for every one lost.'</p>	
<p>Future Wales: The National Plan 2040 – policy 17: Renewable and Low Carbon Energy and Associated Infrastructure</p>	<p>Future Wales sets out a strategy for addressing key national priorities through the planning system, including sustaining and developing a vibrant economy, achieving decarbonisation and climate-resilience, developing strong ecosystems and improving the health and well-being of our communities.</p> <p>Policy 17: confirms that the Welsh Government strongly supports the principle of developing renewable and low carbon energy. It supports large-scale wind energy in pre-assessed (onshore) areas. It does not support large-scale wind energy developments inside nationally designated landscapes</p>	<p>The Mona Offshore Wind Project is a renewable energy development. No elements of the Project would be situated in an internationally or nationally designated area of land.</p> <p>The onshore elements of the Mona Offshore Wind Project will be visible from the Clwydian Range and Dee Valley NL. The indirect landscape impacts are summarised in 6.10.1 and 6.10.2. A detailed study of the effects of the onshore development on the special qualities of these areas has been undertaken and is in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.</p> <p>The policies relevant to the Mona Offshore Wind Project are set out in Volume 7, Annex 6.1: Landscape and visual resources planning policy context, of the Environmental Statement.</p>
<p>Future Wales: The National Plan 2040 – policy 18: Renewable and Low Carbon Energy Developments of National Significance</p>	<p>Proposals for Nationally Significant renewable and low carbon energy projects (such as the Mona Offshore Wind Project) will be permitted subject to policy 17 and the following criteria: Outside pre-assessed areas the proposal does not have an unacceptable adverse impact on the surrounding landscape (including the setting of nationally designated landscapes); it does not have an unacceptably adverse impact on views and visual amenity; the infrastructure is removed at the end of its lifetime; and, the cumulative impact of existing and consented renewable energy schemes should also be considered..</p>	<p>The Mona Offshore Wind Project is a NSIP. No elements of the Mona Offshore Wind Project lie within internationally or nationally designated landscapes. However, the LVIA study area for both onshore and offshore elements include internationally and/or nationally designated areas of land.</p> <p>The onshore elements of the Mona Offshore Wind Project will be visible from the Clwydian Range and Dee Valley NL. The indirect landscape impacts are summarised in 6.10.2 and 6.10.3. A detailed study of the effects of the onshore development on the special qualities of these areas has been undertaken and is in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.</p> <p>The cumulative effects of the Mona Offshore Wind Project with existing onshore and offshore windfarms, as well as other types of major onshore and offshore development projects are assessed in section 6.14.</p>

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Policy	Key provisions	How and where considered in the Environmental Statement
		The policies relevant to the Mona Offshore Wind Project are set out and reviewed in Volume 7, Annex 6.1: Landscape and visual resources planning policy context, of the Environmental Statement.

**6.2.7 Local Planning Policy**

6.2.7.1 The assessment of potential changes to landscape and visual resources has also been made with consideration to the specific policies set out in Adopted Local Development Plans (LDPs) of Conwy County Borough Council (CCBC) (adopted in October 2013) and Denbighshire County Council (DCC) (adopted in June 2013). Replacement LDPs are currently being drafted by CCBC and DCC and will be considered upon publication. Key provisions are set out in Table 6.6 along with details as to how these have been addressed within the assessment.

**Table 6.6: Local planning policy.**

Policy	Key provisions	How and where considered in the Environmental Statement
<b>Conwy County Borough Council: Adopted Local Development Plan (October 2013)</b>		
Strategic policy NTE/1 – The natural environment	This policy aims to protect and enhance the character of the countryside, landscape, built environment and the rich biodiversity and geological assets.	The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The areas around the Onshore Substation that the proposed mitigation will take place are shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental Statement.
NTE/4 – The landscape and protecting Special Landscape Areas	The visual character of the landscapes, seascapes, and townscapes in the Plan Area is highly valued by residents and visitors. High priority is given to the protection, conservation and enhancement of this landscape character and new development should be well-designed.	The visual character (scenic quality) of the landscape is described in section 6.7.  The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The areas around the Onshore Substation that the proposed mitigation will take place are shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental Statement.

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Policy	Key provisions	How and where considered in the Environmental Statement
NTE/5 - The Coastal Zone	The policy seeks to control development along coastlines.	The effects of the works within the Mona Onshore Development Area on the coastal area are considered in section 6.10.5.
<b>Denbighshire County Council: Adopted Local Development Plan (June 2013)</b>		
Policy RD 1 - Sustainable development and good standard design	It is an aspiration of the Council to raise the standard of design in all proposals. Good design is a key element in sustainable development and the LDP will promote high standards of design in terms of built development.	In regard to achieving a good standard of design, The Design Commission for Wales (DCfW) was consulted on 17 August 2023. Also attending the meeting were representatives from Denbighshire County Council.
Policy RD 1 – Sustainable and good standard design	All new developments must enhance and respect their surroundings and contribute towards the local identity. Developments must be of the appropriate scale, design and materials for their location and conform to the general principles set out above	<p>DCfW issued a Design Review Report (DCfW Ref:302) on the 31 August 2023, which related to the high-level design briefing on the 17 August 2023 (Document Reference E.4.1: Technical Engagement Plan Appendices). The correspondence from DCfW included a copy of Designing for Renewable Energy in Wales: Consultation Draft (DCfW, April 2023).</p> <p>A further meeting (EWG5) was held on the 4 October 2023 with representatives from NRW, Denbighshire County Council, Cadw and the Woodland Trust, where further details of the Illustrative Landscape and Ecology Strategy were presented and discussed.</p> <p>The EWG6 meeting took place on the 8 December 2023.</p> <p>Details of matters discussed in the meetings are in Table 6.7.</p> <p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The areas around the Onshore Substation that the proposed mitigation will take place are shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental Statement.</p>
Policy VOE2 – AONB and Area of Outstanding Beauty	<p>Consideration will be given to both the impact of development within the AONB and Area of Outstanding Beauty and the impact of development on the setting of the AONB and AOB. Important views to and from the AONB and AOB will be protected.</p> <p>Applicants should ensure that proposals are compatible with the aims and</p>	Parts of the Onshore Substation will be visible from the Clwydian Range and Dee Valley NL. The indirect landscape impacts are summarised in sections 6.10.1 and 6.10.2. A detailed study of the effects of the onshore development on the special qualities of these areas has been undertaken and is in Environmental Statement Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the

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Policy	Key provisions	How and where considered in the Environmental Statement
	objectives of the AONB Management Plan.	<p>Environmental Statement. The direct visual impact of the Onshore Substation is assessed at section 6.11, with photomontages at winter Year 1 and summer Year 15 at Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement.</p> <p>The effects upon users of the Offa's Dyke Path National Trail, as it crosses the NL are also assessed within section 6.11.1.</p>
Policy VOE 10 - Renewable energy technologies	<p>Development proposals which promote the provision of renewable energy technologies may be supported providing they are located so as to minimise visual, noise and amenity impacts and demonstrate no unacceptable impact upon the interests of nature conservation, wildlife, natural and cultural heritage, landscape, public health and residential amenity. In areas that are visually sensitive, including the NL, Conservation Areas, World Heritage Site and Buffer Zone and in close proximity to historic buildings, visually intrusive technologies will not be permitted unless it can be demonstrated that there is no negative impact on the designation or there is an overriding public need for the development.</p>	<p>The effects of the onshore elements of the Mona Offshore Wind Project with respect to landscape, seascape and visual resources have been considered in the design, where appropriate (Volume 1, Chapter 4: Site Selection and Consideration of Alternatives, of the Environmental Statement).</p> <p>Parts of the Onshore Substation will be visible from the Clwydian Range and Dee Valley NL. The indirect impacts are summarised in sections 6.10.1 and 6.10.2.</p> <p>A detailed study of the effects of the onshore development on the special qualities of these areas has been undertaken and is at Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.</p>

## 6.3 Consultation

- 6.3.1.1 A summary of the key issues raised during consultation activities undertaken to date specific to landscape, seascape and visual resources is presented in Table 6.7 together with how these issues have been considered in the production of this Environmental Statement chapter.
- 6.3.1.2 Responses received from stakeholders are listed in Table 6.7. Consultee comments regarding the offshore energy infrastructure of the Mona Offshore Wind Energy Project are reported in Volume 2, Chapter 8: Seascape and visual resources, of the Environmental Statement.

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**Table 6.7: Summary of key issues raised during consultation activities undertaken for the Mona Offshore Wind Project relevant to landscape, seascape and visual resources.**

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
March 2022	NRW (email) – response to Applicant’s request for feedback on the candidate representative viewpoints for the landscape photography	For the Clwydian Range and Dee Valley NL, NRW agree with representative viewpoint 10 (Graig Fawr); they advise the deletion of representative viewpoint 11 (Moel y Parc summit) as the North Wales coastline is inconspicuous from this location. Instead, NRW recommend a replacement viewpoint with a view from Offa’s Dyke footpath above Meliden where the path contours Prestatyn Hillside in the area of SJ066808.	<p>This chapter considers the onshore infrastructure associated with the Mona Offshore Wind Energy Project. The Clwydian Range and Dee Valley NL falls within the study area for the Onshore Substation. The representative viewpoints selected for assessment of the onshore infrastructure are detailed in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement. The visualisations for the onshore infrastructure are in Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement.</p> <p>The effects of the onshore elements of the Mona Offshore Wind Project on the special qualities of the Clwydian Range and Dee Valley NL are assessed in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.</p>
March 2022	Eryri National Park Authority (email) – response to Applicant’s request for feedback on the candidate representative viewpoints for the landscape photography	Eryri National Park Authority recently gave feedback on the representative viewpoints for Awel y Môr wind farm and suggests that it is worth considering similar representative viewpoints for the Mona Offshore Wind Project.	<p>This chapter considers the onshore infrastructure associated with the Mona Offshore Wind Energy Project. Eryri National Park lies outside the Mona onshore study areas, agreed with NRW.</p> <p>The National Park Authority raised this matter in relation to the offshore elements of the Mona Offshore Wind Energy Project. These are considered in Volume 2, Chapter 8: Seascape and visual resources, of the Environmental Statement.</p>
March 2022	Isle of Anglesey County Council (email) – response to Applicant’s request for feedback on the candidate representative viewpoints for the landscape photography	Isle of Anglesey County Council recently agreed viewpoints for inclusion in the Awel y Môr LVIA.	<p>This chapter considers the onshore infrastructure associated with the Mona Offshore Wind Energy Project. The Isle of Anglesey lies outside the Mona onshore study areas, agreed with NRW.</p> <p>The Isle of Anglesey Council raised this matter in relation to the offshore elements of the Mona Offshore Wind Energy Project are considered in Volume 2, Chapter 8: Seascape and visual resources, of the Environmental Statement.</p>

**MONA OFFSHORE WIND PROJECT**

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
June 2022	The Planning Inspectorate (Scoping Opinion)	The Mona Offshore Wind Project EIA Scoping Report (Mona Offshore Wind Ltd, 2022) states that the LVIA study area (both onshore and offshore) is to be based on a ZTV and that receptors would be agreed with relevant stakeholders for both generation and transmission assets. The Applicant should seek to agree the extent of the ZTV with relevant consultation bodies.	The LVIA offshore study area was presented to stakeholders in the request for feedback on the representative viewpoints (February 2022). During the LVIA Workshop in September 2022 (see below) stakeholders were asked to comment on the LVIA study area. The Applicant did not receive any specific comments on the extent of the LVIA study area arising from that meeting.
June 2022	The Planning Inspectorate (Scoping Opinion)	The Inspectorate acknowledges that export cables would be fully submerged or buried underground. The Inspectorate agrees that in general the introduction of the export cables is unlikely to give rise to significant long-term effects on seascape and landscape character and visual resources during operation of the proposed development. However, it is unclear whether any easement required would result in permanent landscape changes and the potential for such effects should be considered. The Environmental Statement should also assess the potential for significant short-term effects during the beginning of the operational phase, as proposed reinstatement measures mature along the export cable route.	<p>The landscape and seascape character baseline is detailed In Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement and summarised in section 6.5.1 of this chapter.</p> <p>The effects of the onshore infrastructure on landscape resources and receptors are assessed in section 6.10.</p> <p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental Statement. The Illustrative Landscape and Ecology Strategy Plan will be secured by the Outline LEMP, which will be a requirement of the DCO.</p>
June 2022	The Planning Inspectorate (Scoping Opinion)	The Environmental Statement should detail the expected levels of screening that would be established within the '10 years establishment' timeframe of mitigation planting and the assumptions made in this regard	<p>This information is provided in section 6.8 of this chapter.</p> <p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental Statement.</p> <p>This chapter assesses the landscape and visual effects with the proposed mitigation at winter Year 1 (the first planting season after completion) and at summer Year 15, as the larger areas of woodland planting would be planted</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
			using smaller-sized/younger plants, which take longer to establish. The photomontages of the Onshore Substation are at Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement.
September 2022	NRW – Response to an invite to attend a stakeholder LVIA workshop	<p>Based on the location of Project Mona, the current design envelope turbine parameters, the distance from Welsh sites, alongside existing (and proposed) developments in the foreground, NRW Advisory do not currently have any concerns relating to LVIA for Project Mona, and are of the opinion that the likelihood of significant visual effects on North Wales’s National Parks and Areas of Outstanding Natural Beauty, singularly or in combination, is low. However, should the scale of the project / turbine parameters increase we would obviously be keen to be included in further discussions and retain the opportunity to comment at a later stage.</p> <p>At this preliminary stage, therefore, our LVIA specialist will not attend the upcoming workshop, but I will endeavour to do so in my capacity as NRW Advisory Case Manager and to remain updated on project developments.</p>	This chapter assesses the effects of the onshore infrastructure of the Mona Offshore Wind Project.
September 2022	<p>Mona Offshore Wind Project LVIA Workshop:</p> <ul style="list-style-type: none"> <li>• Denbighshire County Council</li> <li>• Isle of Anglesey County Council</li> <li>• Isle of Man Government</li> <li>• Welsh Government</li> </ul>	<p>The purpose of the workshop was to introduce the Mona Offshore Wind Project; to agree the LVIA study area; and to present the layout options.</p> <p>The principal guidance used to identify the baseline character of the seascape was the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3) and technical guidance notes from the Landscape Institute.</p>	<p>The workshop primarily considered the offshore infrastructure. The Applicant did not receive any specific comments on the extent of the onshore LVIA study areas, at this workshop.</p> <p>This Chapter assesses the effects of the onshore infrastructure of the Mona Offshore Wind Project on landscape, seascape and visual resources.</p> <p>The photography and full descriptions of the existing views and those receptors that might experience the views are set out in the Environmental Statement in Volume 7, Annex 6.3: Visual baseline technical report - onshore development.</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
	<ul style="list-style-type: none"> <li>Conwy County Borough Council</li> <li>Gwynedd Council</li> <li>NRW</li> <li>Eryri National Park Authority.</li> </ul>	<p>All relevant documentation from the BMT Cordah report (2003) to date has been reviewed, including the detailed Guidance on the Assessment of the Impact of Offshore Wind Farms: Seascape and Visual Impact Report (DTI, 2005). The following proposed study areas were discussed: 50 km for the array; 10 km for the Onshore Substation; and 1 km for the Onshore Cable Corridor.</p> <p>The options were presented using wireline visualisations from five representative viewpoints. At the end of the meeting stakeholders were asked to confirm which option was most likely to give rise to the worst-case seascape, landscape and visual impacts taking existing operational wind farms and future cumulative schemes into account.</p> <p>Other matters discussed during the meeting were the characterisation of the baseline environment and the identification of the representative viewpoint locations.</p>	
November 2022	Natural England – Response to an invite to attend a stakeholder LVIA Workshop	<p>Natural England have provided comments on the EIA Scoping report advising that the visual buffer be extended from 50km to 60km due to the height of the turbines. Beyond that Natural England does not have further comment to provide regarding LVIA and do not consider impacts are within the setting of any National Park or AONB. As such we will not be attending the LVIA workshop. Please do let us know if there are any changes in future or our understanding is incorrect and we can consider any further advice.</p>	This chapter assesses the effects of the onshore infrastructure of the Mona Offshore Wind Project.

**Section 42 consultation responses**

## MONA OFFSHORE WIND PROJECT

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
June 2023	National Grid	National Grid request changes to the landscape strategy to account for slow and low growing species of trees and include shrubs planted beneath and adjacent to the existing overhead line. This is an applied measure to reduce the risk of growth to a height, which compromises statutory safety clearances.	<p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental Statement.</p> <p>The Illustrative Landscape and Ecology Strategy Plan excludes woodland or tree planting, beneath the overhead lines. Trees that are already in a 40 m wide exclusion zone will be retained. Hedgerows that link the two areas of mature/Ancient Woodland will be retained/restored/created. Wildflower meadows/species rich grassland will be created.</p> <p>The Illustrative Landscape and Ecology Strategy Plan will be secured by the Outline LEMP, which will be a requirement of the DCO.</p>
June 2023	Natural Resources Wales (NRW)	NRW is concerned that there appears to be under-reporting of effects in the LVIA methodology used for the assessment of LVIA at PEIR and suggests making use of the guidance material for the points made in PEIR Volume 8, Annex 26.2: Seascape and landscape character baseline technical report.	All three NRW (2020) guidance documents were reviewed for the PEIR. However, transcription errors were discovered from the DTI (2005) guidance, therefore methodology in Volume 7, Annex 6.4: Landscape, seascape and visual resources impact assessment methodology, of the Environmental Statement reverted to the source guidance on LVIA (DTI, 2005 and GLVIA3). This is explained with more detail in Volume 6, Annex 8.4: Seascape, landscape and visual impact assessment methodology, of the Environmental Statement. The NRW guidance was also reviewed for the onshore assessment, but was found to be relevant primarily to offshore infrastructure.
June 2023	NRW	<p>NRW acknowledges that no components of the Mona Offshore Wind Project are located within nationally designated landscapes. However, there are still concerns that the Offshore Generation Assets (Mona Array Area) would be visible within the seascape setting of the Isle of Anglesey NL, Eryri National Park, and the Clwydian Range and Dee Valley NL.</p> <p>NRW advises that there should be changes to the assessment of the effects on designated landscapes. The changes relate</p>	<p>This chapter considers the effects of the onshore transmission elements of the Mona Offshore Wind Project on the special qualities of the nationally designated landscape within the study areas for the Onshore Substation and cable route - the Clwydian Range and Dee Valley NL. The onshore study areas (agreed with NRW) do not include Eryri National Park or Anglesey NL.</p> <p>The effects of the onshore transmission elements of the Mona Offshore Wind Energy Project on the special qualities of the Clwydian Range and Dee Valley NL are considered within this chapter and assessed in detail in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
		<p>to assessment of potential impacts on the Anglesey NL, Eryri National Park, and the Clwydian Range and Dee Valley NL.</p> <p>NRW considers that the proposals are likely to result in significant adverse effects on visual receptors within these designated landscapes. This would result in the potential for harm to their Special Qualities.</p>	
June 2023	NRW	<p>The LVIA finds no significant effects on the Clwydian Range and Dee Valley NL nor visual receptors within it, as a result of the Mona Onshore Development Area.</p> <p>NRW considers that the substation within the Onshore Development Area would be visible within the rural context of the landscape setting to the Clwydian Range and Dee Valley NL. This is seen in the draft photomontages, views from these locations currently provide an outlook across a predominantly rural and attractive landscape, which provides a sympathetic and coherent setting to the NL and Offa's Dyke Path.</p>	<p>The LVIA study recognises that some onshore components of the Mona Offshore Wind Energy Project can be seen from the Clwydian Range and Dee Valley NL.</p> <p>The project has reduced the height and scale of the substation buildings, as well as micro-siting the substation platform. The impact on the landscape setting of the Clwydian Range and Dee Valley NL and on visual receptors using Offa's Dyke Path within the NL has also reduced.</p> <p>The assessment of the indirect landscape effects on this nationally designated landscape are summarised in section 6.10 of this chapter.</p> <p>The assessment of the direct visual effects is summarised considered within this chapter at section 6.11.</p> <p>The effects of the Onshore Substation on the special qualities of the Clwydian Range and Dee Valley NL are detailed in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study of this Environmental Statement.</p> <p>NPS EN-1, paragraph 5.10.13 notes that <i>'all proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites'</i> and that <i>'reducing the scale of a project can help to mitigate the visual and landscape effects'</i> ... <i>'however, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function'</i> (paragraph 5.10.26).</p>
June 2023	NRW	<p>Furthermore, NRW considers that significant effects are possible in relation to certain visual receptors, these are:</p>	<p>PEIR substation location Option 7 has not been taken forward. The assessment of the visual effects of the substation taken forward to ES (PEIR Option 2) is at section 6.11.2.</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
		<p>Representative viewpoints from within the NL for Option 2 are Viewpoints 2.12 and 2.13 and Representative viewpoints for Option 7 are Viewpoints 3.9 and 3.10; are all located on Offa's Dyke Path (National Trail).</p> <p>NRW agrees with the LVIA that receptors at these locations have very high sensitivity but advises that a small change to a receptor with very high sensitivity, would result in at least a moderate/major adverse which needs correction to be considered as significant.</p>	<p>The project has reduced the height and scale of the substation buildings, as well as micro-siting the substation platform. The impact on the landscape setting of the Clwydian Range and Dee Valley NL and on visual receptors using the Offa's Dyke Path within the NL have also been reduced.</p> <p>Photomontages of the Onshore Substation are presented in Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement.</p> <p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental Statement. The Illustrative Landscape and Ecology Strategy Plan will be secured by the Outline LEMP, which will be a requirement of the DCO.</p> <p>A detailed study of the effects on the special qualities of the Clwydian Range and Dee Valley NL is in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.</p> <p>NPS EN-1, paragraph 5.10.13 notes that <i>'all proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites'</i> and that <i>'reducing the scale of a project can help to mitigate the visual and landscape effects'</i> ... <i>'however, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function'</i> (paragraph 5.10.26).</p>
June 2023	NRW	<p>In relation to the effects from the substation during operation, NRW advises that it is expected to have at least a small magnitude of change, to match with LVIA definition of a Minor change to the visual baseline. NRW suggests that the sensitivity for Option 7 receptors at viewpoints 3.9 and 3.10, should be 'very high' and the viewpoints for Option 7 should be categorised greater than 'minor to moderate' for adverse effects. This is to reflect the difference in distance of Option 2 and 7 from the NL, with Option 7 being slightly closer to the NL.</p>	<p>PEIR substation location Option 7 has not been taken forward.</p> <p>The assessment of the visual effects of the substation taken forward (PEIR Option 2) is at section 6.11.2. A detailed study of the effects on the special qualities of the Clwydian Range and Dee Valley NL is in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.</p> <p>The project has reduced the height and scale of the substation buildings, as well as micro-sited the substation platform, to avoid as many landscape elements as possible. The impact on the landscape setting of the Clwydian Range and Dee Valley NL and on visual receptors using the Offa's Dyke Path within the NL have been reduced from those assessed in the PEIR.</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
			<p>Photomontages of the Onshore Substation are presented in Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement.</p> <p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental Statement. The Illustrative Landscape and Ecology Strategy Plan will be secured by the Outline LEMP, which will be a requirement of the DCO.</p> <p>Draft NPS EN-1, paragraph 5.10.13 notes that <i>'all proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites'</i> and that <i>'reducing the scale of a project can help to mitigate the visual and landscape effects'</i> ... <i>'however, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function'</i> (paragraph 5.10.26).</p>
June 2023	NRW	<p>Local landscape character areas have not been included. NRW recommend the assessment of not only high-level receptors, such as National Character Areas (NCAs) and Seascape Sensitivity Zones (SSZs), but also the consideration of local landscape and seascape character areas that are relevant local character areas.</p> <p>These are identified in the Anglesey Landscape Strategy 2011 and Anglesey Seascape Character Assessment, 2013, and should be referenced to provide further detail on the landscape/ seascape character of the designations and their Special Qualities.</p>	<p>This chapter assesses the effects of the onshore transmission infrastructure of the Mona Offshore Wind Energy Project. The assessment uses the detailed LANDMAP Aspect Layers and Aspect Areas. The details of the LANDMAP Aspect Areas are detailed in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement. LANDMAP is the most detailed character assessment of the Welsh landscape.</p> <p>The effects of the offshore infrastructure on seascape and landscape character is assessed in Volume 2, Chapter 8: Seascape and visual resources, of the Environmental Statement. The detail of the seascape and landscape character areas for that chapter are in Volume 6, Annex 8.2: Seascape and landscape character baseline technical report, of the Environmental Statement.</p> <p>The effects of both the onshore and offshore infrastructure on the special qualities of the internationally and nationally designated landscapes within the various study areas are assessed in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
June 2023	NRW	NRW agrees that there are significant adverse cumulative visual effects in relation to views from the Isle of Anglesey NL and Eryri National Park. As these visual changes have the potential to harm Special Qualities of the designated landscapes, particularly those relating to perceptual and scenic qualities.	<p>This chapter assesses the effects of the onshore transmission infrastructure of the Mona Offshore Wind Energy Project. This NRW comment relates to the offshore infrastructure of the Mona Offshore Wind Energy Project.</p> <p>The effects of the offshore infrastructure on seascape and landscape character is assessed in Volume 2, Chapter 8: Seascape and visual resources, of the Environmental Statement. The detail of the seascape and landscape character areas for that chapter are in Volume 6, Annex 8.2: Seascape and landscape character baseline technical report, of the Environmental Statement.</p> <p>The effects of both the onshore and offshore infrastructure on the special qualities of the internationally and nationally designated landscapes within the various study areas are assessed in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.</p>
June 2023	NRW	In reference to the Overarching National Policy Statement for Energy (NPS EN-1) on Table 26.3 at Volume 4, Chapter 26. NRW does not consider that sufficient evidence has been provided to demonstrate that seascape, landscape, and visual impacts have been minimised in this case. Further work on this aspect is advised in the Environmental Statement (ES).	<p>The siting and design of the offshore infrastructure of the Mona Offshore Wind Energy Project is described in this chapter.</p> <p>The assessment of the visual effects of the substation taken forward to the Environmental Statement (PEIR Option 2) is at section 6.11. A detailed study of the effects on the special qualities of the Clwydian Range and Dee Valley NL is at Volume 6, Annex 8.5: Internationally and nationally designated landscape study, of the Environmental Statement.</p> <p>The project has reduced the height and scale of the substation buildings, as well as micro-sited the substation platform. The impact on the landscape setting of the Clwydian Range and Dee Valley NL and on visual receptors using the Offa's Dyke Path within the NL have been reduced from those assessed in the PEIR.</p> <p>Photomontages of the Onshore Substation are presented in the Environmental Statement in Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement.</p> <p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
			<p>Statement. The Illustrative Landscape and Ecology Strategy Plan will be secured by the Outline LEMP, which will be a requirement of the DCO.</p> <p>Draft NPS EN-1, paragraph 5.10.13 notes that <i>'all proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites'</i> and that <i>'reducing the scale of a project can help to mitigate the visual and landscape effects'</i> ... <i>'however, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function'</i> (paragraph 5.10.26).</p>
June 2023	NRW	<p>In PEIR Volume 4, chapter 26: Seascape, landscape and visual resources – Section 4: Other Effects and Summary. NRW acknowledges the pending tasks outlined in Section 26.30. This includes further fieldwork to capture winter photography of the Onshore Substation, night-time photography to inform the assessment of the night-time effects, which will be completed in the ES and the preparation of photomontages.</p> <p>NRW advises that photomontages for the offshore turbines should be prepared in accordance with Nature Scot Visual Representation of Wind Farms Guidance, 2017 and Landscape Institute Technical Guidance Note 06/19 Visual representation of development proposals.</p>	<p>Once the Onshore Substation location was chosen, the onshore photography was finalised and further photography added, as well as missing winter/summer photography. Night-time photography was undertaken to assess the effects of the Mona offshore generation and transmission assets. There will be no permanent lighting at the Onshore Substation, therefore no night-time photography has been undertaken for the onshore transmission assets.</p> <p>The methodology used for the photography and used to generate and present the photomontages follows the Nature Scot Visual Representation of Wind Farms Guidance (2017) and Landscape Institute (LI) Technical Guidance Note (TGN) 06/19 Visual representation of development proposals. It is detailed in Volume 7, Annex 6.4: Landscape, seascape and visual impact assessment methodology, of the Environmental Statement.</p>
June 2023	NRW	<p>NRW highlights the right to reserve judgement on the potential success of this mitigation until the HELMP has been submitted. Mitigation proposals for the Onshore Substation will include planting. The extent of the planting is indicated on the photomontages but are yet to be set out in a Hydrological, Ecological, and Landscape Management Plan (HELMP).</p>	<p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental Statement. The Illustrative Landscape and Ecology Strategy Plan will be secured by the Outline LEMP, which will be a requirement of the DCO.</p>

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			<p>The project has reduced the height and scale of the substation buildings, as well as micro-sited the substation platform to reduce the impact on existing landscape elements.</p>
June 2023	NRW	<p>From two options for the location of the substation, NRW notes that Option 2 is likely to be preferable location over Option 7, as it's further away from the NL. However, the ground modelling/final contours, any local restrictions on mitigation proposals, and the local landscape considerations will also need to be taken into consideration.</p>	<p>PEIR substation Option 7 has not been taken forward.</p> <p>Only the effects of PEIR substation Option 2 on landscape, seascape and visual resources are assessed in this chapter.</p> <p>The project has reduced the height and scale of the substation buildings, as well as micro-siting the substation platform.</p> <p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental Statement. The Illustrative Landscape and Ecology Strategy Plan will be secured by the Outline LEMP, which will be a requirement of the DCO.</p>
June 2023	NRW	<p>NRW also advises on the difficulty to entirely screen the substation in views from Offa's Dyke Path at Viewpoints 2.12, 2.13, 3.9, and 3.10. The LVIA states that mitigation proposals would effectively reduce the effects at these formerly mentioned viewpoints by Year 15, as they are assessed as negligible/minor adverse.</p> <p>However, these locations are considerably more elevated than the substation site. Detailed design measures, including colour selection for built elements will therefore be needed, as it is an important consideration. The submission of Substation Design Principles Statement as part of the DCO will address this aspect and views from Offa's Dyke need to be used to inform this Statement.</p>	<p>Draft NPS EN-1, paragraph 5.10.13 notes that <i>'all proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites'</i> and that <i>'reducing the scale of a project can help to mitigate the visual and landscape effects'</i> ... <i>'however, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function'</i> (paragraph 5.10.26).</p> <p>The project has reduced the height and scale of the substation buildings, as well as micro-sited the substation platform, to avoid landscape elements, such as trees and hedgerows where possible.</p> <p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22). The Illustrative Landscape and Ecology Strategy Plan will be secured by the Outline LEMP, which will be a requirement of the DCO.</p> <p>The photomontages of the Onshore Substation are in Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement.</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
June 2023	The Woodland Trust	<p>A number of ancient and veteran trees within the proposed cabling corridor are recorded on the Ancient Tree Inventory. Five areas of ancient woodland are within the proposed corridor boundary, and numerous others are located within the wider work area, or adjacent to the corridor/work area boundaries.</p> <p>The Woodland Trust recommends that any non-ancient woodlands affected by the scheme, are reviewed to ensure any areas of potentially unmapped ancient woodland are accounted for as the scheme progresses.</p> <p>The Trust also highlights the importance of an arboricultural impact assessment to be undertaken early within the design process. Surveys are also recommended for detailing woodland flora and fauna alongside an assessment of historical mapping.</p> <p>The Trust has concerns over root damage due to the proposed route alignment corridor found. The Trust would primarily advocate for the redirection of any cabling through ancient woodland areas. However, if such works are likely to occur, it suggests using non-invasive root investigation, for ancient trees and protection beyond the limit of the usual investigative tools. Further clarification on the technique and any potential impacts are necessary.</p>	<p>The Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) has been designed with input from the following disciplines: landscape architecture; arboriculture; ecology; hydrology; and historic environment.</p> <p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies the application. The Illustrative Landscape and Ecology Strategy Plan will be secured by the Outline LEMP, which will be a requirement of the DCO.</p> <p>A tree survey and AIA have been undertaken for the Mona Onshore Development Area and are presented in Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment, of the Environmental Statement. An Outline Arboricultural Method Statement has been prepared which sets out measures for the protection of trees during the construction period (Document Reference J26.18).</p> <p>Ancient Woodland and veteran trees and their RPA have been avoided by the Mona onshore development.</p> <p>Tree RPAs will be clearly marked and fenced off during construction. The operation and maintenance of the Onshore Substation and Onshore Cable Corridor should not necessitate the removal of trees or encroachment on any tree RPAs. In the unlikely event that work near a retained tree is required a method statement for that work would be agreed with the relevant tree officer.</p>
June 2023	The Woodland Trust	<p>The Trust also suggests following the measures outlined in the British Standard. In the BS5837:2012 guidelines, trees should have a root protection area (RPA) of 12 times and the stem diameter capped at 15m; and Natural England and Forestry Commission's</p>	<p>A tree survey and AIA have been undertaken for the Mona Onshore Development Area, to the relevant guidelines and British Standards. They are presented in Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment, of the Environmental Statement. An Outline Arboricultural Method Statement has been prepared which sets out</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
		<p>standing advice on root protection areas for veteran trees is taken into account in planning decisions.</p> <p>The trust recommends buffering ancient woodland as an ideal mitigation measure. This development should allow for a buffer zone of at least 30 metres to prevent adverse impacts such as pollution, disturbance and to ensure avoidance of root damage. HERAS fencing should be fitted with acoustic and dust screening measures and need to be installed during construction. To ensure that, the buffer zone does not suffer from encroachment of construction vehicles/stockpiles, and to limit the effects of other indirect impacts.</p>	<p>measures for the protection of trees during the construction period (Document Reference J26.18).</p> <p>Ancient Woodland and veteran trees have been avoided by reducing the size of the Onshore Substation and the extent of the cable corridor and by choice of construction methodology. Tree RPAs have been avoided as much as possible by the Mona Onshore Development Area.</p> <p>Tree RPAs will be clearly marked and fenced off during construction. The operation and maintenance of the Onshore Substation and Onshore Cable Corridor should not necessitate the removal of trees or encroachment on any tree RPAs. In the unlikely event that work near a retained tree is required a method statement for that work would be agreed with the relevant tree officer.</p> <p>These tree protection measures are also detailed in the Outline CoCP (Document Reference J26).</p>
June 2023	Isle of Anglesey Council	<p>The Council advocates that the threshold for measuring significant effects needs amending and supports the argument that any effect classified Moderate or greater is considered 'significant' as this is considered to align with common practice. However, the LVIA mentions that only effects with a significance level of Substantial or Major are deemed to be significant.</p> <p>Split categories have been used in the assessment of sensitivity and magnitude. The council advocates that this is not aligned with best practice and rectifying this would help to improve clarity. The Council suggests, that where effects fall into matrices of dual categories, for example a receptor or group of receptors that receives a range of effects, that might vary geographically or with the seasons; the LVIA should confirm which level</p>	<p>This chapter considers the effects of the proposed infrastructure within the Mona Onshore Development Area. The Isle of Anglesey does not fall within the study area agreed with NRW as suitable for the Mona onshore transmission infrastructure.</p> <p>LVIA is not a scientific discipline and so magnitude, sensitivity and effects do not readily fall into different categories as the context changes. Split categories are commonly used in LVIA, e.g. the DTI guidance (Guidance on the assessment of the impact of offshore wind farms: Seascape and visual impact report, DTI, 2005) uses split categories (Table 6, page 80).</p> <p>The DTI (2005) guidance considers that most moderate effects will not be significant (page 80, second paragraph).</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
June 2023	Isle of Anglesey Council	<p>applies in each case and provide an explanation to justify each decision.</p> <p>The receptor for National Character Areas NLCA 1 Afordir Môn/Anglesey Coast has not assessed, as well as construction and decommissioning cumulative effects and operations and maintenance cumulative effects is not assessed.</p> <p>The Council considers that there are insufficient mitigation measures adopted as part of the project, or in in relation to cumulative visual effects referred in on the Viewpoints representing the Wales Coast Path on Anglesey and Anglesey NL (represented by VP 2, 3, 27 and 28).</p> <p>The Council also considers important to distinguish between mitigation measures and any measures included in the design; and recommends a discussion with the Applicant to produce appropriate and reasonable mitigation or enhancement measures.</p>	<p>This chapter considers the effects of the proposed infrastructure within the Mona Onshore Development Area. The Isle of Anglesey does not fall within the study area agreed with NRW as suitable for the Mona onshore transmission infrastructure.</p>
June 2023	Cefn Meiriadog Community Council	<p>The scale of the proposed substation is perceived to be entirely incompatible and insensitive to the rural landscape of Cefn Meiriadog. It is considered to have extremely deleterious effects on the landscape and community. Thus, the Council opposes the rate and amount of development happening at Cefn Meiriadog and is concerned that the nature of the community might be changed irreversibly. The community remains predominantly rural in character, which is thought to be an attractive factor for residents.</p> <p>Concerns over cumulative effects from the three existing large substations and five</p>	<p>This chapter assesses the effects on landscape character at section 6.10; visual effects are assessed at section 6.11; and cumulative landscape and visual effects are assessed at section 6.14.</p> <p>Draft NPS EN-1, paragraph 5.10.13 notes that <i>'all proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites'</i> and that <i>'reducing the scale of a project can help to mitigate the visual and landscape effects'</i> ... <i>'however, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function'</i> (paragraph 5.10.26).</p> <p>The project has reduced the height and scale of the substation buildings, as well as micro-siting the substation platform, to reduce impacts. The design of the substation is outlined in the Design Principles Document (Document Reference J3).</p>

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		<p>large-scale projects currently in development; this stems from the perception that existing substations have already taken up relatively, but not completely unobtrusive sites that are imperceptible through topography and tree cover. These developments are: Awel y Môr, Mona, National Grid substation extension, Mares Connect substation, St Asaph Solar Farm.</p>	<p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP (Document Reference J22) which will be a requirement of the DCO.</p>
June 2023	Denbighshire County Council	<p>The Council requires further information about the substation siting, design, scale and layout, and appearance of buildings to be included in the assessment. In addition to the justification for mitigation and compensation considered for impacts caused by the substation particularly in the NL, recreation and tourism.</p> <p>The Council highlights that cumulative impacts in this area cannot be underestimated and note that for certain local landscape receptors, the impacts from the substations are already deemed to be high. This must be compounded by the previous intrusions into the landscape of other large substations.</p>	<p>This chapter assesses the effects on landscape character at section 6.10; visual effects are assessed at section 6.11 and cumulative landscape and visual effects are assessed at section 6.14.</p> <p>Substation Option 7 (at PEIR) has not been taken forward. Substation Option 2 (at PEIR) has been selected as the preferred location for the Onshore Substation. In part, the final substation option was selected, as it was further from the Clwydian Range and Dee Valley NL.</p> <p>The impact on recreation and tourism is considered in Volume 4, Chapter 3: Socio-economics, of the Environmental Statement.</p> <p>The project has reduced the height and scale of the substation buildings, as well as micro-siting the substation platform, to reduce impacts. The design of the substation is outlined in the Design Principles Document (Document Reference J3) in addition to Volume 1, Chapter 3: Project description, of the Environmental Statement.</p> <p>Developments in the Mona Onshore and Offshore Development Areas are visualised in Volume 6, Annex 8.6: Seascape Visualisations and Volume 7, Annex 6.5: Landscape Visualisations, of the Environmental Statement.</p> <p>The landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.20 and detailed in the Design Principles Document (Document Reference J3). The proposed mitigation is shown on the Illustrative Landscape and Ecology Plan (Figure 6.5). The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP, which will be a requirement of the DCO.</p>
June 2023	Denbighshire County Council	<p>The Council has concerns with the extent of hedgerow that is required to be removed and claims that further assessment is needed to</p>	<p>Trenchless techniques will be used, where possible, to avoid impacts to areas of woodland and important hedgerows as shown in Volume 7, Annex 6.6: Tree Survey and Arboricultural Impact Assessment, of the</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
		<p>examine the use of trenchless ducts to lay cables under existing hedgerow and trees. The Council suggests this method would minimise the loss of important and biodiverse trees and hedgerows.</p>	<p>Environmental Statement. An Outline Arboricultural Method Statement has been prepared which sets out measures for the protection of trees during the construction period (Document Reference J26.18).</p> <p>The Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) has been designed with input from the following disciplines: landscape architecture; arboriculture; ecology; hydrology and historic environment.</p> <p>The effects of the development within the Mona Onshore Development Area on ecology and habitats are assessed in Volume 3, Chapter 3: Onshore Ecology, of the Environmental Statement, and the supporting Annexes in Volume 7 of the Environmental Statement.</p> <p>A tree survey and AIA have been undertaken for the Mona Onshore Development Area, to the relevant guidelines and British Standards. They are presented in Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment, of the Environmental Statement.</p> <p>Ancient Woodland and veteran trees and their RPAs will be avoided by the Mona onshore development.</p> <p>Tree RPAs will be clearly marked and fenced off during construction. The operation and maintenance of the Onshore Substation and Onshore Cable Corridor should not necessitate the removal of trees or encroachment on any tree RPAs. In the unlikely event that work near a retained tree is required a method statement for that work would be agreed with the relevant tree officer.</p> <p>These tree protection measures are also detailed in the Outline CoCP (Document Reference J26).</p>
June 2023	Conwy County Borough Council	<p>In order to determine the impact on trees, the Council request a full BS5837 'Trees in relation to design, demolition and constructions' report. The report should provide details for all trees affected within the development and those on neighbouring properties.</p> <p>The Council suggest that it would be useful to have tree/woodland management plans submitted as part of the application and detailed replanting or mitigation planting</p>	<p>A tree survey and AIA have been undertaken for the Mona Onshore Development Area, to the relevant guidelines and British Standards. They are presented in Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment, of the Environmental Statement. An Outline Arboricultural Method Statement has been prepared which sets out measures for the protection of trees during the construction period (Document Reference J26.18).</p> <p>Ancient Woodland and veteran trees and their RPA will be avoided by the Mona onshore development.</p> <p>Tree RPAs will be clearly marked and fenced off during construction. The operation and maintenance of the Onshore Substation and Onshore Cable</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
		<p>plans with sizes, species, locations etc. provided together with location plans.</p>	<p>Corridor should not necessitate the removal of trees or encroachment on any tree RPAs. In the unlikely event that work near a retained tree is required a method statement for that work would be agreed with the relevant tree officer.</p> <p>These tree protection measures are also detailed in the Outline COCP (Document Reference J26).</p> <p>The Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) has been designed with input from the following disciplines: landscape architecture; arboriculture; ecology; hydrology and, historic environment.</p> <p>The proposed mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) which includes details of hedgerow, woodland and tree planting, accompanies this Application.</p> <p>The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP, which will be a requirement of the DCO.</p>
June 2023	St Asaph City Council	<p>The Council considers that the size of the Onshore Substation is completely incompatible with the rural landscapes around the small city of St Asaph. Loss of agricultural land and farming in the area, visual impacts are disproportionate. The Council state that many of St Asaph residents, value the amenity of Cefn Meiriadog, which will be irreversibly changed.</p> <p>The Council is concerned about the cumulative construction and operational impact of the Mona proposal, as proposed projects have similar timescales. The Council considers that current substations already occupy areas considered to offer better topographical screening. St Asaph would like to conserve the historic Cathedral city status and has concerns over ecological issues that the substation at Option 2 will present.</p>	<p>Substation Option 7 (at PEIR) has not been taken forward. Substation Option 2 (at PEIR) has been selected as the preferred location for the Onshore Substation. The location of the selected substation is further from St. Asaph than PEIR Option 7. It is also further from the Clwydian Range and Dee Valley NL. See Volume 1, Chapter 4: Site Selection and Consideration of Alternatives, of the Environmental Statement for more details on the selection of the site.</p> <p>The project has reduced the height and scale of the substation buildings, this, as well as micro-siting the substation platform, has reduced any landscape and visual impacts, that St. Asaph might have experienced.</p> <p>The Zone of Theoretical Visibility for the Onshore Substation is presented within Figure 6.2. Which indicates that only small parts of St. Asaph have theoretical views of the substation. Representative viewpoints 7 and 17 (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement) are located close to these points.</p> <p>The cumulative impacts of the Onshore Substation are considered in section 6.14.</p> <p>The design of the substation building and the landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.19 and Table 6.20, and are detailed in the Design Principles</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
		<p>The Council is concerned over sizeable agricultural areas marked on the Mona project maps as temporary lay down areas during construction may be left as hard standing following construction if the landowner prefers.</p>	<p>Document (Document Reference J3). The proposed landscape mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). An Outline LEMP (Document Reference J22) accompanies this Environmental Statement. The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP, which will be a requirement of the DCO. Those construction compounds that are to be returned to the landowner are to be returned to pasture. Other fields are used for landscape and ecological mitigation.</p> <p>This chapter assesses the effects on landscape character in section 6.10. Visual effects are assessed in section 6.11.</p> <p>NPS EN-1, paragraph 5.10.13 notes that <i>'all proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites.'</i></p>
17 August 2023	<p>Design Commission for Wales (DCfW) Denbighshire County Council</p>	<p>The Design Commission for Wales (DCfW) was consulted on the substation design strategy. Also attending the meeting were representatives from Denbighshire County Council.</p>	<p>The design of the substation building and the landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.19 and Table 6.20, and are detailed in the Design Principles Document (Document Reference J3).</p>
31 August 2023	DCfW	<p>Following the meeting on 17 August 2023, a Design Review Report was issued (DCfW Ref:302). The correspondence from DCFW included a copy of Designing for Renewable Energy in Wales: Consultation Draft (DCfW, April 2023).</p>	
04 October 2023	<p>EWG5: NRW, Conwy County Borough Council, Denbighshire County Council and The Woodland Trust</p>	<p>Further details of the Landscape and Ecology Strategy and visualisations were presented and discussed in addition to a summary of the factors that influenced the design of the Landscape and Ecological Strategy. This included: existing vegetation, including hedgerows and trees; RPAs; historic field boundaries; and other design constraints, including other proposed developments.</p> <p>It was noted that other proposed developments located near the Onshore</p>	<p>The design of the substation building and the landscape mitigation measures adopted as part of the Mona Offshore Wind Project are outlined in Table 6.19 and Table 6.20, and are detailed in the Design Principles Document (Document Reference J3). The proposed landscape mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5). The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP, which will be a requirement of the DCO.</p>

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Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
		<p>Substation informed the landscape and ecological strategy. These included the proposed grid connection for Awel y Môr Offshore Wind Farm and the extension of the National Grid Bodelwyddan substation.</p>	
<p>08 December 2023</p>	<p>EWG6: NRW and Conwy County Borough Council</p>	<p>The Outline LEMP was discussed at this EWG and it was confirmed that it will focus on:</p> <ul style="list-style-type: none"> <li>Retention and/or enhancement of key boundary features at the Onshore Substation, including areas of woodland and hedgerows to provide visual screening and integrate the development into the surrounding landscape</li> <li>Additional planting at the Onshore Substation, including areas of woodland to screen views of the development and mitigate impacts on the character of the surrounding landscape.</li> </ul> <p>Restoring and infilling existing hedgerows at the Onshore Substation where required, to reconnect features of the landscape and provide further visual screening.</p>	<p>These are set out within the Outline LEMP (Document Reference J22) and the Illustrative Landscape and Ecology Strategy Plan is presented at Figure 6.5. The Illustrative Landscape and Ecology Strategy Plan will be secured through the Outline LEMP, which will be a requirement of the DCO.</p>

## 6.4 Baseline methodology

### 6.4.1 Relevant guidance

6.4.1.1 The LVIA has been undertaken based on the guidance on landscape and visual impact assessment within the GLVIA3 (Landscape Institute and Institute of Environmental Management and Assessment, 2013). In addition, the LVIA has been informed by relevant best practice guidance, including:

- Using LANDMAP in Landscape and Visual Impact Assessments (NRW, 2020)
- Technical Guidance Note 02/21: Assessing landscape value outside national designations (Landscape Institute, May 2021)
- Technical Guidance Note 06/19: Visual Representation of Development Proposals (Landscape Institute, September 2019).

### 6.4.2 Scope of the assessment

6.4.2.1 The scope of this Environmental Statement has been developed in consultation with relevant statutory and non-statutory consultees as detailed in Table 6.7. Taking into account the scoping and consultation process, Table 6.8 summarises the issues considered as part of this assessment.

**Table 6.8: Issues considered within this assessment.**

Activity	Potential impacts scoped into the assessment
<b>Construction phase</b>	
Works at the landfall site	The potential impact on seascape and landscape receptors:
Onshore grid connection cable including construction compounds	<ul style="list-style-type: none"> <li>• Seascape/marine character area (Marine Character Area 02)</li> <li>• Landscape character, special qualities and setting of Clwydian Range and Dee Valley NL</li> </ul>
Onshore Substation	<ul style="list-style-type: none"> <li>• Historic landscapes (Registered Parks and Gardens)</li> </ul>
Mona 400 kV grid connection cable route from the Onshore Substation to the Bodelwyddan National Grid substation	<ul style="list-style-type: none"> <li>• LANDMAP Aspect Areas (within 10 km of the Onshore Substation)</li> </ul> The potential impact on visual receptors (people):
Construction and service vehicles, plant and machinery.	<ul style="list-style-type: none"> <li>• People using national trails/long distance paths</li> <li>• People using Access Land and public rights of way</li> <li>• People at main coastal settlement seafronts and shorelines</li> <li>• People travelling along local roads</li> </ul>
<b>Operation, maintenance and decommissioning</b>	
Onshore Substation	The potential impact on seascape and landscape receptors:
	<ul style="list-style-type: none"> <li>• Landscape character, special qualities and setting of Clwydian Range and Dee Valley NL</li> <li>• Historic landscapes (Registered Parks and Gardens)</li> <li>• LANDMAP Aspect Areas (within 10 km of the Onshore Substation)</li> </ul>
	The potential impact on visual receptors (people): <ul style="list-style-type: none"> <li>• People using national trails/long distance paths</li> <li>• People using Access Land and public rights of way</li> <li>• People at main coastal settlement seafronts and shorelines</li> <li>• People travelling along local roads</li> </ul>

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6.4.2.2 Effects which are not considered likely to be significant have been scoped out of the assessment. A summary of the effects scoped out, together with justification for scoping them out and whether the approach has been agreed with key stakeholders through either scoping or consultation (specifically the Mona Offshore Wind Project LVIA Workshop, September 2022), is presented in Table 6.9.

**Table 6.9: Impacts scoped out of the assessment for landscape and visual resources.**

Potential impact	Justification
Landscape and seascape character areas located towards the outer limit of the LVIA study area (10 km from the location of the Mona Onshore Development Area) and where there is little or no ZTV overlap	There is no potential for significant effects to arise where desk study and fieldwork indicates there would be negligible distant visibility of the Mona Onshore Development Area.
The impact of decommissioning of the onshore export cables on landscape and seascape character and visual resources	All cabling equipment (with the exception of link boxes) would be left in situ. The effects do not have the potential to be significant.
Cumulative effect of the operation, maintenance and decommissioning of the onshore export cables	On the basis that all cables would be underground during operation and would be left in situ when the proposed development is decommissioned.

### 6.4.3 Methodology to inform baseline

6.4.3.1 This section deals with the landscape, seascape and visual resources baseline for the onshore elements of the Mona Offshore Wind Project, the separate aspects of which are described in detail in the following separate technical reports:

- Environmental Statement Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement
- Environmental Statement Volume 7, Annex 6.3: Visual baseline technical report - onshore development, of the Environmental Statement.

6.4.3.2 In summary, the landscape, seascape and visual baseline environments were assessed by means of desk study and fieldwork, informed by consultation with the relevant authorities and stakeholders. This process, the activities involved and the consultees engaged, are recorded in this section by providing information regarding:

- Baseline studies and surveys undertaken in relation to the onshore elements of the Mona Offshore Wind Project
- Any difficulties (e.g. technical deficiencies or limitations in available data) encountered in compiling the required information.

6.4.3.3 A record and summary description of these desk study and fieldwork activities is provided in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report and Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

### 6.4.4 Desktop study

6.4.4.1 Information on the landscape, seascape and visual baseline environment within the LVIA study area was collected through a detailed desktop review of existing studies and datasets. These are summarised in Table 6.10.

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**Table 6.10: Summary of key desktop reports.**

Title	Source	Year	Author
LANDMAP – the Welsh Landscape Baseline	NRW	Various (2007)	NRW
NL Character	NRW	Various (2013)	NRW
Conwy and Denbighshire Landscape Sensitivity and Capacity Assessment for Wind Energy Development	Conwy County Borough Council and Denbighshire County Council	2013	Denbighshire County Council
Clwydian Range and Dee Valley Management Plan 2014 - 2019	Clwydian Range and Dee Valley NL	2014	Clwydian Range and Dee Valley NL Partnership
Background Paper 27 Special Landscape Areas	Conwy Borough Council	2014	Conwy Borough Council
Landscape Unit and Strategy Area Maps	Conwy Borough Council	2014	Conwy Borough Council
LANDMAP Guidance Note 1: LANDMAP & Special Landscape Areas	NRW	2017	NRW
Guidance Note 46 (GN46) Using LANDMAP in Landscape and Visual Impact Assessment (LVIA)	NRW	2021	NRW

### 6.4.5 Identification of designated sites

- 6.4.5.1 All designated landscape areas within the LVIA onshore study area that could be affected by the construction, operations and maintenance, and decommissioning phases of the onshore elements of the Mona Offshore Wind Project were identified and considered for assessment.
- 6.4.5.2 Nationally designated landscapes that fall within the Mona Onshore Development Area LVIA study areas are noted in Table 6.12. The effects of the development within the Mona Onshore Development Area on the special qualities of one nationally designated landscape are assessed in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement. The assessment is summarised in section 6.10.1 of this chapter.
- 6.4.5.3 The effects of the development within the Mona Onshore Development Area on locally designated landscapes are assessed in section 6.10.5 of this chapter.

### 6.4.6 Site-specific surveys

- 6.4.6.1 In order to inform the Environmental Statement, site-specific surveys were undertaken in relation to the photography and assessment of the representative viewpoints agreed with statutory consultees. In addition, extensive fieldwork was carried out during preparation of the LVIA to support the landscape, seascape and visual resources baseline and impact assessments. A summary of the site-specific surveys undertaken is provided in Table 6.11.

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**Table 6.11: Summary of site-specific surveys.**

Title	Extent of survey	Overview of survey	Survey contractor	Date	Reference to further information
LVIA photography	Onshore Substations	Baseline assessment of Mona Onshore Development Area and onshore candidate viewpoint winter photography	RPS	17 and 18 March 2022	The baseline photography undertaken during the site visit is presented in Environmental Statement Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement. The baseline character photography at the Onshore Substation location (13 and 14 November) is presented in Environmental Statement Volume 7, Annex 6.2: Landscape and seascape character baseline technical report.
LVIA photography	Onshore Substations	Baseline assessment of Mona Onshore Development Area and onshore candidate viewpoint summer photography	RPS	21 June 2022	
LVIA photography	Onshore Substation (PEIR options 2 and 7)	Baseline assessment of Mona Onshore Development Area and onshore representative viewpoint summer photography	RPS	26 and 27 July 2022	
LVIA photography	Onshore Substation	Baseline assessment of Mona Onshore Development Area and onshore representative viewpoint additional summer photography	RPS	9 and 10 August 2023	
Site survey and photography	Onshore Substation	Landscape and visual resources Onshore Substation site survey, with additional photography	RPS	13 and 14 November 2023	
LVIA photography	Onshore Substation	Baseline assessment of Mona Onshore Development Area and onshore representative viewpoint winter photography	RPS	11 December 2023	

## 6.5 Baseline environment

### 6.5.1 Landscape and seascape baseline environment

6.5.1.1 The onshore LVIA baseline environment comprises two distinct but connected aspects – landscape (and seascape) character and views and visual amenity. These are described in the following separate technical reports:

- Landscape and seascape character baseline (Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement)
- A designated landscape study including assessment of the special qualities of nationally designated landscapes (Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement). The Clwydian Range and Dee Valley NL lies within the agreed LVIA study area for the Onshore Substation
- Visual baseline (Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement).

6.5.1.2 Summaries of the baseline landscape, seascape and visual environments of the LVIA study area are provided below.

### 6.5.2 Nationally designated landscapes within the Mona Onshore Development Area LVIA study area

6.5.2.1 Designated areas of landscapes identified for the inclusion in this chapter are listed in Table 6.12. The special qualities and criteria for designations are set out in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement and assessed in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement. Figure 6.2 illustrates these and the RPaGs (on the Cadw/ICOMOS Register of Parks and Gardens of Special Historic Interest in Wales) within the LVIA study areas for the Mona Onshore Development Area.

**Table 6.12: Nationally designated landscape and relevant qualifying interests for the LVIA of the Mona Onshore Development Area.**

Designated site	Closest distance to the Onshore Substation (km)	Relevant qualifying interest
Clwydian Range and Dee Valley NL	6.1 km	Two special qualities of relevance: <ul style="list-style-type: none"> <li>• Tranquillity</li> <li>• Remoteness and wildness, space and freedom expansive views/seascapes.</li> </ul>

### 6.5.3 Non-designated landscape and seascapes

6.5.3.1 Character areas, within the LVIA study area with the potential to be affected by the MDS of the Mona Onshore Development Area have been identified. LANDMAP Aspect Areas with potential to be affected by the Onshore Cable Corridor and Onshore Substation have also been identified in Table 6.13.

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- 6.5.3.2 The landscape and seascape characteristics with potential to be affected have been identified and are described in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement. Extracts of published assessments reproduced in Appendix A of this annex, provide further detail on landscape and seascape characteristics for relevant character areas. Environmental Statement Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement, includes information on the relevant statutory landscape designations including assessment of the effects of the Mona onshore transmission infrastructure on the special qualities that underpin their designated status as nationally important landscapes.
- 6.5.3.3 Character areas within the LVIA study with little or no overlap with the ZTV of the Onshore Substation and/or that are likely to experience negligible or no change due to those transmission assets have been scoped out of the assessment, as set out in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement.
- 6.5.3.4 Table 6.13 lists the landscape and seascape character areas scoped in to the LVIA. Designated landscapes are considered within the next section of this chapter.

**Table 6.13 Published landscape and seascape character areas assessed in the LVIA.**

Character area reference	Level	Jurisdiction	Source	Reference
<b>National Marine Character Areas</b>				
MCA 02	Colwyn Bay and Rhyl Flats	National	Wales – Conwy/ Denbighshire	LUC Welsh National Seascape Assessment (2015)
<b>National Landscape Character Areas</b>				
NLCA 08	Arfordir Gogledd Cymru/North Wales Coast	National	Conwy/ Denbighshire/ Flintshire	Welsh National Landscape Character Areas online maps, NRW
NLCA 09	Bryniau Rhos/Rhos Hills	National	Conwy/ Denbighshire	
NLCA 11	Vale of Clwyd	National	Denbighshire	
NLCA 12	Clwydian Range	National	Denbighshire/ Flintshire	
<b>LANDMAP Aspect Areas (Visual and Sensory) – directly affected</b>				
CNWVS052	Llandudno to Kinmel Bay intertidal	Local	Conwy	LANDMAP Aspect Areas online maps, NRW
CNWVS062	Llandulas urban coast	Local	Conwy	
CNWVS070	Abergele coastal plain	Local	Conwy	
CNWVS021	Cefn yr Ogof and environs	Local	Conwy	
CNWVS023	Dulas lowlands	Local	Conwy	
DNBGHVS037	Limestone Valley-Cefn	Local	Denbighshire	
DNBGHVS033	Cefn Estate	Local	Denbighshire	

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Character area reference	Level	Jurisdiction	Source	Reference
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As explained in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement, no other Visual and Sensory Aspect Areas have the potential to be significantly affected. For this reason no other Visual and Sensory Aspect Areas have been taken forward to the landscape seascape and visual impact assessment stage, within this chapter.

### LANDMAP Aspect Areas (Visual and Sensory) – indirectly affected

CNWVS070	Abergele coastal plain (eastern section)	Local	Conwy	LANDMAP Aspect Areas online maps, NRW
DNBGHVS013	Coastal fields near Towyn	Local	Denbighshire	
DNBGHVS014	Area north and east of Bodelwyddan	Local	Denbighshire	
DNBGHVS015	River valley of Clwyd/Elwy – north of St. Asaph	Local	Denbighshire	
DNBGHVS016	Vale wooded estate – south of Dyserth	Local	Denbighshire	
DNBGHVS028	Clwydian slopes south of Rhualt	Local	Denbighshire	
DNBGHVS029	Graig Tremerechion	Local	Denbighshire	
DNBGHVS031	Vale of Clwyd – north of Denbigh	Local	Denbighshire	
DNBGHVS035	Wooded parkland and parkland remnants	Local	Denbighshire	

As explained in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement, no other Visual and Sensory Aspect Areas have the potential to be significantly affected. For this reason, no other Visual and Sensory Aspect Areas have been taken forward to the landscape seascape and visual impact assessment stage, within this chapter.

### LANDMAP Aspect Areas (Landscape Habitat) – directly affected

As explained in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement, none of the Landscape Habitat Aspect Areas have the potential to be significantly affected in a landscape and visual sense. For this reason, no Landscape Habitat Aspect Areas have been taken forward to the landscape seascape and visual impact assessment stage, within this chapter.

### LANDMAP Aspect Areas (Geological Landscape) – directly affected

DNBGHGL031	Cefn Meiriadog	local	Denbighshire	LANDMAP Aspect Areas online maps, NRW
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As explained in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement, no other Geological Landscape Aspect Areas have the potential to be significantly affected in a landscape and visual sense. For this reason, no other Geological Landscape Aspect Areas have been taken forward to the landscape seascape and visual impact assessment stage, within this chapter.

### LANDMAP Aspect Areas (Historic Landscape) – indirectly affected

DNBGHHL005	Bodelwyddan Park	local	Denbighshire	LANDMAP Aspect Areas online maps, NRW
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As explained in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement, no other Historic Landscape Aspect Areas have the potential to be significantly affected in a landscape and visual sense. For this reason no other Historic Landscape Aspect Areas have been taken forward to the landscape seascape and visual impact assessment stage, within this chapter.

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Character area reference	Level	Jurisdiction	Source	Reference
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### LANDMAP Aspect Areas (Cultural Landscape) – directly affected

As explained in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement, the Cultural Landscape Aspect Areas are in the process of being updated and full evaluations are not available. However, based on the existing evaluations, it is considered that no Cultural Landscape Aspect Areas have the potential to be significantly affected in a landscape and visual sense. For this reason, no Cultural Landscape Aspect Areas have been taken forward to the landscape seascape and visual impact assessment stage, within this chapter.

## 6.5.4 Site specific description – Onshore Substation

6.5.4.1 In addition to the published landscape and seascape character assessments a site-specific survey was undertaken at the Onshore Substation site, in November 2023. The paragraphs below provide a brief overview of the landscape character of the Onshore Substation site. Site character photographs are in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement, Appendix C: Onshore character photographs.

### Location, land use and development context

6.5.4.2 The site lies to the south of St. Asaph Business Park, and south of the National Grid substation at Bodelwyddan and the substations for Gwynt y Môr and Burbo Bank offshore wind farms. Isolated farmsteads and houses are located along minor roads around the Onshore Substation site. Small hamlets and villages are located at the junctions of minor roads, with towns associated with major roads.

6.5.4.3 The land on which the Onshore Substation would be located is a mix of small to medium-sized fields. The farmland is predominantly laid to grass.

### Topography

6.5.4.4 The Mona Onshore Substation site is on a northeast facing slope, steeper in the south shallower in the north, which descends onto the coastal plain. The high point of the main part of the site is approximately 87 m Above Ordnance Datum (AOD) in the south with a low point approximately 46 m AOD in the northwest corner, of the main part of the Onshore Substation site.

### Hydrology and drainage

6.5.4.5 The land drains from Cefn Meiriadog northeast to the River Elwy. Ditches, some dry and some not, marked as watercourses on the OS 1:25,000 mapping, follow the hedgerow/remnant hedge boundaries, to the northern, central and south of the Onshore Substation site. The central middle watercourse issuing from a well in the south of the site. Isolated ponds are located in some of the lower fields.

### Vegetation at the Onshore Substation site

6.5.4.6 Several fields have been merged together, by removing the hedgerows/allowing the hedgerows to decline, often leaving isolated trees marking the original location of the hedgerow. The hedgerows on the steeper land are in better condition, as are the hedgerows marking the boundaries of properties and along roads and tracks. Details of the hedgerows present on site are provided in Volume 7, Annex 3.4: Hedgerow Survey, of the Environmental Statement. The majority of the mature hedgerow trees,

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isolated trees and copses are oak. Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment, of the Environmental Statement provides a detailed survey of tree species and condition. The species of the hedgerows are detailed in Volume 3, Chapter 3: Onshore ecology of the Environmental Statement.

### Vegetation of the surrounding area

6.5.4.7 The vegetation surrounding the Onshore Substation site is similar to that on the adjacent land of the site. The majority of the mature hedgerow trees, isolated trees and copses are oak. The exception to this is that there are large areas of mature/Ancient Woodland to the southwest (including Coed yr Odyn, Coed Celyn and at Bryn Meiriadog) and northeast (including Coed Cord and Coed Esgob) of the site. Volume 7, Annex 6.6: Tree survey and Arboricultural Impact Assessment of the Environmental Statement provides some details of the surrounding tree species. Similarly, the species of some of the hedgerows and other vegetation surrounding the site are detailed in the Environmental Statement in Volume 3, Chapter 3: Onshore Ecology.

### Access and infrastructure

6.5.4.8 The B5831, Glascoed Road, runs east to west to the north of the Onshore Substation site. Minor roads cross the countryside to the south, skirting around Cefn Meiriadog. No public roads cross the site, although there are farm tracks and accesses to farmsteads and individual properties.

6.5.4.9 400 kV overhead power lines cross the Onshore Substation site, to the north of the proposed location of the substation platform. They connect into National Grid's Bodelwyddan substation via a sealing end compound and gantries with overhead power lines located in a field immediately to the west of the Onshore Substation site.

## **6.5.5 Landscape value of the Onshore Substation site**

6.5.5.1 As with every landscape, whilst the Onshore Substation site is undesignated it still has a value. LANDMAP provides its own evaluation for the wider Aspect Area, these are set out in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report. Landscape Institute Technical Guidance Note 02/21: Assessing landscape value outside national designations, Table 1 (published May 2021) provides a range of factors that can be considered when identifying landscape value. Broadly, they fit into the categories outlined in GLVIA3 at Box 5.1, which are summarised below.

### Landscape quality

6.5.5.2 Landscape quality, or condition, measures the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, how intact the landscape is and the condition of individual elements.

6.5.5.3 As noted in the site description the boundary hedges are generally intact. However, the many of the internal field boundary hedgerows are remnants only or have been removed entirely. This has left isolated mature trees, disassociated from the landscape in which they once stood.

6.5.5.4 The mature/Ancient Woodland outside the Onshore Substation site appears to be in a good condition and is a positive characteristic in the landscape.

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### Scenic quality

- 6.5.5.5 This measures the degree to which the landscape appeals primarily to the visual senses.
- 6.5.5.6 The Onshore Substation site has mature woodland to the southwest and northeast, this woodland and the topography of Cefn Meriadog lend the site a sense of enclosure, particularly in the south. Trees in pasture are a feature of the site, which is pleasant, but not notable or unusual. The elevated, wide views are north, over the trees on the site and the coastal plain towards the Clwydian Range of hills and the sea, rather than of the site itself.

### Rarity and representativeness

- 6.5.5.7 Rarity is concerned with the presence of rare features and elements in the landscape or the presence of a rare character type or elements within a site and its surroundings which are considered particularly important examples, which are worthy of retention.
- 6.5.5.8 The landscape on the site is not particularly rare. It is typical of the farmland within this edge of the coastal plain.

### Conservation interests

- 6.5.5.9 This considers the presence of features of wildlife, earth science, historical and cultural interest that can add value to a landscape.
- 6.5.5.10 The landscape of the Onshore Substation site is not representative of a particular type, nor is it rare. There are some interesting, individual trees, but no rare species. Volume 3, Chapter 3: Onshore ecology, of the Environmental Statement details the ecology of the site. The history of the site and surroundings is reported in Volume 3, Chapter 5: Historic Environment, of the Environmental Statement. However, there are no known historical or cultural elements or characteristics in the landscape of the Onshore Substation site that should be conserved.

### Recreational value

- 6.5.5.11 This considers any evidence that the landscape is valued for recreational activity where experience of the landscape is important.
- 6.5.5.12 There is no public access to the Onshore Substation site.

### Perceptual aspects

- 6.5.5.13 A landscape may be valued for its perceptual qualities, notably wildness and/or tranquillity.
- 6.5.5.14 Tranquillity, a perceptual aspect of landscapes, is defined differently by different organisations. The Landscape Institute defines it as '*a state of calm and quietude associated with peace*' (Glossary, GLVIA3). The definition of tranquillity that has been adopted by both Welsh Government (Welsh Government 2012) and Natural Resources Wales (NRW 2016a) "*An untroubled state, which is peaceful, calm and free from unwanted disturbances. This can refer to a state of mind or a particular environment.*".
- 6.5.5.15 In the existing landscape there are very low levels of lighting and noise, in the location of the Onshore Substation (apart from the noise associated with the 400 kV overhead power lines). However, this is a working agricultural landscape, rather than undisturbed

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land. The 400 kV overhead power lines and pylons cross through the landscape and these together with views of National Grid's Bodelwyddan substation, compromise visual tranquillity.

### Associations

- 6.5.5.16 This considers any evidence of artistic endeavours and historic events that contribute to the perceptions of the natural beauty of an area.
- 6.5.5.17 No artistic endeavours or historic events that contribute to the perceptions of natural beauty have been found to be associated with the Onshore Substation site. Information on the historic environment/history of the site and its surroundings is detailed in Volume 3, Chapter 5: Historic environment, of the Environmental Statement.

### **6.5.6 Landscape/seascape change**

- 6.5.6.1 Regarding seasonal and medium to long-term temporal landscape and seascape character change, these issues are intrinsic to LVIA and are considered as part of both the baseline and the impact assessment stages. A summary of the issues involved follows.
- 6.5.6.2 Seasonal temporal change: Seasonal variations in vegetation cover, colour and texture alter the character of landscapes, particularly the difference between winter and summer deciduous vegetation. Landscapes and seascapes are also affected by diurnal and seasonal variations in weather and natural lighting.
- 6.5.6.3 Medium and long-term temporal change: Landscape and seascape character inevitably changes over time (i.e. years/decades). Change may result in new landscape patterns, or reversion to former ones. For example: deforestation, afforestation, urbanisation, land/farm management, farming techniques, natural resource exploitation, government legislation/policy/funding (e.g. agriculture and forestry/woodland grants), planning and environmental policy (e.g. landscape designations) and other land use initiatives (e.g. rewilding).

### **6.5.7 Onshore visual baseline**

- 6.5.7.1 The visual baseline assessment involved a desktop exercise and consultation process to identify appropriate visual receptors and representative viewpoints within the LVIA study area and falling within the ZTV of the Onshore Substation.
- 6.5.7.2 The representative viewpoints were selected to represent a broad range of locations and sensitive visual receptors across the LVIA study area. Fieldwork was undertaken to verify the visual receptors and representative viewpoint locations and photography captured in Table 6.14.
- 6.5.7.3 Visual receptor categories are considered in the LVIA, these are all from publicly accessible viewpoints. They include:
- People using National Trails and promoted paths (e.g. Offa's Dyke Path National Trail and the Wales Coast Path)
  - People using Access Land/open country (CRoW Act, 2000)
  - People using Public Rights of Way (PRoW) close to, or crossing, the Mona Onshore Development Area
  - Cyclists using National Cycle Routes (NCRs) or National Cycleways

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- People accessing main coastal settlement adjacent to the Mona Onshore Development Area
- People travelling along main coastal roads (e.g. A55 and A547)
- People using coastal railways (e.g. Crewe to Holyhead).

### Views from Residential Properties

6.5.7.4 The Landscape Institute has provided guidance on residential visual amenity in *Landscape Institute Technical Guidance Note 2/19 Residential Visual Amenity Assessment* (LI TGN 2/19).

6.5.7.5 Views of the proposed Onshore Substation would neither overwhelm existing properties within the LVIA study area, nor render these properties so ‘*unattractive a place to live that planning permission should be refused*’ (Inspector Kingaby, Burnthouse Farm Wind Farm, APP/D0515/A/10/2123739, Inspector’s Report, paragraph 119) (also at paragraph A1.6 of LI TGN 2/19). Inspector Kingaby noted that ‘*There needs to be a degree of harm over and above identified substantial effect to take a case into the category of refusal in the public interest. Changing the outlook from a property is not sufficient*’ (Inspector’s Report, paragraph 120) (also at paragraph A1.7, LI TGN 2/19). The Inspector, in the Langham Wind Farm decision, noted that ‘*The planning system controls development in the public interest, and not in the private interest. The preservation of open views is a private interest*’ (Langham Wind Farm Appeal Decision APP/D2510/A/10/2130539) (also at LI TGN 2/19, paragraph A1.11).

6.5.7.6 The closest, inhabited properties that lie within the ZTV are:

- Tan-y-bryn (141 m to the east of the Onshore Substation platform). Ground floor views towards the substation are mostly screened by intervening stables/other buildings, as well as hedgerows. There are no first-floor windows facing towards the Onshore Substation
- Tyddyn Meredydd (184 m to the west of the Onshore Substation platform). Ground floor views towards the substation are screened by outbuildings/barns between the house and the road. There is a view through to the road over the gate onto the road, however, this view is truncated by a hedgebank/hedgerow on an embankment. The main ground floor views from this property are towards the northern end of the Clwydian Range and the coast. There are potential first floor views in the direction of the Onshore Substation
- Isfryn Farm (282 m to the south of the Onshore Substation platform). Isfryn Farm has a large barn, as well as a number of hedgerows with mature hedgerow trees, between the farmhouse and the Onshore Substation location
- Cae-llŵyd (283 m to the southwest of the Onshore Substation platform). A combination of topography and woodland screens or partly screens views from this property.

6.5.7.7 People with ground floor views of a development are considered to be more susceptible to changes in visual amenity. This is because it is the ground floor rooms that are normally occupied in waking or daylight hours (GLVIA3, paragraph 6.36). The ground floor views from these closest properties towards the Onshore Substation location are either completely or significantly screened. Very few properties further from the Onshore Substation location have the potential to have ground floor views. For those that do, any impacts diminish with distance as well as with intervening topography, buildings and vegetation. Therefore, it is judged that no residential properties have the potential to experience a degree of harm over and above

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substantial to make considering private views a public interest matter. As such, private views are not considered further in this chapter.

6.5.7.8 The representative viewpoint locations are illustrated on Figure 6.4. The locations, descriptions and photography are provided within Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement. The representative viewpoint locations are also listed in Table 6.14.

**Table 6.14: Representative viewpoints for the Mona onshore transmission infrastructure included in the LVIA.**

Representative viewpoint reference	Location and distance from Onshore Substation	Receptor type	Receptor location category	Note
1 Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B1 and B1a Environmental Statement, Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 1a and 1b)	View southeast along farm track from minor road to Tyddyn Meredydd, located 150 m from the Onshore Substation	Walkers using road, cyclists and occupiers of vehicles	Public highway	None
2 Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B2 and B2a Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 2a and 2b)	View north from minor road to the south of Isfryn Farm, located 139 m from the Onshore Substation	Walkers using road, cyclists and occupiers of vehicles	Public highway	None
3 Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B3 and B3a Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 3a and 3b)	View east-southeast from public footpath 105/6 to the southeast of Pentre-mawr, located 336 m from the Onshore Substation	Walkers using public right of way	PRoW	None
4 Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B4 and B4a Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 4a and 4b)	View southeast from public footpath 105/7 to the southwest of Waen-Meredydd, located 490 m from the Onshore Substation	Walkers using public right of way	PRoW	None

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Representative viewpoint reference	Location and distance from Onshore Substation	Receptor type	Receptor location category	Note
<p>5</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B5 and B5a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 5a and 5b)</p>	<p>View southeast from junction of farm track with minor road at Waen - Meredydd, located 495 m from the Onshore Substation</p>	<p>Walkers using track</p>	<p>Private farm track</p>	<p>None</p>
<p>6</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B6 and B6a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 6a and 6b)</p>	<p>View northwest from minor road at Ty'n-y-ffordd-fawr, located 817 m from the Onshore Substation</p>	<p>Walkers using road, cyclists and occupiers of vehicles</p>	<p>Public highway</p>	<p>None</p>
<p>7</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B7 and B7a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 7a and 7b)</p>	<p>View southwest from public footpath 208/13 west of St. Asaph, and is located 1.55 km from the Onshore Substation</p>	<p>Walkers using public right of way</p>	<p>PRoW</p>	<p>None</p>
<p>8</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B8 and B8a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 8a and 8b)</p>	<p>View southeast from field gate off the B5381, Glascoed Road, adjacent to Bryncelyn, and is located 1.44 km from the Onshore Substation</p>	<p>Cyclists and occupiers of vehicles</p>	<p>Public highway</p>	<p>None</p>
<p>9</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B9 and B9a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 9a and 9b)</p>	<p>View south-southeast from public bridleway 201/9 east of Bodelwyddan Park, and is located 1.68 km from the Onshore Substation</p>	<p>Equestrians and walkers using bridleway</p>	<p>PRoW</p>	<p>None</p>

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Representative viewpoint reference	Location and distance from Onshore Substation	Receptor type	Receptor location category	Note
<p>10</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B10 and B10a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 10a and 10b)</p>	<p>View south from public footpath 206/27 and access track to Rhuddlan Castle, adjacent to Twthill, and is located 4.63 km from the Onshore Substation</p>	<p>Walkers using public right of way/visitors to the castle / heritage assets</p>	<p>PRoW</p>	<p>None</p>
<p>11</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B11 and B11a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 11a and 11b)</p>	<p>View west-southwest from Offa's Dyke Path, to the south of Moel Maenefa, and is located 7.09 km from the Onshore Substation</p>	<p>Walkers using National Trail in the Clwydian Range and Dee Valley NL</p>	<p>PRoW</p>	<p>None</p>
<p>12</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B12 and B12a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 12a and 12b)</p>	<p>View west-southwest from Offa's Dyke Path to the south of Pen-y-Mynydd, and is located 6.46 km from the Onshore Substation</p>	<p>Walkers using National Trail in the Clwydian Range and Dee Valley NL</p>	<p>PRoW</p>	<p>None</p>
<p>13</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B13 and B13a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 13a and 13b)</p>	<p>View southwest from Cwttir Lane, south of the junction with Heol Esgob, and is located 1.36 km from the Onshore Substation</p>	<p>Walkers using road, cyclists and occupiers of vehicles</p>	<p>Public highway</p>	<p>None</p>
<p>14</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B14 and B14a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 14a and 14b)</p>	<p>View northwest from minor road close to junction with access track to Coed Kendrick/Wigfair Home Farm, and is located 1.7 km from the Onshore Substation</p>	<p>Walkers using road, cyclists and occupiers of vehicles</p>	<p>Public highway</p>	<p>None</p>

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Representative viewpoint reference	Location and distance from Onshore Substation	Receptor type	Receptor location category	Note
<p>15</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B15 and B15a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 15a and 15b)</p>	<p>View south from the North Wales Path (footpath 26/30)/National Cycle Route 84, northwest of Rhuddlan, adjacent to River Clwyd, and is located 5.54 km from the Onshore Substation.</p>	<p>Walkers and cyclists</p>	<p>PRoW</p>	<p>None</p>
<p>16</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B16 and B16a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 16a and 16b)</p>	<p>View southwest from public footpath 206/999 to the southwest of Pengwern College, and is located 3.13 km from the Onshore Substation</p>	<p>Walkers</p>	<p>PRoW</p>	<p>None</p>
<p>17</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B17 and B17a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 17a and 17b)</p>	<p>View west-southwest from public footpath 208/10, off the Upper Denbigh Road to the south of St. Asaph, and is located 2.57 km from the Onshore Substation</p>	<p>Walkers</p>	<p>PRoW</p>	<p>None</p>
<p>18</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B18 and B18a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 18a and 18b)</p>	<p>View southwest from panoramic viewpoint at the trig point at Graig Fawr (CRoW Act Access Land) within the Clwydian Range and Dee Valley NL, and is located 8.50 km from the Onshore Substation</p>	<p>Walkers / people using the Access Land</p>	<p>Access Land</p>	<p>None</p>

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Representative viewpoint reference	Location and distance from Onshore Substation	Receptor type	Receptor location category	Note
<p>19</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B19 and B19a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 19a and 19b)</p>	<p>View southwest from Offa’s Dyke Path National Trail /public footpath 405/12 on Prestatyn hillside within the Clwydian Range and Dee Valley NL, and is located 10.05 km from the Onshore Substation</p>	<p>Walkers</p>	<p>PRoW</p>	<p>None</p>
<p>20</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B20 and B20a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 20a and 20b)</p>	<p>View southeast from the Wales Coast Path, at Pont y Ddraig footbridge over the River Clwyd, Kinmel Bay, and is located 7.89 km from the Onshore Substation</p>	<p>Walkers, holiday-makers</p>	<p>PRoW</p>	<p>None</p>
<p>21</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B21 and B21a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 21a and 21b)</p>	<p>View southwest from B5429, adjacent to Criccin Cross, southeast of Rhuddlan, and is located 4.78 km from the Onshore Substation</p>	<p>Walkers using road, cyclists and occupiers of vehicles</p>	<p>Public highway</p>	<p>None</p>
<p>22</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B22 and B22a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 22a and 22b)</p>	<p>View west from public footpath 210/6, north of Wern Ddu, and is located 3.94 km from the Onshore Substation</p>	<p>Walkers</p>	<p>PRoW</p>	<p>None</p>

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Representative viewpoint reference	Location and distance from Onshore Substation	Receptor type	Receptor location category	Note
<p>30</p> <p>Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Appendix B Figures B30 and B30a</p> <p>Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement (Year 1 winter and Year 15 summer photomontages, Figure nos. 23a and 23b)</p>	<p>View west from the southern end of public bridleway 208/3, adjacent to Coed Esgob, and is located 387 m from the Onshore Substation</p>	<p>People using the bridleway</p>	<p>Public right of way</p>	<p>Although shown as open on the definitive map, access to this bridleway is currently blocked at the northern end, at Coed yr Esgob and can only be accessed from private land.</p>

**6.5.8 Future baseline scenario**

6.5.8.1 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires that an Environmental Statement includes ‘an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge’. If Mona Offshore Wind Project does not come forward, an assessment of the future baseline conditions has been carried out and is described within this section.

**Future landscape, seascape character and visual baseline**

6.5.8.2 Landscape and adjacent seascapes are constantly evolving. Evolution is an intrinsic attribute of landscapes which are in constant flux. The forces driving landscape/seascape change are both human and natural, predominantly the former within the LVIA study area. Building and infrastructure development, intensive agriculture and minerals exploitation is changing the character of both urban and rural landscapes. Climate change driven by human activity has the potential to alter vegetation patterns and landscape character in the longer term, although to what extent and over what timeframe is a matter of conjecture.

6.5.8.3 Volume 4, Chapter 2: Climate change, of the Environmental Statement, presents an assessment of predicted changes in the climate relating to the LVIA study area between 2030 and 2080 including those resulting from extreme weather events of heat, cold, rainfall, drought and wind. It is predicted that mean temperatures will increase, winter precipitation will increase; and summer precipitation will decrease. Overall, the frequency of hot days, dry spells and heavy rainfall is predicted to increase.

6.5.8.4 The current landscape and seascape character baseline situation is described in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement. The climate change predictions recorded in Volume 4, Chapter 2: Climate change, of the Environmental Statement, are unlikely to be sufficient to lead to an appreciable change in the baseline vegetation and character within the LVIA study area. The underlying landscape and seascape characteristics are predicted to remain broadly constant for the period assessed in Volume 4, Chapter 2: Climate change, of the Environmental Statement. Consequently, excluding

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building/infrastructure development, the future landscape and seascape character baseline, and the related visual baseline, would be essentially the same as the current baseline situation summarised above in this LVIA and presented in more detail in Volume 7, Annex 6.2: Seascape and landscape character baseline technical report, of the Environmental Statement.

6.5.8.5 Regarding future building/infrastructure development, it is not possible to accurately predict future change. The cumulative effects assessment detailed in section 6.14 of the LVIA includes existing onshore and offshore wind farms (the cumulative baseline) and proposed onshore and offshore wind farms. It also identifies other relevant existing offshore infrastructure projects (part of the cumulative baseline) and proposed onshore and offshore major development projects for the LVIA study area for the immediate future, the focus being on onshore and offshore infrastructure projects, in the light of the climate emergency and related government policy/legislation, an intensification of offshore wind development within the LVIA study area is likely in the future.

### 6.5.9 Data limitations

6.5.9.1 The LVIA assumptions and limitations are set out in detail in Environmental Statement Volume 7, Annex 6.4: Landscape seascape, landscape and visual resources impact assessment methodology.

6.5.9.2 Regarding the approach taken in the LVIA to the assessment of the different development phases of the Mona Offshore Wind Project, the following assumption/limitation should be noted. For developments of this type and scale, landscape, seascape, and visual impacts arising will increase in magnitude on a continuum from the start of construction through to completion of works and commencement of operations and maintenance in the short-term, remaining fairly constant during operations and maintenance in the long-term. The decommissioning phase is effectively the construction process in reverse for the Onshore Substation (also short-term in duration). Note this is not the case with the Mona Onshore Cable Corridor where the cable will be left in situ with only the link boxes being removed. In addition, during the latter stages of construction and early stages of decommissioning, the onshore elements of the Mona Offshore Wind Project will give rise to similar levels of landscape, seascape and visual change as during the operations and maintenance phase. Consequently, in this LVIA, for each landscape, seascape and visual receptor, construction and decommissioning effects are dealt with together, recorded separately to the operational effects.

## 6.6 Impact assessment methodology

### 6.6.1 Overview

6.6.1.1 The onshore LVIA has followed the methodology set out in Volume 7, Annex 6.4: Landscape, seascape and visual impact assessment methodology, of the Environmental Statement, a summary of which is reproduced below in this section.

6.6.1.2 Specific to the onshore LVIA, the following document provides key guidance:

- Guidelines for Landscape and Visual Impact Assessment: Third Edition, 2013, Landscape Institute (LI) and Institute of Environmental Management.

6.6.1.3 In addition, the LVIA has considered the relevant legislative and policy framework as summarised in section 6.2, and detailed in Volume 7, Annex 6.1: Landscape, seascape and visual resources planning policy context, of the Environmental Statement.

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6.6.1.4 A detailed LVIA methodology, based on GLVIA3, is provided in Volume 7, Annex 6.4: Landscape, seascape and visual resources impact assessment methodology of the Environmental Statement. For the purposes of this LVIA, the standard criteria wording has been refined to accord with GLVIA3 best practice guidelines. There are some differences between the Landscape Institute's criteria as set out in GLVIA3 and that set out in Volume 1, Chapter 5: Environmental Impact Assessment (EIA) methodology, of the Environmental Statement. Where there are differences, the LVIA methodology has followed GLVIA3, as industry specific guidance.

### 6.6.2 Impact assessment criteria

6.6.2.1 The criteria for determining the significance of effects is a two-stage process that involves defining the magnitude of the impacts and the sensitivity of the receptors. This section describes the criteria applied in this chapter to assign values to the magnitude of potential impacts and the sensitivity of the receptors. More detail on the LVIA methodology is contained within the Environmental Statement in Volume 7, Annex 6.4: Landscape, seascape and visual resources impact assessment methodology, of the Environmental Statement.

#### Magnitude

6.6.2.2 The criteria for defining magnitude in this chapter are outlined in Table 6.15. Note that in LVIA, there are three criteria determining the magnitude of an impact. These are: Size or scale of proposed change; geographical extent; and duration and reversibility of the change.

6.6.2.3 Of these three factors the size/scale of change has the most influence on the overall judgement of magnitude. Size or scale of change is assessed on a number of criteria: Distance; size; scale; field of view; contrast; consistency of image; skyline/background; number; and nature of visibility. These criteria are explained in Volume 7, Annex 6.4: Landscape, seascape and visual resources impact assessment methodology, of the Environmental Statement.

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**Table 6.15: Definition of terms relating to the magnitude of an impact.**

Magnitude of impact	Definition
Large	<p>Landscape/seascape</p> <p>Total loss, or/very substantial loss or addition of, key elements/features/patterns of the baseline (i.e. pre-development landscape/seascape) and/or introduction of dominant, uncharacteristic elements compared with the attributes of the receiving landscape/seascape.</p>
	<p>Visual</p> <p>Complete or very substantial visual change involving complete or very substantial obstruction of existing view or complete change in character and composition of visual baseline (i.e. pre-development view) (e.g. through removal of key elements).</p>
Medium	<p>Landscape/seascape</p> <p>Partial loss or addition of, or moderate alteration to, one or more key elements/features/patterns of the baseline (i.e. pre-development landscape/seascape) and/or introduction of elements that may be prominent but would not be substantially uncharacteristic in comparison to the attributes of the receiving landscape/seascape.</p>
	<p>Visual</p> <p>moderate visual change, which may involve partial obstruction of existing view or partial change in character and composition of visual baseline (i.e. pre-development view) through the introduction of new elements or removal of existing elements. Change may be prominent but would not substantially alter the scale and character of the surroundings and the wider setting. Composition of views would alter.</p> <p>View character may be partially changed through the introduction of features which, although uncharacteristic, may not necessarily be visually discordant.</p>
Small	<p>Landscape/seascape</p> <p>minor loss or addition of, or alteration to, one or more key elements/features/patterns of the baseline (i.e. pre-development landscape/seascape and/or introduction of elements that may not be uncharacteristic compared with the surrounding landscape/seascape).</p>
	<p>Visual</p> <p>minor change to the visual baseline (i.e. pre-development view) – change would be distinguishable from the surroundings whilst view composition and character would be similar to the pre-change circumstances.</p>
Negligible	<p>Landscape/seascape</p> <p>Very minor loss or addition of, or alteration to, one or more key elements/features/patterns of the baseline (i.e. pre-development landscape/seascape) and/or introduction of elements that are not uncharacteristic in comparison to the surrounding landscape/seascape; approximating to a 'no-change' situation.</p>
	<p>Visual</p> <p>Very slight change in visual baseline (i.e. pre-development view) – change barely distinguishable from the surroundings. Composition and character of view substantially unaltered.</p>
No change	<p>No loss, alteration, or addition to the receiving landscape/seascape resource.</p> <p>No alteration to the existing view.</p>

6.6.2.4 Where the magnitude of impact is judged to fall in between the above categories it is expressed as small to negligible, medium to small or large to medium.

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**Sensitivity**

6.6.2.5 The criteria for defining sensitivity in this chapter are outlined in Table 6.16. Note that, in LVIA, the sensitivity of landscape/seascape and of visual receptors is determined by an assessment of two separate factors: the value of the receptor; and the receptor's susceptibility to the development proposed.

**Table 6.16: Definition of terms relating to the sensitivity of the receptor.**

<b>Sensitivity</b>		<b>Definition</b>
<b>Landscape/seascape resource and receptors</b>	<b>Resource/receptor susceptibility</b>	<b>Resource/receptor value</b>
Very High	Exceptional landscape/seascape quality; absence of landscape/seascape detractors; no or limited potential for substitution. Key elements/features well known to the wider public.	Internationally/nationally designated landscapes, or key elements, or features of internationally/nationally designated landscapes.
High	Strong/distinctive landscape character; relatively free of landscape detractors.	Nationally/regionally designated landscape areas or features.
Medium	Some distinctive landscape/seascape characteristics; presence of landscape/seascape detractors.	Regionally/locally designated/valued landscape/seascape areas and features.
Low	Absence of distinctive landscape/seascape characteristics; unavoidable presence of landscape/seascape detractors.	Undesignated landscape/seascape areas and features.
Negligible	Absence of positive landscape/seascape characteristics. Significant presence of landscape/seascape detractors.	Undesignated/non-valued landscape/seascape and features.
<b>Visual receptors</b>	<b>Receptor susceptibility</b>	<b>Receptor value</b>
Very High	Observers, drawn to a particular view, including those who have travelled from around Britain and overseas to experience the views.	Judgements made about the value of views should take account of: <i>'recognition of the value attached to particular views, for example in relation to heritage assets, or through planning designations; and, indicators of value attached to views by visitors, for example through appearances in guidebooks or on tourist maps, provision of facilities for their enjoyment (such as parking places, sign boards or interpretive material) and references to them in literature or art...'</i> (GLVIA3, para 6.37)
High	Observers on the public rights of way network in the countryside are more sensitive to visual change.	
Medium	Observers enjoying the countryside from vehicles on quiet/promoted routes or pedestrians on less scenic/urban rights of way are moderately sensitive to visual change.	
Low	Observers in vehicles or people involved in outdoor activities where attention is not focused on landscape are less sensitive to visual change.	
Negligible	Observers in vehicles or people involved in frequent or frequently repeated activities are less sensitive to visual change.	

6.6.2.6 Where the sensitivity of a particular receptor is judged to be in between the above categories, or it varies with location it is expressed as negligible to low, low to medium, medium to high or high to very high.

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**Significance of Effect**

- 6.6.2.7 Significance of the effect upon seascape, landscape and visual resources is determined by correlating the magnitude of the impact and the sensitivity of the receptor. The method employed for this assessment is presented in Table 6.17. Where a range of significance of effect is presented, the final assessment for each effect is based upon professional judgement.
- 6.6.2.8 For the purposes of this assessment, any effects with a significance level of substantial or major have been deemed significant in terms of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. In general, any effects with a significance level of moderate or less have been judged as not significant. This principle is supported by the DTI 2005 guidance (*Guidance on the Assessment of the Impact of Offshore Wind Farms: Seascape and Visual Impact Report*) at page 80, which explains that *'Where seascape or visual effects is [sic] classified as moderate, it is most likely that the effect will not be significant, but it is feasible that it could be judged as significant, depending on the particular circumstances arising.'* An example of where this might be the case, is in the judgements of effects on landscape and visual resources and receptors within/of nationally designated areas, where a moderate effect may be judged as significant in some circumstances. GLVIA3 explains at paragraph 3.32 that *"Some practitioners use the phrase 'not significant in EIA terms' to describe those effects considered to fall below a 'threshold' of significance but this can potentially confuse since the phrase has no specific meaning in relation to the EIA Regulations."* All judgements of significance of effect have been made by suitably qualified and experienced landscape professionals.
- 6.6.2.9 Effects are assessed as being adverse, neutral, or positive. The judgements regarding the significance of effect and that relating to whether an effect is beneficial or adverse are entirely separate. The assessment of whether an effect is positive, neutral or adverse is based on professional judgement having regard to the relevant objective factors.

**Table 6.17: Matrix used for the assessment of the significance of the effect.**

Sensitivity of receptor	Magnitude of impact				
	No Change	Negligible	Small	Medium	Large
Negligible	No change	Negligible	Negligible to minor	Negligible to minor	Negligible to minor
Low	No change	Negligible to minor	Negligible to minor	Minor	Minor to moderate
Medium	No change	Negligible to minor	Minor	Moderate	Moderate to major
High	No change	Negligible to minor	Minor to moderate	Moderate to major	Major
Very High	No change	Minor	Moderate to major	Major	Substantial

6.6.2.10 Table 6.18 provides definitions for significance of effect levels recorded in the LVIA.

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**Table 6.18: Definitions of LVIA significance criteria.**

Level of significance	Typical descriptors	
	Landscape/seascape resource	Visual resource
Substantial	Where proposed changes would be uncharacteristic and/or would significantly alter a landscape of exceptional landscape quality (e.g. internationally designated landscapes) or key elements known to the wider public of nationally designated landscapes (where there is no or limited potential for substitution nationally).	Where proposed changes would be uncharacteristic and/or would significantly alter a view of remarkable scenic quality, within internationally designated landscapes or key features or elements of nationally designated landscapes that are well known to the wider public.
Major	Where proposed changes would be uncharacteristic and/or would significantly alter a valued aspect of (or a high quality) landscape/seascape.	Where proposed changes would be uncharacteristic and/or would significantly alter a valued view or a view of high scenic quality.
Moderate	Where proposed changes would be demonstrably out of scale or at variance with the character of an area.	Where proposed changes to views would be demonstrably out of scale or at variance with the existing view.
Minor	Where proposed changes would be at slight variance with the character of an area.	Where proposed changes to views, although discernible, would only be at slight variance with the existing view.
Negligible	Where proposed changes would have an indiscernible effect on the character of an area.	Where proposed changes would have a barely noticeable effect on views/visual amenity.
No Change	No discernible loss or alteration to landscape/seascape character, features or elements.	No part of the Mona Offshore Wind Project is discernible.

## 6.7 Key parameters for assessment

### 6.7.1 Maximum Design Scenario

6.7.1.1 The Maximum Design Scenarios (MDSs) identified in Table 6.20 have been selected as those having the potential to result in the greatest effect on an identified receptor or receptor group. These scenarios have been selected from the Project Design Envelope provided in the Volume 1, Chapter 3: Project description of Environmental Statement. Effects of greater adverse significance are not predicted to arise should any other development scenario, based on details within the Project Design Envelope (e.g. different infrastructure layout at the Onshore Substation) to that assessed here be taken forward in the final design scheme.

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**Table 6.19: MDS considered for the assessment of potential impacts on landscape and visual resources.**

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

Potential impact	Phase <sup>a</sup>			Maximum design scenario	Justification
	C	O	D		
The LVIA considers the likely impacts of the Mona Offshore Wind Project on the seascape, landscape and visual receptor groups within the 50 km radius study area, resulting from its construction, operations and maintenance and decommissioning (see Table 6.8).	✓	✓	✓	<p><b>Mona Onshore Development Area</b></p> <p><b>Construction phase</b></p> <p><u>Open cut trenching along the Onshore Cable Corridor:</u></p> <ul style="list-style-type: none"> <li>The area of the permanent Onshore Cable Corridor is up to 450,000 m<sup>2</sup> based on a corridor measuring 30 m wide and 15 km in length. The temporary working corridor requires an additional 44 m wide corridor (making the total width of the Onshore Cable Corridor (temporary and permanent requirements) 74 m wide representing an area of up to 1,10,000 m<sup>2</sup>. In localised stretches of the route, the total width of the Onshore Cable Corridor may increase to 100 m (e.g. at trenchless technique crossings)</li> <li>There are up to four cable trenches within the permanent Onshore Cable Corridor, each trench measures up to 2.5 m wide at the top, 1.5 m at the base and the depth is 1.8 m</li> <li>The maximum number of joint bays along the Onshore Cable Corridor is 80 (based on a minimum distance of 750 m between each joint bay on up to four trenches)</li> <li>The area of each joint bay is up to 200 m<sup>2</sup>, and each joint bay is 2 m deep; the volume of material excavated per joint bay is 400 m<sup>3</sup> (a total of up to 32,000 m<sup>3</sup> of material excavated for the joint bays)</li> <li>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)</li> <li>The area of each link box is up to 6 m<sup>2</sup>, and each link box is up to 1 m deep; the volume of material excavated per link box is 6 m<sup>3</sup> (a total of up to 480 m<sup>3</sup> of material excavated for the link boxes)</li> <li>There is one haul road within the Onshore Cable Corridor along the length of the corridor; it is 6 m wide excluding passing places. It will be constructed using imported engineered granular fill with geotextile style layers with a nominal thickness of 400 mm and a maximum thickness of up to 1,000 mm</li> <li>Duration of construction and installation of the onshore export cables is 33 months.</li> </ul> <p><u>Open cut trenching along the 400kV Grid Connection Cable Corridor:</u></p> <ul style="list-style-type: none"> <li>The area of the permanent 400kV Grid Connection Cable Corridor is up to 16,000 m<sup>2</sup> based on a corridor measuring 16 m wide and 1 km in length. The temporary working corridor</li> </ul>	The width of the Onshore Cable Corridor and 400kV Grid Connection Cable Corridor, the use of open cut trenching and the number of construction compounds present the maximum extent of the construction works and durations over which these works will occur.

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Potential impact	Phase <sup>a</sup> Maximum design scenario			Justification
	C	O	D	
			<p>requires an additional 48 m wide corridor, making the total width of the route to grid connection (temporary and permanent requirements) 60 m wide representing an area of up to 64,000 m<sup>2</sup></p> <ul style="list-style-type: none"> <li>• There are up to two cable trenches within the permanent 400kV Grid Connection Cable Corridor, each trench measures up to 2.5 m wide at the top, 1.5 m at the base and the depth is 1.8 m</li> <li>• The maximum number of joint bays along the 400kV Grid Connection Cable Corridor is two (based on a minimum distance of 500 m between each joint bay on up to two trenches)</li> <li>• The area of each joint bay is up to 200 m<sup>2</sup>, and each joint bay is up to 2 m deep; the volume of material excavated per joint bay is 400 m<sup>3</sup> (a total of up to 4,000 m<sup>3</sup> of material excavated for the joint bays)</li> <li>• The maximum number of link boxes along the 400kV Grid Connection Cable Corridor is two (based on a distance of 500 m between each link box on up to two trenches)</li> <li>• The area of each link box is up to 6 m<sup>2</sup>, and each link box is 1 m deep; the volume of material excavated per link box is 6 m<sup>3</sup> (a total of up to 60 m<sup>3</sup> of material excavated for the link boxes)</li> <li>• There is one haul road within the 400kV Grid Connection Cable Corridor along the length of the corridor; it is 6 m wide excluding passing places. It will be constructed using imported engineered granular fill with geotextile style layers with a nominal thickness of 400 mm and a maximum thickness of up to 1000 mm</li> <li>• Duration of construction and installation of the onshore export cables is 33 months.</li> </ul> <p><u>Trenchless techniques</u></p> <ul style="list-style-type: none"> <li>• The maximum number of trenchless locations along the Onshore Cable Corridor is 45 and three on the 400kV Grid Connection Cable Corridor. Primary trenchless technique operations will require a compound, these will measure up to 150 m x 150 m. Secondary trenchless technique operations will require a smaller compound (measuring up to 150 m x 100 m) and will be located within the 100 m temporary construction corridor.</li> <li>• Locations for trenchless techniques remain under consideration. Further details are available within Volume 5, Annex 3: Onshore crossing schedule, of the Environmental Statement.</li> </ul> <p><u>Construction compounds</u></p> <ul style="list-style-type: none"> <li>• Up to two primary construction compounds (each measuring 22,500 m<sup>2</sup>) and up to four secondary construction compounds (each measuring 15,000 m<sup>2</sup>) will be located along the Onshore Cable Corridor. The compounds will be located within the Mona Onshore Development Area. Soils will be removed and stored; crushed stone or suitable fill material will be used across the entire area to create hardstanding</li> </ul>	

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Potential impact	Phase <sup>a</sup> Maximum design scenario			Justification
	C	O	D	
			<ul style="list-style-type: none"> <li>Storage areas may also be required at various locations within the Mona Onshore Development Area. These will operate as areas where some limited additional storage may be required in addition to the temporary land within the 74 m temporary corridor</li> <li>Security and fencing will be provided at work sites on a 24-hour basis. Security lighting will be required at the compounds. Task lighting may also be required during working hours in the winter months.</li> </ul> <p><u>Reinstatement</u></p> <ul style="list-style-type: none"> <li>On completion of installation work, the haul road will be removed, and the ground reinstated using stored subsoil and topsoil. All temporary construction compounds and temporary fencing will be removed, field drainage and/or irrigation will be reinstated, and the land will be restored to its original condition</li> <li>Hedgerows will be replanted using locally sourced native species, where practicable. Suitably qualified and experienced contractors will be used to undertake the reinstatement, which will be based on restoring the hedge to match the remaining hedgerow at each location. Where appropriate, some enhancement (such as planting of additional suitable species) may be undertaken.</li> </ul> <p><u>Onshore Substation</u></p> <ul style="list-style-type: none"> <li>The maximum footprint of the Onshore Substation will measure 65,000 m<sup>2</sup> and will include the substation buildings and the earthworks to create the platform. The Onshore Substation will have a maximum impermeable footprint of 42,000 m<sup>2</sup>. The main equipment will either be housed within a single or multiple buildings, in an open space or a combination of buildings and open space. Comprise. The maximum building dimensions will be as follows: 80 m wide, 140 m long and 15 m high. Lightning protection height will be up to 30 m</li> <li>Access to the substation will be via a new permanent access road measuring up to 8 m wide, with 15 m permanent land-take for drainage and utilities and 800 m in length</li> <li>A construction compound will be required to support the construction of the substation extending up to 150,000 m<sup>2</sup>.</li> <li>Approximately 5.8 hectares of woodland planting is proposed in proximity to the Onshore Substation and 715 m of hedgerow enhancements.</li> <li>Duration of construction/installation and site reinstatement will be 33 months; plus, up to 10 months for testing and commissioning.</li> </ul>	<p>The extent of the Onshore Substation footprint, the building dimensions and the construction compound represent the maximum extent in which the buildings and lightning protection could be present.</p>

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Potential impact	Phase <sup>a</sup>			Maximum design scenario	Justification
	C	O	D		
				<p><b>Operations and maintenance phase</b></p> <p>The Mona Onshore Development Area will comprise the following key operational components:</p> <ul style="list-style-type: none"> <li>• Onshore export cabling (buried)</li> <li>• Onshore Substation (upstanding)</li> <li>• Mona 400kV Grid connection cable(s) (buried)</li> <li>• Permanent access road to Onshore Substation</li> </ul> <p>The expected lifetime of the Onshore Substation is up to 50 years, and some components lives can be extended beyond this period.</p> <p><b>Decommissioning phase</b></p> <ul style="list-style-type: none"> <li>• The onshore cable and 400kV grid connection cable would remain in situ but some of the link boxes may be removed</li> </ul> <p>The Onshore Substation and access road would be removed.</p>	<p>The maximum duration over which construction activity would occur.</p>

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**6.8 Landscape mitigation measures adopted as part of the Mona Offshore Wind Project**

6.8.1.1 As part of the project design process a number of measures adopted as part of the Mona Offshore Wind Project have been proposed to reduce the potential for impacts on landscape, seascape and visual resources (Table 6.20). As there is a commitment to implementing these measures, they are considered inherently part of the design of the Mona Offshore Wind Project and have been considered in the assessment at section 6.10 and 6.11 (i.e. the determination of magnitude and significance assumes implementation of these measures). These measures are considered standard industry practice for this type of development. Landscape mitigation is shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).

**Table 6.20: Measures adopted as part of the Mona Offshore Wind Project.**

Measures adopted as part of the Mona Offshore Wind Project	Justification	How the measure will be secured
<b>Primary measures: Measures included as part of the project design</b>		
<p>The onshore cables will be underground, rather than on overhead lines. The link boxes will be accessed via manhole covers once installed.</p> <p>Replace habitat lost by the development of the Mona onshore transmission assets.</p> <p>Planting will be provided at the Onshore Substation site for screening. These measures are set out in an Outline LEMP (Document Reference J22) that has been prepared and submitted with the application for consent.</p> <p>The mitigation planting will be designed to comprise a mix of faster growing ‘nurse’ species and slower growing ‘core’ species. The core species will comprise a mix of preferred native, canopy species that will outlive the nurse species and characterise the woodland structure over the longer term.</p>	<p>To ensure proposed development is successfully integrated into the rural/wooded landscape and to screen views gained by visual receptors.</p>	<p>As described in the Outline LEMP (Document Reference J22).</p> <p>An Illustrative Landscape and Ecology Strategy is presented at Figure 6.5.</p> <p>The submission of final versions of these documents will form a requirement of the DCO.</p> <p>Following an initial consultation with relevant consultees, the Illustrative Landscape and Ecology Strategy will be reviewed by the Design Commission for Wales, NRW and the Local Planning Authorities (LPAs) will be agreed with the LPAs.</p> <p>Secured through the Outline LEMP (Document Reference J22).</p> <p>The techniques that will be used to cross obstacles during the construction of the Landfall, Mona Onshore Cable Corridor and the Mona 440 kV Grid Connection Corridor are detailed in Volume 5, Chapter 4.3: Onshore crossing schedule, of the Environmental Statement.</p>
<p>The onshore cables will be buried for their entire length.</p>	<p>To reduce the visual impact of the onshore infrastructure</p>	
<b>Tertiary measures: Measures required to meet legislative requirements, or adopted standard industry practice</b>		
<p>Outline LEMP (Document Reference J22) setting out the landscape strategy. This is likely to include:</p>	<p>To minimise impact on landscape and integrate development into landscape whilst providing spoil cut and fill balance.</p> <p>To ensure proposed development is successfully integrated into the</p>	<p>Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) to be agreed with Denbighshire County Council.</p> <p>The submission of these documents will form a requirement of the DCO and will be secured through the Outline LEMP</p>

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<b>Measures adopted as part of the Mona Offshore Wind Project</b>	<b>Justification</b>	<b>How the measure will be secured</b>
<ul style="list-style-type: none"> <li>• Incorporating surface water attenuation features at Onshore Substation.</li> <li>• Strengthening and enhancement of existing hedgerow field boundaries within the vicinity of Onshore Substation.</li> <li>• Using native and locally appropriate plant species around Onshore Substation.</li> <li>• Reinstating hedgerows and trees required to be removed within the Onshore Cable Corridor.</li> <li>• Using earth-shaping as part of the landscape mitigation.</li> <li>• Identifying areas where it may be possible to achieve advanced planting</li> </ul>	<p>rural/wooded landscape and to screen views gained by visual receptors, including views from PRow.</p> <p>To create diversity within the landscape and visual interest</p> <p>To ensure long-term contribution to landscape features and integration with surrounding agricultural landscape.</p> <p>To reflect distinctive landscape character and enhance biodiversity.</p> <p>To restore and conserve distinctive landscape character.</p> <p>To allow growth prior to completion of construction and commencement of operation.</p>	<p>(Document Reference J22).</p>
<p>An Outline Arboricultural Method Statement has been prepared as part of the Outline CoCP (Document Reference J26.18).</p>	<p>To set out measures for the protection of trees during the construction process.</p>	<p>The preparation of the detailed CoCP would be secured through a requirement of the DCO. The detailed Arboricultural Method Statement will be appended to the detailed CoCP.</p>
<p>Onshore Substation Design Principles Statement to include the following:</p> <ul style="list-style-type: none"> <li>• Design of substation building.</li> <li>• Use of appropriate materials/colours/finishes for the façades of the Onshore Substation buildings</li> </ul>	<p>To ensure proposed development is successfully integrated into the rural landscape and views gained by visual receptors</p>	<p>The Design Principles Document will be secured as a requirement of the DCO (Document Reference J3). Principles for the design of the substation building, and materials, including façades to be reviewed by the Design Commission for Wales and Denbighshire County Council and agreed with Denbighshire County Council.</p>

6.8.1.2 The Outline LEMP (Document Reference J22) and the Design Principles Document (Document Reference J3) set out in detail the landscape measures that will be used to integrate the Mona onshore development into the existing landscape and mitigate the landscape and visual effects. In summary these will be:

- Following the landscape management guidelines for LANDMAP Aspect Area DNBGHVS033 – broadly to maintain the existing character, conserve the vegetation that is present, increase broadleaved woodlands and restore hedgerows – as far as possible
- Earth-modelling to the west of the Onshore Substation. This will involve raising the levels of the land to provide immediate screening of the lower structures within the Onshore Substation platform, such as the perimeter fence, from the closest receptors. It will also provide higher land on which to plant the woodland proposed for this part of the land surrounding the Onshore Substation

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- Extend areas of woodland from the south, towards the north around the eastern and western sides of the Onshore Substation. This will provide further screening of some elements of the Onshore Substation and link smaller areas of woodland
- Restore historic hedgerows where practicable, to restore the structure of the landscape. These will also provide connectivity between areas of mature woodland/Ancient Woodland and isolated trees that were once part of the field structure
- Where the cable is buried, and crosses a hedgerow, the hedgerow will be replanted without tree species. If hedgerow trees cannot be avoided and are removed, they will be replaced in the replanted hedgerow, as close to their original location as possible
- Create wildflower meadows in areas that cannot be used for woodland creation
- Use of locally native seed/plants grown from locally native seed
- Develop a long-term LEMP based on the Outline LEMP (Document Reference J22) and the Illustrative Landscape and Ecological Strategy Plan (Figure 6.5).
- Determine the most appropriate colour treatment of the substation buildings, based on a Façade Options Report, set out within the Design Principles Document (Document Reference J3).

6.8.1.3 At winter Year 1 (the first planting season after the construction of the onshore elements of the Mona Offshore Wind Project) not all the measures proposed in Table 6.20 and adopted as part of the project will have had time to mitigate the impact of the transmission assets within the Mona Onshore Development Area. However, any advance planting, away from the main construction zone (e.g. the strengthening and enhancing of field boundaries) could take place before construction is complete and would have had some time to establish by Year 1. The assessment has been undertaken on the basis that no advance planting has been implemented. Any earth-modelling, closer to the Onshore Substation will have an immediate effect of softening the impact of any built structures. By Year 15 the planting undertaken after the substation and any ancillary structures (e.g. the access road) are complete will have had time to establish and the impact of such structures will be reduced further, due to the softening effect of the maturing vegetation.

## 6.9 Assessment of significant effects

### 6.9.1 Introduction

6.9.1.1 The impacts of the construction, operations and maintenance, and decommissioning phases of the onshore elements of the Mona Offshore Wind Project have been assessed on landscape, seascape, and visual resources. The MDS of the onshore elements of the Mona Offshore Wind Project against which each impact has been assessed arising from the construction, operation and maintenance and decommissioning phases of the Mona Offshore Wind Project are listed in Table 6.19.

6.9.1.2 A description of all the potential effects of the onshore elements of the Mona Offshore Wind Project on landscape, seascape and visual resources receptors is set out in Table 6.19. In the interests of proportionality and in line with GLVIA3, the text within this assessment section describes the potential effects, some of which would have the potential to be significant, or when combined the effect has the potential to be significant.

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- 6.9.1.3 With respect to the representative viewpoints described in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, and listed in Table 6.14, in the interests of proportionality of assessment and to avoid duplication and double recording of effects, these are considered in this section in tandem with the assessment of visual receptors they represent, referenced accordingly.
- 6.9.1.4 Impacts will arise on landscape, seascape and visual resources during the construction, operations and maintenance, and decommissioning phases as a result of the following Mona Offshore Wind Project components (as set out in more detail in sections 6.10 and 6.11 and Table 6.19):
- Works at the landfall site
  - Onshore grid connection cable (18 km in length) including construction compounds
  - Onshore Substation
  - Onshore cable connection from the Onshore Substation to the Bodelwyddan National Grid substation
  - Construction and service vehicles, plant and machinery, including that required for trenchless installation techniques.
- 6.9.1.5 The landscape, seascape and visual impacts will be caused by both static and moving elements of the above components which will affect the characteristics and perceptions of the landscape/seascape character areas within the Mona Offshore Development Area LVIA study areas.
- 6.9.1.6 For the purposes of this assessment, effects have been defined based on the scenario of an individual who may perceive the onshore development, albeit associated with renewable energy, as a negative addition to the landscape or view. Effects are defined as adverse throughout the assessment.

### 6.9.2 Onshore Substation

- 6.9.2.1 At the Welsh national scale, the Onshore Substation (including construction compounds) lies within NLCA 09 Bryniau Rhos/Rhos (see Figure B1 of Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement). The NLCA is a sparsely settled (affording a sense of peace and tranquillity) rural landscape, of predominantly sheep grazed pasture. There is a mix of field sizes and patterns, divided by hedgerows, but also including fences, with occasional woodlands. Wide views are available from the higher points.
- 6.9.2.2 A small section of the land within the Mona Onshore Development Area to the east, lies within NLCA11 Dyffryn Clwyd/Vale of Clwyd (see Figure B1 of Volume 7, Annex 6.2: Landscape and seascape character baseline, of the Environmental Statement). The proposals for this sliver of land, on the far eastern side of the NCLA, are temporary and permanent ecological and landscape mitigation. As such, there is no potential for this large landscape character area to be significantly, directly affected.
- 6.9.2.3 For a full description of the NLCAs, see Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement.
- 6.9.2.4 There is the potential for indirect effects of the Onshore Substation on NCLA 08 Afordir Gogledd Cymru/North Wales Coast, the remainder of NLCA11 Dyffryn Clwyd/Vale of Clwyd and NLCA 12 Bryniau Clwyd/Clwydian Range (see Volume 7, Annex 6.2: Landscape and seascape character baseline, Figure B1, of the Environmental

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Statement). As the NLCAs are large areas of land and the indirect effects on landscape character are dealt with at a more detailed, local scale, within the assessment of effects on the LANDMAP Visual and Sensory Aspect Areas, they are not considered here. The exception is NCLA 12 Bryniau Clwyd/Clwydian Range, which is considered within section 6.10.1, which assess the effects on the Clwydian Range and Dee Valley NL. A detailed study of the effects of the Mona Offshore Wind Energy Project on the special qualities of the Clwydian Range and Dee Valley NL is at Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.

- 6.9.2.5 The Onshore Substation is located in the following LANDMAP Aspect Area layers:
- DNBGHVS033 Cefn Estate Mosaic Rolling Lowland (Visual and Sensory)
  - DNBGHHL041 Pentre-mawr Irregular Fieldscape (Historic Landscape)
  - DNBGHCLS030 Cefn Estate (Cultural Landscape Services)
  - DNBGHGL031 Cefn Meiriadog Other (Geological Landscape)
  - DNBGHLH023 Cefn Improved Grassland (Landscape Habitat).
- 6.9.2.6 Whilst this chapter summarises the effects of the proposed Mona Onshore Development on these Aspect Area layers, the effects are considered in more detail within Volume 3, Chapter 5: Historic environment; Chapter 1: Geology, hydrogeology and ground conditions and Chapter 3: Onshore ecology of this Environmental Statement. This chapter concentrates primarily on the Visual and Sensory Aspect Area layer.
- 6.9.2.7 It should be noted that the sensitivity of the various Aspect Layers in the Mona Onshore Development Area has altered since the assessments were first undertaken. The area in which the Onshore Substation is located, now includes the Gwynt y Môr Offshore Transmission Owner regime (OFTO) and Burbo Bank Extension OFTO, for example, illustrating that the landscape is dynamic. In this part of North Wales the character of the landscape has changed and is changing still, as has the sensitivity of some of the Aspect Area layers. The assessments in the sections below are given for the original assessment of the Aspect Area layers, followed by a revised sensitivity based on the current situation.

### 6.9.3 Onshore Cable Corridor and construction compounds

- 6.9.3.1 The LANDMAP Aspect Areas relevant to the Onshore Cable Corridor are listed and assessed in section 6.10.5.
- 6.9.3.2 Relevant LANDMAP Aspect Areas within the LVIA study area are described in outline and shown in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement. Representative viewpoints supporting the LVIA are provided in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.
- 6.9.3.3 At the Welsh national scale, the landfall and Onshore Cable Corridor (including construction compounds) lie within NLCA 08 Arfordir Gogledd Cymru/North Wales Coast and NLCA 09 Bryniau Rhos/Rhos (see Volume 7, Annex 6.2: Landscape and seascape character baseline, Figure B1).
- 6.9.3.4 NLCA 08 characteristics within the Mona Offshore Development Area study area include a broad coastal plain with small River Clwyd estuary, predominantly man-made coastal edge. Network of small pastoral fields divided by ditches and managed

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hedgerows, with small woodlands. A number of historic parklands. Transport routes along the coast.

6.9.3.5 NLCA 09 characteristics within the Mona Offshore Development Area study area include rural inland foothills. Mixed field patterns and sizes, predominantly sheep-grazed pasture. Hedgerow field boundaries. Occasional woodlands. Sparsely settled, affording a sense of tranquillity and peace.

6.9.3.6 For full descriptions of the NLCAs see Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement.

## 6.10 Assessment of effects on landscape and seascape character

### 6.10.1 Assessment of effects on the special qualities of national landscape designations – Clwydian Range and Dee Valley NL

6.10.1.1 Impacts will potentially arise during the construction, operations and maintenance, and decommissioning phases on the special qualities of the part of Clwydian Range and Dee Valley NL that lies within the Mona Onshore Development Area LVIA study area.

6.10.1.2 The impacts will be generated by static elements and dynamic elements (construction phase only) of the development components which have the potential to affect those special qualities identified as being susceptible to changes in visual environment. The Clwydian Range and Dee Valley NL is situated approximately 6.1 km to the east of the proposed Onshore Substation platform at its closest point. The effects on the special qualities of the NL are assessed in detail in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement. In summary two landscape character and quality components that might be affected by the development within the Mona Onshore Development Area are:

- Tranquillity
- Remoteness and wildness, space and freedom, expansive views/seascapes.

6.10.1.3 A further special quality, access, recreation and tourism, is also potentially affected by the development within the Mona Offshore Development Area:

- People using the Offa's Dyke National Trail and other promoted routes
- People using Access Land.

6.10.1.4 The effects on views are considered within section 6.11 of this chapter. The representative viewpoints from this landscape resource/receptor are the following:

- Representative viewpoint 11 – View west-southwest from Offa's Dyke Path, to the south of Moel Maenefa
- Representative viewpoint 12 – View west-southwest from Offa's Dyke Path, to the south of Pen-y-Mynydd
- Representative viewpoint 18 – View southwest from Graig Fawr summit
- Representative viewpoint 19 – View southwest from Offa's Dyke Path / public footpath 405/12, Prestatyn hillside.

6.10.1.5 Baseline photographs of these representative viewpoints are within Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement, Figures B.11 to B.12, as well as B.18 to B.19). The photomontages for these viewpoints are Figures: 21-22 for representative viewpoint 11; 23-24 for representative viewpoint 12; 35-36 for representative viewpoint 18; and 37-38 for

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representative viewpoint 19. These are available in Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement.

6.10.1.6 The representative viewpoints towards this landscape resource/receptor, that include the location of Onshore Substation, are:

- Representative viewpoint 2 – View north from minor road adjacent to Hendy Farm
- Representative viewpoint 3 – View east-southeast from public footpath 105/6 to the southeast of Pentre-mawr
- Representative viewpoint 8 – View southeast from farm gate off Glascoed Road, adjacent to Bryn-celyn.

6.10.1.7 This latter group of representative viewpoints (2, 3 and 8) evidence the landscape setting of the Clwydian Range and Dee Valley NL. Baseline photographs are at Volume 7, Annex 6.3: Visual baseline technical report – onshore development, Appendix B, Figures B.2 to B.3, as well as B.8). The photomontages for these viewpoints are Figures: 3-4 for representative viewpoint 2; 5-6 for representative viewpoint 2; and 15-16 for representative viewpoint 8. These are available in Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement.

## Construction and decommissioning phases

### **Magnitude of impact**

- 6.10.1.8 The influence of the Onshore Substation components due to construction and decommissioning works and associated activities and vehicle/equipment movements as described in Table 6.19. The theoretical visibility of the Onshore Substation is illustrated by the ZTV (Figure 6.4). Potential effect on the above special qualities at minimum distances of approximately 6.1 km would be very limited.
- 6.10.1.9 The magnitude of the impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect the receptor both directly (views) and indirectly. The magnitude of impact on the NL's qualifying special qualities (tranquillity, and remoteness and wildness, space and freedom, expansive views/seascapes and access recreation and tourism (assessed in Volume 3, Chapter 7: Land Use and Recreation and Volume 4, Chapter 3: Socio-economics, of the Environmental Statement, respectively) is considered to be **negligible** at most during the construction and decommissioning phases. Representative viewpoints 11, 12, 18 and 19 are located in the part of the NL within the LVIA study area.

### **Sensitivity of the receptor**

- 6.10.1.10 The Clwydian Range and Dee Valley NL special qualities are deemed to be of high landscape value and high susceptibility to the proposed development. In summary, the sensitivity of the landscape receptors is **high**. The sensitivity of visual receptors and at individual viewpoints is assessed in section 6.11. Those people using the Offa's Dyke Path National Trail have a **very high** sensitivity to the Mona Onshore Substation.

### **Significance of the effect**

- 6.10.1.11 Overall, the magnitude of the impact on the qualifying special qualities of the Clwydian Range and Dee Valley NL during construction and decommissioning is negligible and the sensitivity of the receptor is high. The temporary effects on the landscape character and special qualities of tranquillity and remoteness and wildness, space and freedom, expansive views/seascapes are **negligible to minor adverse**, which are not significant. The temporary effects on people using Offa's Dyke Path are **minor adverse**, which are not significant.

## Operations and maintenance phase

### **Magnitude of impact**

- 6.10.1.12 An indirect impact will potentially arise on the qualifying special qualities of the Clwydian Range and Dee Valley NL referred to above due to the operations and maintenance of Onshore Substation. The impact will result from the presence of static project components occupying the Onshore Substation which will potentially affect perceptions of Clwydian Range and Dee Valley NL. Photomontages of the Onshore Substation from representative viewpoints 11, 12, 18 and 19 (Figures 21 and 22, 23 and 24, 35 and 36, 37 and 38 of Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, are representative of the predicted visual change in views from the NL, in winter Year 1 and summer Year 15, upon completion of the construction of the substation.
- 6.10.1.13 The impact is predicted to be of local spatial extent, long-term duration, continuous and low reversibility. It is predicted that the impact will affect the NL's special qualities both directly (views) and indirectly (landscape character). Taking account of the settled

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character of the landscape context, the magnitude of impact is **negligible** during the operations and maintenance phase.

### Sensitivity of the receptor

- 6.10.1.14 The sensitivity of the Clwydian Range and Dee Valley NL special qualities is as set out above for the construction and decommissioning phases, that is **high**. The sensitivity of people using Offa's Dyke Path National Trail through the NL is **very high** (also considered in section 6.11.1).

### Significance of the effect

- 6.10.1.15 Overall, the magnitude of impact in relation to the qualifying special qualities of the Clwydian Range and Dee Valley NL during operations and maintenance is negligible at most and the sensitivity of the receptor is high. The effects will be **negligible to minor adverse**, which are not significant. The effects on people using the Offa's Dyke Path National Trail within the NL are **minor adverse** and not significant.
- 6.10.1.16 The proposed landscape mitigation, shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5) would not alter the predicted effects on the special qualities of the NL, due to distance. In the longer term, it will assist in embedding the Onshore Substation into the landscape.

## 6.10.2 Assessment of effects on the landscape setting of the Clwydian Range and Dee Valley NL

- 6.10.2.1 The western setting of the Clwydian Range and Dee Valley NL is primarily the flat coastal plain from which the Clwydian Range rises up in contrast. The Mona substation is partly cut into the slopes of Cefn Meiriadog, on the southern edge of the coastal plain. Due to the flat, treed, topography, views that encompass both the Onshore Substation and the NL are generally only available from publicly accessible elevated views to the west and south of the Onshore Substation location (i.e. from the northern slopes of Cefn Meiriadog). The visual impact on receptors at these locations are assessed in section 6.11. The proposed landscape mitigation, which is guided by the visual and sensory Aspect Layer LANDMAP guidelines for the area, will restore hedgerows and woodland to the hillside, that have been lost through modern farming practices and assist in mitigating the landscape impacts on the setting of the Clwydian Range and Dee Valley NL.

### Magnitude of impact

- 6.10.2.2 During construction and decommissioning of the Onshore Substation, high level plant will be visible, but unlikely to break the skyline of the Clwydian Hills, when viewed from the west and south. The plant will be seen with a backdrop of Cefn Meiriadog from most other views. The temporary magnitude of impact is **small**.
- 6.10.2.3 During operations and maintenance, the Onshore Substation will not break the skyline, or the level of the tops of the trees that are a feature of the coastal plain. The impact on the wooded, coastal plain setting of the NL is **small**.

### Sensitivity of the landscape

- 6.10.2.4 The land to the west of the Clwydian Range and Dee Valley NL is not a designated landscape. The effects of the development within the Mona Offshore Development Area on the LANDMAP areas that make up the flat coastal plain, are assessed in section 6.10.5. Taken as a whole, the coastal plain, as a setting for the NL has a **medium** sensitivity to the proposed change.

## Significance of effects

6.10.2.5 The effect of the proposed Mona substation on the treed, coastal landscape setting of the Clwydian Range and Dee Valley NL is **minor adverse**, which is not significant. As the proposed landscape mitigation matures, the impact and the effects will reduce to **negligible adverse**.

## 6.10.3 Assessment of effects on the special characteristics of local landscape designations – Rhyd y Foel to Abergele SLA and Elwy and Aled Valleys Special Landscape Areas (SLAs)

6.10.3.1 The western part of the Onshore Cable Corridor passes through the Rhyd y Foel to Abergele SLA (Figure 6.2).

### Construction phase

#### Magnitude of impact

6.10.3.2 There is a direct impact on the Rhyd y Foel to Abergele SLA. However, the Rhyd y Foel to Abergele SLA only has the potential to experience temporary significant effects at the construction phase, from the trenching of the Onshore Cable Corridor, or from the construction compounds, some of which will contain drilling rigs. The magnitude of the impact during the construction phase will be **medium**.

#### Sensitivity of the landscape

6.10.3.3 The sensitivity of the landscape to the proposed temporary change is **medium**.

#### Significance of effects

6.10.3.4 The significance of the temporary effects, during the construction phase of the Mona Onshore Cable Corridor, on the Rhyd y Foel to Abergele SLA is judged to be **moderate adverse** and not significant, due to its low height and temporary nature.

#### Other effects on SLAs

6.10.3.5 The effects of the works along the Onshore Cable Corridor do not directly affect the Elwy and Aled Valleys SLA (Figure 6.2) and the construction works do not have the potential to cause significant effects to the Elwy and Aled Valleys SLA, due to the low-level nature of the works and their distance from the proposed Onshore Cable Corridor. No further assessment of the effects of the construction of the Onshore Cable Corridor on the Elwy and Aled Valleys SLA has been undertaken.

6.10.3.6 Both the Elwy and Aled Valleys SLA and Rhyd y Foel to Abergele SLA lie outside the ZTV of the Onshore Substation (Figure 6.2). There is no potential for significant effects (direct or indirect) to arise on the special characteristics of the SLAs due to implementation of the Onshore Substation, no further assessment of these local landscape designations has been undertaken.

## 6.10.4 Assessment of effects on the qualifying characteristics of Registered Parks and Gardens

6.10.4.1 The following Registered Parks and Gardens (RPaGs) (on the Cadw/ICOMOS Register of Parks and Gardens of Special Historic Interest in Wales) are located with the LVIA study area for Mona Onshore Development Area (Figure 6.2):

- Gwrych Castle Grade II\* Listed RPaG (directly affected by Mona Onshore Cable Corridor)

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- Kinmel Park Grade II\* Listed RPaG (potentially indirectly affected by views of Onshore Substation)
- Bodelwyddan Castle Grade II Listed RPaG (potentially indirectly affected by views of Onshore Substation)
- Bodrhyddan Grade II\* RPaG (potentially indirectly effected by views of Onshore Substation)
- Plas Heaton Grade II Listed RPaG (potentially indirectly affected by views of Onshore Substation)
- St. Bueno's College Grade II Listed RPaG (potentially indirectly affected by views of Onshore Substation)
- Brynbella Grade II Listed RPaG (potentially indirectly affected by views of Onshore Substation).

6.10.4.2 Impacts will potentially arise during the construction, and decommissioning phases on the qualifying landscape and visual characteristics of those RPaGs located in the Mona Onshore Development Area LVIA study area of the Onshore Substation.

### Construction phase

#### Magnitude of impact

6.10.4.3 There is a direct impact on the Gwrych Castle RPaG during the construction phase, from the trenching of the Onshore Cable Corridor, and the construction compounds which will contain drilling rig. The woodland within the park will be drilled under, but the launch and receptor pit compounds and the trenching through the grassland of the park will be visible. The magnitude of the impact during the construction phase will be **medium**. No other RPaG is directly affected by the development within the Mona Offshore Development Area.

#### Sensitivity of the landscape

6.10.4.4 The sensitivity of Gwrych Castle RPaG to the proposed temporary change is **medium**.

#### Significance of effects

6.10.4.5 The significance of the temporary effects, during the construction phase of the Mona Onshore Cable Corridor, on Gwrych Castle RPaG is judged to be **moderate adverse** and not significant, due to its low height and trenchless technique for the most part and its temporary nature.

#### Other effects on RPaGs

6.10.4.6 Of the RPaGs listed above, only slivers of the Onshore Substation ZTV are coincidental with Bodrhyddan, Kinmel Park and Plas Heaton. These have no potential to experience significant landscape effects, as they lie predominantly outside the ZTV (Figure 6.2). However, three RPaGs are more extensively covered by the ZTV of the Onshore Substation, these are Bodelwyddan Castle, Brynbella and St. Bueno's College. Bodelwyddan Castle, due to proximity and Brynbella and St. Bueno's due to their elevation. These three landscapes are located such that potential visibility and visual influence of the substation components would be very limited (due to intervening hedgerow and tree vegetation in the case of the former and separation distance and intervening vegetation with the latter two). Consequently, there is little potential for significant effects to arise on the qualifying characteristics of Historic Parks and Gardens located within the LVIA study area due to implementation of the Onshore

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Substation. No further assessment of these RPaGs has been undertaken in this chapter.

6.10.4.7 The effects on the setting of the RPaGs is in Volume 3, Chapter 5: Historic Environment, of the Environmental Statement.

### 6.10.5 Assessment of effects on LANDMAP Aspect Area layers

6.10.5.1 The sensitivity of the various Aspect Area layers in the Mona Onshore Development Area has altered since the LANDMAP assessments were first undertaken. The area in which the Onshore Substation is located, now includes the Gwynt y Môr OFTO and Burbo Bank Extension OFTO, for example. The character of the landscape has changed, as has the sensitivity of the Aspect Area layers. The assessments below have regard to the published Aspect Area Assessments and evaluations, with updated sensitivities for those Aspect Areas for which the baseline situation has been altered.

#### Construction and decommissioning phases

##### Magnitude of impact

##### Onshore Cable Corridor

6.10.5.2 During construction, direct impacts will be experienced by those Visual and Sensory Aspect Areas that the cable route passes through. The impact will vary according to whether there are construction compounds located within the Aspect Area and whether the cable is trenches or passing underneath most of the Aspect Area via a trenchless technique. In all Aspect Areas, areas of woodland and mature trees and hedgerows have been avoided, by routeing or by passing underneath using a trenchless technique. The magnitude of impact for each Visual and Sensory Aspect Area directly affected is set out below:

- CNWVS052 Llandudno to Kinmel Bay intertidal – Landfall (using a trenchless technique) – **medium** magnitude of impact
- CNWVS062 Llandulas Urban Coast – Onshore Cable Corridor (using a trenchless technique) – **small** magnitude of impact
- CNWVS070 Abergele Coastal Plain – western section of LANDMAP Aspect Area (compounds accommodating plant used to undertake trenchless installation techniques and trenched cable) – **large** magnitude of impact
- CNWVS021 Cefn yr Ogof and Environs – Onshore Cable Corridor (compounds accommodating plant used to undertake trenchless installation techniques and trenched cable) – **medium** magnitude of impact
- CNWVS023 Dulas Lowlands – Onshore Cable Corridor (compounds accommodating plant used to undertake trenchless installation techniques and trenched cable) – **medium** magnitude of impact
- DNBGHVS037 Limestone Valley-Cefn – Onshore Cable Corridor (compounds accommodating plant used to undertake trenchless installation techniques and trenched cable) – **medium** magnitude of impact.

##### Onshore Substation

6.10.5.3 Direct impacts will be experienced by LANDMAP Visual and Sensory Aspect Area DNBGHVS033 Cefn Estate Mosaic Rolling Lowland (Figure 6.3). The impacts will be

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caused by the presence of construction compounds and plant occupying this part of the Mona Onshore Development Area (as described in Table 6.19). This will result in the temporary and permanent loss of pasture farmland, hedgerows and mature hedgerow trees and the introduction of electrical infrastructure and associated landscape proposals, directly affecting landscape character. The magnitude of impact will be **large**.

6.10.5.4 Direct impacts will be experienced by Geological Landscape Aspect Area DNBGHGL031 Cefn Meiriadog. The two parts of the Regionally Important Geological/Geomorphological Site (RIGS) within DNBGHGL031 Cefn Meiriadog, lie to the south of the Mona Onshore Development Area. It is in part physically and visually separated from the Onshore Substation by woodland. However, part of the RIGS is coincidental with the ZTV of the Onshore Substation. The magnitude of impact will be **negligible to small**, due to intervening vegetation and topography.

6.10.5.5 Indirect impacts will be experienced by the following Visual and Sensory Landscape Aspect Areas, as the ZTV of the Onshore Substation is coincidental with the Aspect Areas listed below. However, distance, topography and/or and intervening vegetation/built development has reduced the magnitude of impact in most of the Aspect Areas:

- CNWVS070 Abergele Coastal Plain (eastern section) – **negligible** magnitude of impact, due to distance and intervening vegetation/built development
- DNBGHVS013 Coastal Fields near Towyn – **negligible** magnitude of impact, due to distance and intervening vegetation/built development
- DNBGHVS014 Area North and East of Bodelwyddan – **negligible to small** magnitude of impact, due to intervening vegetation/built development
- DNBGHVS015 River Valley of Clwyd/Elwy – North of St. Asaph – **negligible** magnitude of impact, due to intervening vegetation/built development
- DNBGHVS016 Vale Wooded Estate – South of Dyserth – **negligible** magnitude of impact, due to distance and/or intervening vegetation/built development
- DNBGHVS028 Clwydian Slopes South of Rhualt – **negligible** magnitude of impact, due to distance, topography and intervening vegetation
- DNBGHVS029 Graig Tremerechion – **negligible** magnitude of impact, due to distance, topography and intervening vegetation
- DNBGHVS031 Vale of Clwyd – North of Denbigh – **negligible** magnitude of impact, due to distance, topography and intervening vegetation
- DNBGHVS035 Wooded Parkland and Parkland Remnants – **small** magnitude of impact, due to intervening vegetation/built development.

6.10.5.6 Indirect impacts will be experienced by the following Historic Landscape Aspect Area:

- DNBGHHL005 Bodelwyddan Park – this Aspect Area includes Bodelwyddan Castle, RPaG. While not directly affected, the ZTV of the Onshore Substation is coincidental with DNBGHHL005 and for this reason it is taken forward to assessment. The magnitude of impact on this LANDMAP Aspect Area is **small**, due to the presence of intervening vegetation.

## Sensitivity of the receptor

### Onshore Cable Corridor

6.10.5.7 The sensitivity of each Visual and Sensory Aspect Area directly affected is set out below. The sensitivity is based on the overall evaluation (as per LANDMAP, see Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement) and the susceptibility is that to the proposed change, using the methodology set out in Volume 7, Annex 6.4: Landscape and visual impact assessment methodology, of the Environmental Statement:

- CNWVS052 Llandudno to Kinmel Bay intertidal – Landfall (trenchless technique) – high value, medium susceptibility – **medium** sensitivity
- CNWVS062 Llandulas Urban Coast – Onshore Cable Corridor (trenchless technique) – low value, low susceptibility – **low** sensitivity
- CNWVS070 Abergele Coastal Plain – western section (compounds accommodating plant used to undertake trenchless installation techniques and trenched cable) – moderate value, low susceptibility – **low** sensitivity
- CNWVS021 Cefn yr Ogof and Environs – Onshore Cable Corridor (compounds accommodating plant used to undertake trenchless installation techniques and trenched cable) – high value, medium susceptibility – **high** sensitivity
- CNWVS023 Dulas Lowlands – Onshore Cable Corridor (compounds accommodating plant used to undertake trenchless installation techniques and trenched cable) – moderate value, medium susceptibility – **medium** sensitivity
- DNBGHVS037 Limestone Valley-Cefn – Onshore Cable Corridor (compounds accommodating plant used to undertake trenchless installation techniques and trenched cable) – high value. Medium susceptibility – **medium** sensitivity.

### Onshore Substation

6.10.5.8 Directly affected LANDMAP Aspect Areas – The overall evaluation for DNBGHVS033 Cefn Estate Mosaic Rolling Lowland (Visual and Sensory) is moderate and for DNBGHGL031 Cefn Meiriadog (Geological Landscape) is high. The susceptibility of these LANDMAP areas to the proposed change is medium. Given the changes in the landscape since the original LANDMAP assessments were undertaken, the sensitivity to the proposed development is judged to **medium** for both these Aspect Area layers.

6.10.5.9 Indirectly affected LANDMAP Aspect Areas (Visual and Sensory) – The overall evaluations for the LANDMAP overall evaluation is taken as the value of the Aspect Area. The susceptibility of these LANDMAP Aspect Areas to the proposed change varies, between low and high and is dependent on a number of factors, the including visibility and distance.

- CNWVS070 Abergele Coastal Plain (eastern section) moderate value, low susceptibility – **low** sensitivity
- DNBGHVS013 Coastal Fields near Towyn, moderate value, low susceptibility – **low** sensitivity
- DNBGHVS014 Area North and East of Bodelwyddan, moderate value, medium susceptibility – **medium** sensitivity
- DNBGHVS015 River Valley of Clwyd/Elwy – North of St. Asaph, high value, low susceptibility – **low** sensitivity

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- DNBGHVS016 Vale Wooded Estate – South of Dyserth, high value, low susceptibility – **low** sensitivity
- DNBGHVS028 Clwydian Slopes South of Rhualt, outstanding value, medium susceptibility – **high** sensitivity
- DNBGHVS029 Graig Tremerechion, high value, medium susceptibility – **medium** sensitivity
- DNBGHVS031 Vale of Clwyd – North of Denbigh, high value, medium susceptibility – **medium** sensitivity
- DNBGHVS035 Wooded Parkland and Parkland Remnants, high value, high susceptibility – **high** sensitivity.

6.10.5.10 The presence of Bodelwyddan Castle RPaG raises the value of those parts of Visual and Sensory Aspect Areas DNBGHVS014 Area North and East of Bodelwyddan and DNBGHVS035 Wooded Parkland and Parkland Remnants, where they overlap with Historic Landscape Aspect Area DNBGHHL005 Bodelwyddan Park (see paragraph 6.10.5.16).

6.10.5.11 Indirectly affected LANDMAP Aspect Areas (Historic Landscape) – The ZTV of the Onshore Substation is coincidental with DNBGHHL005 Bodelwyddan Park, which lies to the north of the B5381, Glascoed Road. This Aspect Area has an overall evaluation of high and a high susceptibility, due to the presence of Bodelwyddan Castle RPaG. The sensitivity of this Aspect Area is **high**.

### Significance of the effect

#### Onshore Cable Corridor

- 6.10.5.12 The temporary, direct effects on the LANDMAP Visual and Sensory Aspect Areas (Figure 6.3) that the Onshore Cable Corridor passes through are set out below:
- CNWVS052 Llandudno to Kinmel Bay intertidal – medium magnitude of impact, medium sensitivity – **moderate adverse** effects, which are not significant
  - CNWVS062 Llandulas Urban Coast – small magnitude of impact, low sensitivity – **minor adverse** effects, which are not significant
  - CNWVS070 Abergele Coastal Plain – western section – large magnitude of impact, low sensitivity – **moderate adverse** effects, which are not significant
  - CNWVS021 Cefn yr Ogof and Environs – medium magnitude of impact, high sensitivity – **major adverse** effects, which are significant
  - CNWVS023 Dulas Lowlands – medium magnitude of impact, medium sensitivity – **moderate adverse** effects, which are not significant
  - DNBGHVS037 Limestone Valley-Cefn – medium magnitude of impact, medium sensitivity – **moderate adverse** effects, which are not significant.

#### Onshore Substation

6.10.5.13 The magnitude of the temporary, direct impact on the DNBGHVS033 Cefn Estate Mosaic Rolling Lowland (Visual and Sensory) landscape character resulting from the construction of the Onshore Substation area is high, the sensitivity of the agricultural landscape is medium. The significance of temporary effect on the landscape character of the Onshore Substation area is **major adverse**, which is significant.

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- 6.10.5.14 The magnitude of the temporary, direct impact on the land within DNBGHGL031 Cefn Meiriadog during construction and decommissioning is medium and the sensitivity of the receptors is medium. The temporary effect, based on the original NRW assessment of sensitivity would be **moderate adverse**, which is not significant.
- 6.10.5.15 The temporary indirect effects will be experienced by the following Visual and Sensory Landscape Aspect Areas, as the ZTV of the Onshore Substation is coincidental with the Aspect Areas listed below:
- CNWVS070 Abergele Coastal Plain (eastern section) – negligible magnitude of impact, low sensitivity – **negligible adverse** effects, which are not significant
  - DNBGHVS013 Coastal Fields near Towyn – negligible magnitude of impact, low sensitivity – **negligible adverse** effects, which are not significant
  - DNBGHVS014 Area North and East of Bodelwyddan – negligible to small magnitude of impact, medium sensitivity – **negligible to minor adverse** effects, which are not significant
  - DNBGHVS015 River Valley of Clwyd/Elwy – North of St. Asaph – negligible magnitude of impact, low sensitivity – **negligible adverse** effects, which are not significant
  - DNBGHVS016 Vale Wooded Estate – South of Dyserth – negligible magnitude of impact, low sensitivity – **negligible adverse** effects, which are not significant
  - DNBGHVS028 Clwydian Slopes South of Rhuallt – negligible magnitude of impact, high sensitivity – **minor adverse** effects, which are not significant
  - DNBGHVS029 Graig Tremerechion – negligible magnitude of impact, medium sensitivity – **minor adverse** effects, which are not significant
  - DNBGHVS031 Vale of Clwyd – North of Denbigh – negligible magnitude of impact, medium sensitivity – **minor adverse** effects, which are not significant
  - DNBGHVS035 Wooded Parkland and Parkland Remnants – small magnitude of impact, high sensitivity – **moderate adverse** effects, which are not significant.
- 6.10.5.16 Temporary indirect effects will be experienced by Historic Landscape Aspect Area DNBGHHL005 Bodelwyddan Park – this Aspect Area includes Bodelwyddan Castle, RPaG. While not directly affected, the ZTV of the Onshore Substation is coincidental with DNBGHL005. The magnitude of impact on this LANDMAP Aspect Area is small, the sensitivity is high. The effects are judged to be **moderate adverse**, which are not significant as the impact is temporary in nature.

## Operations and maintenance phase

### Magnitude of impact

#### Onshore Cable Corridor

6.10.5.17 Due to the Onshore Cable Corridor being buried, the impacts during the operations and maintenance phase do not have the potential to cause significant effects and are not considered further in this assessment.

#### Onshore Substation

6.10.5.18 A potentially significant direct impact will arise on DNBGHVS033 Cefn Estate Mosaic Rolling Lowland (Visual and Sensory), as well as on DNBGHGL031 Cefn Meiriadog (Geological landscape) due to the operations and maintenance of the Onshore Substation. The impact will be caused by the presence of static project components occupying Mona Onshore Development Area (as described in Table 6.19). This will result in the loss of pasture farmland, hedgerows and mature hedgerow trees and the introduction of electrical infrastructure and associated landscape proposals, directly affecting the landscape of the agricultural vale.

6.10.5.19 The impact is predicted to be of local spatial extent, long-term duration, continuous and low reversibility. The impact will affect the landscape resource and receptors directly. Although smaller in geographical extent than the area of the construction works, the magnitude of impact within DNBGHVS033 Cefn Estate Mosaic Rolling Lowland (Visual and Sensory) is **high** during the operations and maintenance phase. As the RIGS are not publicly accessible and not visible from within the Onshore Substation site, the impact on DNBGHGL031 Cefn Meiriadog (Geological landscape) is of a lower magnitude, that is **small**.

6.10.5.20 Indirect impacts will be experienced by the following Visual and Sensory Landscape Aspect Areas, as the ZTV of the Onshore Substation is coincidental with the Aspect Areas listed below. However, distance, topography and/or intervening vegetation/built development has reduced the magnitude of impact in most of the Aspect Areas:

- CNWVS070 Abergele Coastal Plain (eastern section) – **negligible** magnitude of impact, due to distance and intervening vegetation/built development
- DNBGHVS013 Coastal Fields near Towyn – **negligible** magnitude of impact, due to distance and intervening vegetation/built development
- DNBGHVS014 Area North and East of Bodelwyddan – **negligible to small** magnitude of impact, due to intervening vegetation/built development
- DNBGHVS015 River Valley of Clwyd/Elwy – North of St. Asaph – **negligible** magnitude of impact, due to intervening vegetation/built development
- DNBGHVS016 Vale Wooded Estate – South of Dyserth – **negligible** magnitude of impact, due to distance and/or intervening vegetation/built development
- DNBGHVS028 Clwydian Slopes South of Rhualt – **negligible** magnitude of impact, due to distance, topography and intervening vegetation
- DNBGHVS029 Graig Tremerechion – **negligible** magnitude of impact, due to distance, topography and intervening vegetation

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- DNBGHVS031 Vale of Clwyd – North of Denbigh – **negligible** magnitude of impact, due to distance, topography and intervening vegetation
- DNBGHVS035 Wooded Parkland and Parkland Remnants – **small** magnitude of impact, due to intervening vegetation/built development.

6.10.5.21 Indirect impacts will be experienced by the Historic Landscape Aspect Area DNBGHHL005 Bodelwyddan Park – this Aspect Area includes Bodelwyddan Castle, RPaG. While not directly affected, the ZTV of the Onshore Substation is coincidental with DNBGHHL005. The magnitude of impact on this LANDMAP Aspect Area is **small**, due to the presence intervening vegetation.

### Sensitivity of the receptor

6.10.5.22 The sensitivity of the receptors is as set out at paragraphs 6.10.5.9 to 6.10.5.11 above.

### Significance of the effect

#### Onshore Substation

6.10.5.23 The magnitude of the impact on the landscape character of DNBGHVS033 Cefn Estate Mosaic Rolling Lowland (Visual and Sensory) due to the Onshore Substation area is high. The sensitivity of this landscape is high. The significance of effect on the landscape character of the DNBGHVS033 Cefn Estate Mosaic Rolling Lowland (Visual and Sensory) is **major adverse**, which is significant. Regarding landscape mitigation – ground modelling and new planting forms part of the proposed development (Figure 6.5). As the new planting becomes established it would reduce landscape effects to **moderate to major adverse** significance by Year 15, which are not significant to significant.

6.10.5.24 Indirect effects will be experienced by the following Visual and Sensory Landscape Aspect Areas, as the ZTV of the Onshore Substation is coincidental with the Aspect Areas listed below:

- CNWVS070 Abergele Coastal Plain (eastern section) – negligible magnitude of impact, low sensitivity – **negligible adverse** effects, which are not significant
- DNBGHVS013 Coastal Fields near Towyn – negligible magnitude of impact, low sensitivity – **negligible adverse** effects, which are not significant
- DNBGHVS014 Area North and East of Bodelwyddan – negligible to small magnitude of impact, medium sensitivity – **negligible to minor adverse** effects, which are not significant
- DNBGHVS015 River Valley of Clwyd/Elwy – North of St. Asaph – negligible magnitude of impact, low sensitivity – **negligible adverse** effects, which are not significant
- DNBGHVS016 Vale Wooded Estate – South of Dyserth – negligible magnitude of impact, low sensitivity – **negligible adverse** effects, which are not significant
- DNBGHVS028 Clwydian Slopes South of Rhuallt – negligible magnitude of impact, high sensitivity – **minor adverse** effects, which are not significant
- DNBGHVS029 Graig Tremerechion – negligible magnitude of impact, medium sensitivity – **minor adverse** effects, which are not significant
- DNBGHVS031 Vale of Clwyd – North of Denbigh – negligible magnitude of impact, medium sensitivity – **minor adverse** effects, which are not significant

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- DNBGHVS035 Wooded Parkland and Parkland Remnants – small magnitude of impact, high sensitivity – **moderate adverse** effects, which are not significant.
- 6.10.5.25 Temporary indirect effects will be experienced by Historic Landscape Aspect Area DNBGHHL005 Bodelwyddan The magnitude of impact on this LANDMAP Aspect Area is small, the sensitivity is high. The effects are judged to be **moderate adverse**, which are not significant.
- 6.10.5.26 As the landscape mitigation planting matures (Figure 6.5) it will reduce landscape effects to **negligible to minor adverse** significance by Year 15, for the majority of these landscape resources and receptors, which are not significant as they are temporary in nature.

## 6.11 Visual impact assessment

### 6.11.1 Visual effects experienced by visual receptor groups

#### Assessment of effects experienced by people travelling along national trails/long distance paths – Wales Coast Path

- 6.11.1.1 The offshore cable will be drilled under the sea defences, Wales Coast Path, railway, A55 and A547, to the west of Abergele. During the construction phase, people using the coast path will have views of the drill operations to the north, but not of the inland works, due to the existing earth-bundling between the coast path and the transport corridor.

#### Magnitude of impact

- 6.11.1.2 The magnitude of the temporary impact is **small**, given the small geographical extent and scale of the works and the extent and type of development/works within the same views.

#### Sensitivity of the receptor

- 6.11.1.3 The sensitivity of the people using the Wales Coast Path to the proposed change is **high**.

#### Significance of effect

- 6.11.1.4 The temporary visual effect of the offshore construction works, in the location of the landfall, on people using the Wales Coast Path is **moderate adverse**, which is not significant.

#### Other visual effects

- 6.11.1.5 Once installed there is no potential for significant effects to be experienced by people using the Wales Coast Path. No further assessment of effects is provided here.

- 6.11.1.6 There is no potential for significant visual effects to arise on people travelling along Wales Coast Path due to implementation of the Onshore Substation, as only a sliver of the Onshore Substation ZTV overlaps with the Path (Figure 6.4). Representative viewpoint 20: View southeast from the Wales Coast Pat at Pont y Ddraig footbridge over the River Clwyd at Kinmel Bay, is located on the Wales coast path at this point (Figures 39 and 40 of Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement). As such, no further assessment of the effect of the Onshore Substation has been undertaken.

## Assessment of effects experienced by people travelling along national trails/long distance paths – Offa’s Dyke Path National Trail

- 6.11.1.7 Visual impacts will potentially be experienced by people using Offa’s Dyke Path National Trail, during the construction, operations and maintenance, and decommissioning phases of the Onshore Substation.
- 6.11.1.8 The impacts will be generated by static and dynamic elements of the development components which have the potential to affect the views and visual amenity of people using certain stretches of the long-distance path within approximately 6 to 7 km of the Onshore Substation.
- 6.11.1.9 Outline details of the baseline conditions and factors influencing potential impacts on Offa’s Dyke Path National Trail are provided below. Potential effects arising on the landscape designation are assessed in paragraphs that follow, and also in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement.

### **Baseline conditions**

- 6.11.1.10 Offa’s Dyke Path National Trail is aligned north-south, roughly along the spine of the Clwydian Range of hills within the LVIA study area (Figure 6.2). At its northern end, approaching Prestatyn, it affords elevated, wide-ranging views along the coast of north Wales and across its settled hinterland. The elevation of this north section of the route varies from between close to 300 m AOD around Mynydd y Cwm dropping to less than 250 m and falling to 5 m AOD or less at Prestatyn on the coast. The sections of the path with theoretical visibility of the Mona Onshore Development Area are those in the east of the LVIA study area.
- 6.11.1.11 All viewpoints are set out and described in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement. The views from Moel Maenefa (representative viewpoint 11, Figure B11) Pen-y-Mynydd (representative viewpoint 12, Figure B12) and Prestatyn Hillside (representative viewpoint 19, Figure B19) give a range of views, with a geographical spread of the closest parts of the path to the Onshore Substation.

### **Impact considerations**

- 6.11.1.12 Fieldwork and analysis of the ZTV of the Onshore Substation (Figure 6.4) and the representative viewpoint visualisations in Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, indicates some visibility of the Onshore Substation from Offa’s Dyke Path. The photomontages are presented in Annex 6.5 at:
- Representative viewpoint 11: View west-southwest from Offa’s Dyke Path, to the south of Moel Maenefa (Figures 21 and 22)
  - Representative viewpoint 12: View west-southwest from Offa’s Dyke Path, to the south of Pen-y-Mynydd (Figures 23 and 24)
  - Representative viewpoint 19: View southwest from Offa’s Dyke Path, Prestatyn Hillside (Figures 37 and 38).

## Construction and decommissioning phases

### **Magnitude of impact**

- 6.11.1.13 An impact will potentially arise on the views/visual amenity of people using the sections of Offa’s Dyke Path National Trail referred to above. This will be caused by visibility of

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construction works and associated activities/movements (described in Table 6.19) at closest distances of approximately 6 km.

- 6.11.1.14 The impact is predicted to be of local spatial extent, short-term duration (increasing during construction, decreasing during decommissioning) intermittent and high reversibility. The impact will affect receptors directly. Due to the distance from the path and the intervening vegetation, the magnitude of visual impact is **negligible** at most during the construction and decommissioning phases.

### **Sensitivity of the receptor**

- 6.11.1.15 People using the Offa's Dyke Path National Trail within the Clwydian Range and Dee Valley NL are deemed to be of high susceptibility to change in the very high value views, due to the proposed development. The sensitivity of the receptor is **very high**.

### **Significance of the effect**

- 6.11.1.16 Overall, the magnitude of the visual impact on people using Offa's Dyke Path National Trail during construction and decommissioning is negligible and the sensitivity of the receptor is very high. The temporary effect will be **minor adverse**, which is not significant.

## **Operations and maintenance phase**

### **Magnitude of impact**

- 6.11.1.17 A visual impact will potentially be experienced by people using Offa's Dyke Path National Trail during the operations and maintenance phase of the Onshore Substation. The impact will result from visibility of static project components (as summarised above and described in Table 6.19 at closest distances of approximately 6 km which has the potential to affect people's appreciation of the surrounding landscape and views.
- 6.11.1.18 The impact is predicted to be of local spatial extent, long-term duration, intermittent and low reversibility. The impact will affect views/visual amenity directly. The magnitude of impact is **negligible** at most during the operations and maintenance phase, occurring along the closest sections of long-distance path to the Onshore Substation.

### **Sensitivity of the receptor**

- 6.11.1.19 The sensitivity of the people using Offa's Dyke Path National Trail within the NL, to the proposed Onshore Substation, is as set out above for the construction and decommissioning phases, that is **very high**.

### **Significance of the effect**

- 6.11.1.20 Overall, the magnitude of visual impact experienced by people using the sections of Offa's Dyke Path National Trail, that fall within the ZTV (Figure 6.4) during operations and maintenance is low to negligible at most and the sensitivity of the receptor is very high. The visual effect will be **minor adverse**, which is not significant.
- 6.11.1.21 Regarding landscape mitigation, ground modelling and new planting forms part of the proposed development, as shown on the landscape and ecological strategy plan (Figure 6.5). As the new planting becomes established it would not alter the predicted visual effect in the longer term but would soften the views.

### Assessment of effects experienced by people travelling along public rights of way and local roads

- 6.11.1.22 Potentially significant impacts will be experienced by close receptors during the construction, operations and maintenance, and decommissioning phases on the views from and visual amenity of walkers using the public footpath west of the Onshore Substation and walkers and occupiers of vehicles using the local road south of the Onshore Substation, at the base of Cefn Meiriadog. These impacts would be caused by visibility of some or all the Mona Offshore Wind Project, below.
- 6.11.1.23 The impacts will be generated by both static and moving elements (construction phase only) of the above components which will affect the views/visual amenity of people using certain stretches of footpaths and roads.
- 6.11.1.24 All viewpoints are set out and described in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement. The views from public roads include: Representative viewpoint 1 (view southeast along farm track from minor road to Tyddyn Meredydd) Figure B1, representative viewpoint 2 (view north from minor road adjacent to Henry Farm) Figure B2; representative viewpoint 3 (view east-southeast from public footpath 105/6 to the east of Pentre-mawr) Figure B3; representative viewpoint 4 (view southeast from public footpath 105/7 to the southwest of Waen-Meredydd) Figure B4; representative viewpoint 5 (view southeast from the junction of farm track with minor road at Waen-Meredydd) Figure B5; and representative viewpoint 30 (view east from the southern end of public bridleway 208/3 adjacent to Coed Esgob – currently not publicly accessible) Figure B30, which are the closest views from these receptors. The photomontages are presented in Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement:
- Representative viewpoint 1: View southeast along farm track from minor road to Tyddyn Meredydd (Figures 1 and 2)
  - Representative viewpoint 2: View north from minor road adjacent to Henry Farm (Figures 3 and 4)
  - Representative viewpoint 3: View east-southeast from public footpath 105/6 to the east of Pentre-mawr (Figures 5 and 6)
  - Representative viewpoint 4: View southeast from public footpath 105/7 to the southwest of Waen-Meredydd (Figures 7 and 8)
  - Representative viewpoint 5: View southeast from the junction of farm track with minor road at Waen-Meredydd (Figures 9 and 10)
  - Representative viewpoint 30: View east from the southern end of public bridleway 208/3 adjacent to Coed Esgob – currently not publicly accessible (Figures 45 and 46).
- 6.11.1.25 There is no potential for significant visual effects to be experienced by other people on local roads and the local public rights of way network within the LVIA study area resulting from the implementation of the onshore elements of the Mona Offshore Wind Project.

### Construction and decommissioning phases

#### **Magnitude of impact**

- 6.11.1.26 A direct visual impact will potentially be experienced by of people using the sections of public right of way and roads referred to above. This will be caused by visibility of

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the removal of existing site features including hedgerows and trees, the erection and dismantling of the substation infrastructure and the associated equipment activities/movements (described in Table 6.19) within the Mona Onshore Development Area.

- 6.11.1.27 The impact is predicted to be of local spatial extent, short-term duration (increasing during construction, decreasing during decommissioning), intermittent and high reversibility. The impact will affect visual receptors directly. The magnitude of visual impact is **medium to large** during the construction and decommissioning phases, dependent on proximity to the works and the amount of intervening vegetation/built form.

### Sensitivity of the receptor

- 6.11.1.28 Walkers using the public right of way and local roads are deemed to be of high value and high susceptibility to the proposed development. The overall sensitivity of the receptors is **high**.
- 6.11.1.29 Cyclists using public rights of way and local roads are of a high value and a medium susceptibility to the proposed development. Their overall sensitivity is **medium**.
- 6.11.1.30 Occupiers of vehicles using the local road are deemed to be of low value and low sensitivity, cyclists are deemed to be of medium value and medium susceptibility to the proposed development. The overall sensitivity of these receptors is **low to medium**.

### Significance of effect

- 6.11.1.31 The magnitude of the visual impact experienced by pedestrians and people using the public right of way at during construction and decommissioning is medium to large and the sensitivity of the receptor is high. The temporary effects will be **moderate to major adverse**, which are not significant to significant.
- 6.11.1.32 The magnitude of the visual impact experienced by cyclists using local roads or public right of way at during construction and decommissioning is medium to large and the sensitivity of the receptor is medium. The temporary effects will be **moderate adverse**, which are not significant.
- 6.11.1.33 The magnitude of the visual impact experienced by people in vehicles using the local road network during construction and decommissioning is medium and the sensitivity of the receptor is low to medium. The temporary effects will be **minor to moderate adverse**, which are not significant.

## Operations and maintenance phase

### **Magnitude of impact**

- 6.11.1.34 A visual impact will potentially be experienced by people using the sections of public right of way and road referred to above. This will be caused by a reduction in characteristic features of the agricultural landscape including pasture, hedgerows and trees, the introduction of energy infrastructure at the Onshore Substation area and the associated immature landscape proposals (described in Table 6.20) within the Mona Onshore Development Area. These changes have the potential to affect people's appreciation of the surrounding landscape.
- 6.11.1.35 The impact is predicted to be of local spatial extent, long-term duration, intermittent and low reversibility. The impact will affect views/visual amenity directly. The magnitude of impact is **medium** during the operations and maintenance phase.

### **Sensitivity of the receptor**

- 6.11.1.36 The sensitivity of visual receptors is as set out in paragraphs 6.11.1.28 to 6.11.1.30.

### **Significance of effect**

- 6.11.1.37 The magnitude of the visual impact experienced by pedestrians and people using the public right of way during the operations and maintenance phase is medium to large and the sensitivity of the receptor is high. The effects will be **moderate to major adverse**, which are not significant to significant.
- 6.11.1.38 The magnitude of the visual impact experienced by cyclists using local roads or public right of way during the operations and maintenance phase is medium to large and the sensitivity of the receptor is medium. The effects will be **moderate adverse**, which are not significant.
- 6.11.1.39 The magnitude of the visual impact experienced by people in vehicles using the local road network during the operations and maintenance phase is medium and the sensitivity of the receptor is low to medium. The effects will be **minor to moderate adverse**, which are not significant.
- 6.11.1.40 No other significant adverse effects on visual receptors within the LVIA study area for the Onshore Substation are anticipated.
- 6.11.1.41 Regarding mitigation, ground modelling and new planting forms part of the proposed development (Figure 6.5). As the new planting becomes established it would reduce the most significant visual effects **moderate adverse**, at most by Year 15, which is not significant.

## **6.11.2 Visual effects experienced by receptors at representative viewpoint locations**

- 6.11.2.1 The representative viewpoint locations that this section refers to are on Figure 6.4.

### Assessment of effects experienced by people at representative viewpoint 1 – View southeast along farm track from minor road to Tyddyn Meredydd

- 6.11.2.2 Direct visual impacts will potentially be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint falling within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some of the Onshore Substation construction and construction

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compounds described in Table 6.19 which will affect the views/visual amenity of people at this location.

### Summary of visual baseline

- 6.11.2.3 This is a close, filtered view looking southeast from the local road which passes through the landscape around the substation site, at the junction of a farm track with the lane. Representative of views available to people at/using the track and/or the local road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement. Figure B1 of Appendix B to Annex 6.3 is the baseline panorama of representative viewpoint 1.

### Description of visual change

- 6.11.2.4 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area, set out in Table 6.19 and the visualisations of the Onshore Substation (Environmental Statement Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 1 and 2).
- 6.11.2.5 At this viewpoint the pylon carrying the overhead lines within the sealing end compound is the dominant feature in the view, due to size and proximity to the viewer. The substation is set behind an existing hedgerow with mature trees. At winter Year 1 the substation is prominent. By summer Year 15, the proposed landscape mitigation will have become established and will be maturing. The lower substation infrastructure is screened and the larger substation buildings are seen as separate elements within the landscape. The pylon in the sealing end compound remains the dominant feature in the view.

## Construction and decommissioning phases

### Magnitude of impact

- 6.11.2.6 An impact will potentially be experienced by people during construction and decommissioning at this representative viewpoint. This will be caused by visibility of the erection and dismantling of the substation and associated equipment/activities and traffic movements (described in Table 6.19) which will affect people's appreciation of the surrounding landscape.
- 6.11.2.7 The impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **large** during the construction and decommissioning phases.

### Sensitivity of the receptor

- 6.11.2.8 Equestrians, cyclists and walkers using the road network, have a medium susceptibility to the changes in medium value views. The sensitivity of the visual receptors at this location varies between **low to medium**.

### Significance of the effect

- 6.11.2.9 Overall, the magnitude of the visual impact experienced by people at this representative viewpoint during construction and decommissioning is medium and the sensitivity of the receptor is low to medium. The temporary effects will be **minor to moderate adverse**, which are not significant.

## Operations and maintenance phase

### Magnitude of impact

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6.11.2.10 Visual impact will be experienced by people at this viewpoint during the operations and maintenance phase of the Onshore Substation. The impact will result from visibility of the project components (as described in Table 6.19) which will affect people's appreciation of the surrounding landscape.

6.11.2.11 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **medium** during the operations and maintenance phase, reducing as the landscape mitigation becomes established.

### **Sensitivity of the receptor**

6.11.2.12 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is, **low to medium**.

### **Significance of the effect**

6.11.2.13 Overall, the magnitude of visual impact caused by the Onshore Substation during the operations and maintenance phase and experienced by people at this viewpoint is medium. The sensitivity of the receptor is low to medium. The effects will be **minor to moderate adverse**, which are not significant.

6.11.2.14 Landscape mitigation, forms part of the proposed development (Figure 6.5). As the new planting becomes established it would reduce visual effects by Year 15.

### **Assessment of effects experienced by people at representative viewpoint 2 – View north from minor road adjacent to Hendy Farm**

6.11.2.15 Direct visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases on the view from this representative viewpoint falling within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

### **Summary of visual baseline**

6.11.2.16 This is a panoramic view looking north from a local road in an elevated location at the base of Cefn Meiriadog. Representative of views available to people at/using the local road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

### **Description of visual change**

6.11.2.17 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area, set out in Table 6.19 and the visualisations of the Onshore Substation (Environmental Statement Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 3 and 4).

6.11.2.18 At this viewpoint pylons carrying the overhead lines cross the middle ground and break the skyline. The Onshore Substation is set in front of these pylons and although there is some minor electrical infrastructure in the foreground at winter Year 1, the substation is the dominant feature in the view, despite the presence of existing mature vegetation due to elevation of the viewer. By summer Year 15, the proposed landscape mitigation will be established and maturing. The lower substation infrastructure is partly screened. The woodland, planted to enclose the substation and connect the mature woodland to the north and south of the substation is taking effect. Due to the elevation of the viewer views into the substation compound are still possible. The substation will be a prominent feature in this view.

## Construction and decommissioning phases

### Magnitude of impact

- 6.11.2.19 A visual impact will potentially be experienced by people during construction and decommissioning at this representative viewpoint. This will be caused by visibility of the erection and dismantling of the Onshore Substation and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.20 The impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **large** during the construction and decommissioning phases.

### Sensitivity of the receptor

- 6.11.2.21 Equestrians, cyclists and walkers using the road network, have a medium to high susceptibility to the changes in medium value views. The sensitivity of the visual receptors at this location varies between **low** and **medium**.

### Significance of the effect

- 6.11.2.22 Overall, the magnitude of the visual impact experienced by people at this representative viewpoint during construction and decommissioning is large and the sensitivity of the receptor is medium to high. The temporary effects will be **moderate to major adverse**, which are not significant to significant.

## Operations and maintenance phase

### Magnitude of impact

- 6.11.2.23 A visual impact will potentially be experienced by people at this representative viewpoint due to the operations and maintenance of the Mona Onshore Development Area. The impact will result from visibility of the project components (as described in Table 6.19) which have the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.24 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **large** at Year 1 winter, reducing to **medium** at Year 15 summer.

### Sensitivity of the receptor

- 6.11.2.25 Equestrians, cyclists and walkers using the road network, have a medium to high susceptibility to the changes in medium value views. The sensitivity of the visual receptors at this location varies between **low** and **medium**.

### Significance of the effect

- 6.11.2.26 Overall, the magnitude of visual impact caused by the onshore elements within the Mona Onshore Development Area during operations and maintenance and experienced by people at this viewpoint is high in Year 1 winter reducing to medium at Year 15 summer. The sensitivity of the receptors varies between medium and high. The effects will be **major adverse** at Year 1 winter reducing to **moderate adverse** at Year 15 summer as the landscape mitigation (shown on Figure 6.5) matures, which are significant to not significant effects.

**Assessment of effects experienced by people at representative viewpoint 3 – View east-south-east from public footpath 105/6 to the southeast of Pentre-mawr**

6.11.2.27 Visual impacts will potentially be experienced by people during the construction, operations and maintenance, and decommissioning phases on the view from this representative viewpoint falling within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

**Summary of visual baseline**

6.11.2.28 This is a panoramic view looking east from a public footpath which crosses a slightly elevated area of farmland. Representative of views available to people at/using the PRow at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

**Description of visual change**

6.11.2.29 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area, set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 5 and 6).

6.11.2.30 At this viewpoint pylons carrying the overhead lines cross the middle ground, going away from the viewer, and break the skyline. They are a noticeable feature in the view. The Onshore Substation is set in front of these pylons and although there is some minor electrical infrastructure between the substation and the viewer, the substation is a prominent feature in the view at Year 1 winter. However, it does not break the skyline, or the tree canopy of the coastal plain. By summer Year 15, the proposed landscape mitigation will have become established and will be maturing. The lower substation infrastructure is partly screened, but due to the elevation of the viewer views of the substation are still possible. The substation will be a prominent feature in this view.

**Construction and decommissioning phases**

**Magnitude of impact**

6.11.2.31 An impact will potentially be experienced by people during construction and decommissioning at this representative viewpoint. This will be caused by visibility of the erection and dismantling of the substation and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.

6.11.2.32 The impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **medium** during the construction and decommissioning phases.

**Sensitivity of the receptor**

6.11.2.33 The views/visual amenity of people at this viewpoint is of medium value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

**Significance of the effect**

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6.11.2.34 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is medium and the sensitivity of the receptor is high. The temporary effects experienced by people walking this public footpath will be **major adverse**, which are significant.

### Operations and maintenance phase

#### **Magnitude of impact**

6.11.2.35 A visual impact will potentially be experienced by people at this representative viewpoint due to the operations and maintenance of the onshore elements within the Mona Onshore Development Area. The impact will result from visibility of the project components (as described in Table 6.19) which have the potential to affect people's appreciation of the surrounding landscape.

6.11.2.36 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **medium** during the operations and maintenance phase.

#### **Sensitivity of the receptor**

6.11.2.37 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is, **high**.

#### **Significance of the effect**

6.11.2.38 Overall, the magnitude of visual impact caused by the onshore elements within the Mona Onshore Development Area during the operations and maintenance phase and experienced by people at this viewpoint is medium. The sensitivity of the receptor is high. The effects will be **major adverse** at Year 1 winter, which are significant, reducing to **moderate adverse** at Year 15 summer, as the landscape mitigation becomes established (shown on Figure 6.5).

### Assessment of effects experienced by people at representative viewpoint 4 – View southeast from public footpath 105/7 to the southwest of Waen-Meredydd

6.11.2.39 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases on the view from this representative viewpoint falling within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

#### **Summary of visual baseline**

6.11.2.40 This is an open view, southeast from a public footpath crossing farmland. Representative of views available to people at/using the PRoW at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

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### Description of visual change

6.11.2.41 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area, set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 7 and 8).

6.11.2.42 At this viewpoint pylons carrying the overhead lines cross the middle ground, going away from the viewer, and break the skyline. They are a noticeable feature in the view. The Onshore Substation is set in behind these pylons and there is some minor electrical infrastructure between the viewer and the high voltage lines. The substation is a small part of the view at Year 1 winter, breaking the skyline, but not noticeably so. By summer Year 15, the proposed landscape mitigation will have become established and will be maturing. The substation is substantially screened, both by existing vegetation (as it would be in Year 1 summer) but also by the landscape mitigation, which has enhanced the landscape character from this viewpoint.

### Construction and decommissioning phases

#### Magnitude of impact

6.11.2.43 A visual impact will be experienced by people during construction and decommissioning phases of the onshore elements, within the Mona Onshore Development Area, at this representative viewpoint. This will be caused by visibility of the erection and dismantling of the substation and associated equipment/activities and traffic movements which has the potential to affect people's appreciation of the surrounding landscape.

6.11.2.44 The impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **small** during the construction and decommissioning phases, due to distance and screening of all but the tallest elements of plant.

#### Sensitivity of the receptor

6.11.2.45 The views/visual amenity of people at this viewpoint are of medium value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

#### Significance of the effect

6.11.2.46 Overall, the magnitude of the visual impact experienced by people at this viewpoint during the construction and decommissioning phases of the Project is small and the sensitivity of the receptor is high. The temporary effects will be **minor to moderate adverse**, which are not significant.

## Operations and maintenance phase

### Magnitude of impact

- 6.11.2.47 A visual impact will be experienced by people at this representative viewpoint due to the operations and maintenance of the Mona Onshore Development Area. The impact will result from visibility of the project components (as described in Table 6.19) which have the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.48 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **small** during the operations and maintenance phase.

### Sensitivity of the receptor

- 6.11.2.49 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is, **high**.

### Significance of the effect

- 6.11.2.50 Overall, the magnitude of visual impact caused by the onshore elements within the Mona Onshore Development Area during the operations and maintenance phases and experienced by people at this representative viewpoint is high. The sensitivity of the receptor is high. The effects will be **minor to moderate adverse** in Year 1 winter, and **negligible adverse** in Year 1 summer, which are not significant.
- 6.11.2.51 As the proposed landscape mitigation becomes established (Figure 6.5) it would reduce visual effects to **negligible adverse** by Year 15, which are not significant.

## Assessment of effects experienced by people at representative viewpoint 5 – View southeast from junction of farm track with minor road at Waen-Meredydd, south of St Asaph Business Park

- 6.11.2.52 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases of the onshore elements of the Mona Offshore Wind Project at this viewpoint. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19.

### Summary of visual baseline

- 6.11.2.53 This is a partly restricted view looking south from the junction of the local road and farm access track on the edge of the St Asaph Business Park. Representative of views available to people at/using the track and/or local road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

### Description of visual change

- 6.11.2.54 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area, set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 9 and 10).
- 6.11.2.55 At this viewpoint pylons carrying the overhead lines cross the middle ground, going away from the viewer, and break the skyline. They are a noticeable feature in the view. The Onshore Substation is situated behind these pylons and there is some minor electrical infrastructure within the view. The substation is a small part of the view at Year 1 winter, breaking the skyline, but not taller than the existing trees, when seen from this location. By summer Year 15, the proposed landscape mitigation will have

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become established. The substation will be partly screened, both by existing vegetation (as it would be in Year 1 summer) but also by the landscape mitigation, which has enhanced the landscape character from this viewpoint.

### Construction and decommissioning phases

#### Magnitude of impact

- 6.11.2.56 A visual impact will be experienced by people during construction and decommissioning at this representative viewpoint. This will be caused by visibility of the erection and dismantling of the substation and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.57 The impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **small** during the construction and decommissioning phases.

#### Sensitivity of the receptor

- 6.11.2.58 Equestrians, cyclists and walkers using the road network, have a medium to low susceptibility to the changes in low value views. The sensitivity of equestrians and cyclists is **medium** and the sensitivity of walkers is medium to high.
- 6.11.2.59 People in vehicles at this viewpoint have a low susceptibility to the changes in low value views. The sensitivity of the receptor is **low**.

#### Significance of the effect

- 6.11.2.60 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is low and the sensitivity of the receptor varies from medium to high. The temporary effects will be **minor to moderate adverse**, which are not significant.

### Operations and maintenance phase

#### Magnitude of impact

- 6.11.2.61 A visual impact will be experienced by people at this representative viewpoint due to the operations and maintenance of the onshore elements within the Mona Onshore Development Area. The impact will result from visibility of the project components (as described in Table 6.19) which have the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.62 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **small** during the operations and maintenance phase.

#### Sensitivity of the receptor

- 6.11.2.63 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is, **medium** for equestrians and cyclists and **medium to high** for walkers.

#### Significance of the effect

- 6.11.2.64 Overall, the magnitude of visual impact caused by the onshore elements within the Mona Onshore Development Area during operations and maintenance, experienced

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by people at this viewpoint is small. The sensitivity of the receptor varies from medium to high. The effect will be **minor to moderate adverse**, which are not significant.

- 6.11.2.65 Regarding landscape mitigation, ground modelling and new planting forms part of the proposed development (Figure 6.5). As the new planting becomes established it would reduce visual effects to **minor adverse** by Year 15, which is not significant.

### Assessment of effects experienced by people at representative viewpoint 6 – Local road at Ty'n-y-ffordd-fawr

- 6.11.2.66 Visual impacts will potentially be experienced by people during the construction, operations and maintenance, and decommissioning phases of the Onshore Substation. These impacts would be caused by visibility of some or all the onshore transmission assets described in Table 6.19.

#### Summary of visual baseline

- 6.11.2.67 This is an open view looking west from a local road at the access to Ty'n-y-ffordd-fawr farm. Representative of views available to people at/using the local road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

#### Description of visual change

- 6.11.2.68 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 11 and 12).
- 6.11.2.69 At this viewpoint pylons carrying the overhead lines are seen going away from the viewer and break the skyline. They are a prominent feature in the view. The Onshore Substation is situated behind these pylons and there is some minor electrical infrastructure within the view, close to barns. The substation is a negligible small part of the view at Year 1 winter. It does not break the skyline and is seen with a backdrop of Cefn Meriadog. It will be substantially screened by existing vegetation in Year 1 summer. By summer Year 15, the proposed landscape mitigation will have become established and will enhance the landscape character of the view.

### Construction and decommissioning phases

#### Magnitude of impact

- 6.11.2.70 A visual impact will potentially be experienced by people during the construction and decommissioning phases of the onshore elements of the Mona Offshore Wind Project at this viewpoint. This will be caused by associated equipment/activities and traffic movements which have the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.71 The impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **small** during the construction and decommissioning phases.

#### Sensitivity of the receptor

- 6.11.2.72 Equestrians, cyclists and walkers using the road network, have a medium susceptibility to the changes in medium value views. The sensitivity of equestrians and cyclists is **medium** and the sensitivity of walkers is high.

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6.11.2.73 People in vehicles at this viewpoint have a low susceptibility to the changes in medium value views. The sensitivity of the receptor is **low**.

### **Significance of the effect**

6.11.2.74 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is small and the sensitivity of the receptor varies from medium to high. The temporary effects will be **minor to moderate adverse**, which are not significant.

### **Operations and maintenance phase**

#### **Magnitude of impact**

6.11.2.75 A visual impact will potentially be experienced by people at this representative viewpoint location, due to the operations and maintenance of the transmission assets within the Mona Onshore Development Area. The impact will result from visibility of the project components which have the potential to affect people's appreciation of the surrounding landscape.

6.11.2.76 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **small** in Year 1 winter, during the operations and maintenance phase, decreasing to **negligible** in summer views, from Year 1 onwards, due to the screening provided by existing vegetation.

#### **Sensitivity of the receptor**

6.11.2.77 The sensitivity of the viewers at this viewpoint is, as set out above for the construction and decommissioning phases and varies from **medium to high**.

#### **Significance of the effect**

6.11.2.78 Overall, the magnitude of visual impact caused by the transmission assets within the Mona Onshore Development Area during operations and maintenance, experienced by people at this viewpoint is small. The sensitivity of the receptor is high. The effect will be **minor adverse** in Year 1 winter, which is not significant. In summer viewers, from Year 1 onwards, will experience **negligible adverse** effects, which are not significant.

### **Assessment of effects experienced by people at representative viewpoint 7 – View southwest from public footpath 208/13 west of St Asaph**

6.11.2.79 The ZTV of the Onshore Substation indicated that visual impacts could potentially be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint. These impacts would have been caused by visibility of some, or all the onshore transmission assets described in Table 6.19.

#### **Summary of visual baseline**

6.11.2.80 This is an open view, southwest from a public footpath crossing farmland. Representative of views available to people at/using the PRoW at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

#### **Description of visual change**

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- 6.11.2.81 The assessment is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 13 and 14).
- 6.11.2.82 There will be no change in the visual baseline, as the Onshore Substation will be screened from view by barns from this viewpoint. As such this viewpoint is not assessed.

### **Assessment of effects experienced by people at representative viewpoint 8 – View southeast from farm gate off Glascoed Road at Bryncelyn**

- 6.11.2.83 The ZTV of the Onshore Substation indicated that visual impacts could potentially be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

#### **Summary of visual baseline**

- 6.11.2.84 This is an open view looking southeast from the Glascoed Road over a foreground of field gate and timber fences. Representative of views available to people at/using the road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

#### **Description of visual change**

- 6.11.2.85 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement Figures 15 and 16).
- 6.11.2.86 There will be no change in the visual baseline, as the Onshore Substation will be screened from view by existing vegetation from this viewpoint. As such this viewpoint is not assessed.

### **Assessment of effects experienced by people at representative viewpoint 9 – View south-southeast from public bridleway 201/9 east of Bodelwyddan Park**

- 6.11.2.87 Visual impacts will be experienced by people, at this representative viewpoint, during the construction, operations and maintenance, and decommissioning phases. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

#### **Summary of visual baseline**

- 6.11.2.88 This is a middle distance, framed view, southeast from a bridleway crossing farmland on the edge of the parkland estate, defined by the wall on the right. Representative of views available to people at/using the PRoW at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

#### **Description of visual change**

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6.11.2.89 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 17 and 18).

6.11.2.90 The view is across pasture, the fields divided by hedgerows, with occasional mature trees. Cefn Meriadog provides the backdrop to this flat coast landscape. The Onshore Substation would be substantially screened by the existing vegetation in winter, but the top of the closest building would be just visible in Year 1 winter. In summer views, from Year 1, the substation would be screened by the existing vegetation.

### Construction and decommissioning phases

#### **Magnitude of impact**

6.11.2.91 A visual impact will be experienced by people during construction and decommissioning at this viewpoint. This will be caused by visibility of the erection and dismantling of the transmission assets and associated equipment/activities which have the potential to affect people's appreciation of the surrounding landscape.

6.11.2.92 The impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **negligible** during the construction and decommissioning phases.

#### **Sensitivity of the receptor**

6.11.2.93 The views/visual amenity of people at this viewpoint is of medium value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

#### **Significance of the effect**

6.11.2.94 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is negligible and the sensitivity of the receptor is high. The temporary effects will be **negligible to minor adverse**, which are not significant.

### Operations and maintenance phase

#### **Magnitude of impact**

6.11.2.95 A visual impact will be experienced by people at this representative viewpoint due to the operations and maintenance of the Mona Onshore Development Area. The impact will result from visibility of the project components which have the potential to affect people's appreciation of the surrounding landscape.

6.11.2.96 The impact is predicted to be of local spatial extent, long-term duration and continuous. It is predicted that the impact will affect views/visual amenity directly. The magnitude of impact is **negligible** during the operations and maintenance phase at Year 1 winter and **no change** during summer.

#### **Sensitivity of the receptor**

6.11.2.97 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is **high**.

#### **Significance of the effect**

6.11.2.98 Overall, the magnitude of visual impact caused by the Mona Onshore Development Area during operations and maintenance, experienced by people at this viewpoint is

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negligible. The sensitivity of the receptor is high. The effects will be **no change to negligible adverse**, which are not significant.

- 6.11.2.99 Ground modelling and new planting forms part of the landscape mitigation of the proposed development (Figure 6.5). As the new planting becomes established, it would not alter the predicted visual effect in the longer term but would enhance the landscape character within the view.

### Assessment of effects experienced by people at representative viewpoint 10 – View south from Twthill adjacent to public footpath 206/27 / access track to Rhuddlan Castle

- 6.11.2.100 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases on the view from this representative viewpoint falling within the ZTV of the. These impacts would be caused by visibility of some or all the Onshore Substation transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

#### **Summary of visual baseline**

- 6.11.2.101 This is a panoramic view from open space on the south edge of the settlement of Rhuddlan near the castle. Representative of views available to views available to people at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

#### **Description of visual change**

- 6.11.2.102 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 19 and 20).
- 6.11.2.103 The Onshore Substation is substantially screened by existing vegetation from this viewpoint, both in winter and summer views, due to the layers of vegetation between the viewpoint and the location of the substation. The distance from the view means that the tops of the substation are barely noticeable amongst other built development within this wide, open view. Cefn Meriadog and the higher hills to the south provide the backdrop.

### Construction and decommissioning phases

#### **Magnitude of impact**

- 6.11.2.104 An impact will be experienced by people during construction and decommissioning at this representative viewpoint. This will be caused by visibility of the erection and dismantling of the transmission assets and associated equipment/activities which has the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.105 The impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. It is predicted that the impact will affect receptors directly. The magnitude of visual impact is **negligible** during the construction and decommissioning phases.

#### **Sensitivity of the receptor**

- 6.11.2.106 The views/visual amenity of people at this viewpoint is of high value and medium susceptibility to the proposed development. The sensitivity of the receptor is **high**.

#### **Significance of the effect**

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6.11.2.107 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is negligible and the sensitivity of the receptor is high. The temporary effects will be **negligible to minor adverse**, which are not significant.

### Operations and maintenance phase

#### **Magnitude of impact**

6.11.2.108 A visual impact will potentially be experienced by people at this viewpoint due to the operations and maintenance of the Mona Onshore Development Area. The impact will result from visibility of the project components which have the potential to affect people's appreciation of the surrounding landscape.

6.11.2.109 The impact is predicted to be of local spatial extent, long-term duration and continuous. It is predicted that the impact will affect views/visual amenity directly. The magnitude of impact is **negligible** during the operations and maintenance phase.

#### **Sensitivity of the receptor**

6.11.2.110 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is **high**.

#### **Significance of the effect**

6.11.2.111 Overall, the magnitude of visual impact caused by the Mona Onshore Development Area during operations and maintenance, experienced by people at this viewpoint is negligible. The sensitivity of the receptor is high. The effects will be **negligible to minor adverse**, which is not significant.

6.11.2.112 Ground modelling and new planting forms part of the proposed development (see Figure 6.5). As the new planting becomes established, it would not alter the predicted visual effect in the longer term, as this is an elevated view, but would enhance the character of the view and soften views of the substation.

### Assessment of effects experienced by people at representative viewpoint 11 – View west-southwest from Offa's Dyke Path, to the south of Moel Maenefa

6.11.2.113 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases on the view from this representative viewpoint falling within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

#### **Summary of visual baseline**

6.11.2.114 This is a panoramic view looking west from Offa's Dyke Path at Moel Maenefa which crosses the uplands of the Clwydian Range. Representative of views available to people at/using the national trail at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

#### **Description of visual change**

6.11.2.115 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 21 and 22).

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6.11.2.116 The Onshore Substation is partly screened by existing vegetation from this viewpoint, both in winter and summer views, due to the layers of vegetation between the viewpoint and the location of the substation. The distance from the view means that the tops of the substation are barely noticeable within this elevated, wide view. Cefn Meriadog and the higher hills to the south provide the backdrop.

### Construction and decommissioning phases

#### **Magnitude of impact**

6.11.2.117 An impact will be experienced by people during construction and decommissioning at this representative viewpoint. This will be caused by visibility of the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements which has the potential to affect people's appreciation of the surrounding landscape.

6.11.2.118 The impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. It is predicted that the impact will affect receptors directly. The magnitude of visual impact is **negligible** during the construction and decommissioning phases.

#### **Sensitivity of the receptor**

6.11.2.119 The views/visual amenity of people at this representative viewpoint is of very high value and high susceptibility to the proposed development. The sensitivity of the receptor is **very high**.

#### **Significance of the effect**

6.11.2.120 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is negligible and the sensitivity of the receptor is very high. The temporary effect will be **minor adverse**, which is not significant.

### Operations and maintenance phase

#### **Magnitude of impact**

6.11.2.121 A visual impact will be experienced by people at this representative viewpoint due to the operations and maintenance of the Mona Onshore Development Area. The impact will result from visibility of the project components which have the potential to affect people's appreciation of the surrounding landscape.

6.11.2.122 The impact is predicted to be of local spatial extent, long-term duration and continuous. It is predicted that the impact will affect views/visual amenity directly. The magnitude of impact is **negligible** during the operations and maintenance phase.

#### **Sensitivity of the receptor**

6.11.2.123 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is **very high**.

#### **Significance of the effect**

6.11.2.124 Overall, the magnitude of visual impact caused by the Mona Onshore Development Area during operations and maintenance, experienced by people at this viewpoint is negligible. The sensitivity of the receptor is high. The effect will be **minor adverse**, which is not significant.

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- 6.11.2.125 Ground modelling and new planting forms part of the proposed development (see Figure 6.5). As the new planting becomes established, it would not alter the predicted visual effect in the longer term, as this is an elevated view, but would enhance the character of the view and soften views of the substation.

### Assessment of effects experienced by people at representative viewpoint 12 – View west-southwest from Offa’s Dyke Path, to the south of Pen-y-Mynydd

- 6.11.2.126 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases on the view from this representative viewpoint falling within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

#### **Summary of visual baseline**

- 6.11.2.127 This is a panoramic view looking west from Offa’s Dyke Path at Pen-y-Mynydd which crosses the uplands of the Clwydian Range. Representative of views available to people at/using the National Trail at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

#### **Description of visual change**

- 6.11.2.128 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 23 and 24).
- 6.11.2.129 The Onshore Substation is partly screened by existing vegetation from this viewpoint, both in winter and summer views, due to the layers of vegetation between the viewpoint and the location of the substation. The distance from the view means that the tops of the substation are barely noticeable amongst other built development within this elevated, wide view. Cefn Meriadog and the higher hills to the south provide the backdrop.

### Construction and decommissioning phases

#### **Magnitude of impact**

- 6.11.2.130 An impact will be experienced by people during construction and decommissioning at this representative viewpoint. This will be caused by visibility of the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements which has the potential to affect people’s appreciation of the surrounding landscape.
- 6.11.2.131 The impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. It is predicted that the impact will affect receptors directly. The magnitude of visual impact is **negligible** during the construction and decommissioning phases.

#### **Sensitivity of the receptor**

- 6.11.2.132 The views/visual amenity of people at this viewpoint is of very high value and high susceptibility to the proposed development. The sensitivity of the receptor is **very high**.

#### **Significance of the effect**

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- 6.11.2.133 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is negligible and the sensitivity of the receptor is very high. The temporary effect will be **minor adverse**, which is not significant.

### Operations and maintenance phase

#### **Magnitude of impact**

- 6.11.2.134 A visual impact will be experienced by people at this representative viewpoint due to the operations and maintenance of the Mona Onshore Development Area. The impact will result from visibility of the project components which have the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.135 The impact is predicted to be of local spatial extent, long-term duration and continuous. It is predicted that the impact will affect views/visual amenity directly. The magnitude of impact is **negligible** during the operations and maintenance phase.

#### **Sensitivity of the receptor**

- 6.11.2.136 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is **very high**.

#### **Significance of the effect**

- 6.11.2.137 Overall, the magnitude of visual impact caused by the Mona Onshore Development Area during operations and maintenance, experienced by people at this viewpoint is negligible. The sensitivity of the receptor is very high. The effect will be **minor adverse**, which is not significant.
- 6.11.2.138 Ground modelling and new planting forms part of the proposed development (see Figure 6.5). As the new planting becomes established, it would not alter the predicted visual effect in the longer term, as this is an elevated view, but would enhance the character of the view and soften views of the substation.

### Assessment of effects experienced by people at representative viewpoint 13 – View southwest from Cwttir Lane, south of the junction with Heol Esgob

- 6.11.2.139 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint, located within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, of the onshore transmission assets described in Table 6.19.

#### **Summary of visual baseline**

- 6.11.2.140 This is an open view looking southwest from Cwttir Lane, a local road to the north of the B5381, Glascoed Road. Representative of views available to people at/using the local road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report, of the Environmental Statement.

#### **Description of visual change**

- 6.11.2.141 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 25 and 26).

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6.11.2.142 In winter views a corner of one of the substation buildings might be visible from this viewpoint. The Onshore Substation will be substantially screened by existing vegetation. In summer views from Year 1 onwards, it will be screened and there will be no change to the view.

### Construction and decommissioning phases

#### **Magnitude of impact**

6.11.2.143 A visual impact will potentially be experienced by people during construction and decommissioning at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.

6.11.2.144 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **negligible** during the construction and decommissioning phases.

#### **Sensitivity of the receptor**

6.11.2.145 The views/visual amenity of people at this viewpoint is of medium value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

#### **Significance of the effect**

6.11.2.146 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is negligible and the sensitivity of the receptor is high. The temporary effects will be **minor adverse**, which are not significant.

### Operations and maintenance phase

#### **Magnitude of impact**

6.11.2.147 A visual impact will potentially be experienced by people at this representative viewpoint due to the operations and maintenance of the transmission assets within the Mona Onshore Development Area. The project components (as described in Table 6.19) which have the potential to affect people's appreciation of the surrounding landscape.

6.11.2.148 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **negligible** during the operations and maintenance phase.

#### **Sensitivity of the receptor**

6.11.2.149 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is, **high**.

#### **Significance of the effect**

6.11.2.150 Overall, the magnitude of visual impact of the transmission assets within the Mona Onshore Development Area during operations and maintenance and, experienced by people at this viewpoint is negligible. The sensitivity of the receptor is high. The effects will, be **negligible to minor adverse**, which are not significant.

6.11.2.151 Ground modelling and new planting forms part of the proposed development (see Figure 6.5). As the new planting becomes established, it would not alter the predicted

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visual effect in the longer term, but would enhance the character of the view and soften views of the substation.

### **Assessment of effects experienced by people at representative viewpoint 14 – View northwest from minor road at Wigfair Home Farm**

6.11.2.152 The ZTV of the Onshore Substation indicated that visual impacts could potentially be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

#### **Summary of visual baseline**

6.11.2.153 This is a framed view looking southwest from a local road. It is representative of views available to people at/using the local road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

#### **Description of visual change**

6.11.2.154 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 27 and 28).

6.11.2.155 There will be no change in the visual baseline, as the Onshore Substation will be screened from view by existing vegetation from this viewpoint. As such this viewpoint is not assessed.

### **Assessment of effects experienced by people at representative viewpoint 15 – View south from River Clwyd public footpath 26/30 / NCN 84, northwest of Rhuddlan**

6.11.2.156 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint, located within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19.

#### **Summary of visual baseline**

6.11.2.157 This is an open view looking southwest from a public footpath on the banks of the River Clwyd, to the northwest of Rhuddlan. Representative of views available people at/using the footpath/cycleway at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

#### **Description of visual change**

6.11.2.158 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 29 and 30).

6.11.2.159 The Onshore Substation is partly screened by existing vegetation from this viewpoint, both in winter and summer views, due to the layers of vegetation between the viewpoint and the location of the substation. The distance from the view means that the substation buildings are barely noticeable amongst other built development within

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this open, wide view. Cefn Meriadog and the higher hills to the south provide the backdrop.

### Construction and decommissioning phases

#### **Magnitude of impact**

- 6.11.2.160 A visual impact will be experienced by people during construction and decommissioning at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.161 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **negligible** during the construction and decommissioning phases.

#### **Sensitivity of the receptor**

- 6.11.2.162 The views/visual amenity of people at this viewpoint is of medium value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

#### **Significance of the effect**

- 6.11.2.163 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is negligible and the sensitivity of the receptor is high. The temporary effects will be **negligible to minor adverse**, which are not significant.

### Operations and maintenance phase

#### **Magnitude of impact**

- 6.11.2.164 A visual impact will be experienced by people at this representative viewpoint due to the operations and maintenance of the transmission assets within the Mona Onshore Development Area. The project components (as described in Table 6.19) which have the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.165 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **negligible** during the operations and maintenance phase.

#### **Sensitivity of the receptor**

- 6.11.2.166 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is, **high**.

#### **Significance of the effect**

- 6.11.2.167 Overall, the magnitude of visual impact of the transmission assets within the Mona Onshore Development Area during operations and maintenance and, experienced by people at this viewpoint is negligible. The sensitivity of the receptor is high. The effects will be **negligible to minor adverse**, which are not significant.
- 6.11.2.168 Ground modelling and new planting forms part of the proposed development (see Figure 6.5). As the new planting becomes established, it would not alter the predicted visual effect in the longer term, but would enhance the character of the view and soften views of the substation.

**Assessment of effects experienced by people at representative viewpoint 16 – View southwest from public footpath 206/999 to the southeast of Pengwern College**

6.11.2.169 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint, located within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19.

**Summary of visual baseline**

6.11.2.170 This is an open view looking southwest from a public footpath across arable farmland. It is representative of views available to people using the public footpath at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

**Description of visual change**

6.11.2.171 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 31 and 32).

6.11.2.172 The Onshore Substation is partly screened by existing vegetation from this viewpoint in winter views, due to the layers of vegetation between the viewpoint and the location of the substation. The distance from the view means that the substation buildings will be barely noticeable amongst other built development within this open, wide view. Cefn Meriadog and the higher hills to the south provide the backdrop. In summer months the substation will be screened by existing vegetation from Year 1.

**Construction and decommissioning phases**

**Magnitude of impact**

6.11.2.173 A visual impact will be experienced by people during construction and decommissioning at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people’s appreciation of the surrounding landscape.

6.11.2.174 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **negligible** during the construction and decommissioning phases.

**Sensitivity of the receptor**

6.11.2.175 The views/visual amenity of people at this viewpoint is of medium value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

**Significance of the effect**

6.11.2.176 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is negligible and the sensitivity of the receptor is high. The temporary effects will be **negligible to minor adverse**, which are not significant.

## Operations and maintenance phase

### Magnitude of impact

- 6.11.2.177 A visual impact will be experienced by people at this representative viewpoint due to the operations and maintenance of the transmission assets within the Mona Onshore Development Area. The project components (as described in Table 6.19) which have the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.178 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact in winter months is **negligible** during the operations and maintenance phase. In summer months there will be **no change**, due to the screening by existing vegetation.

### Sensitivity of the receptor

- 6.11.2.179 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is, **high**.

### Significance of the effect

- 6.11.2.180 Overall, the magnitude of visual impact of the transmission assets within the Mona Onshore Development Area during operations and maintenance and, experienced by people at this viewpoint is negligible. The sensitivity of the receptor is high. The effects will, be **negligible to minor adverse**, in the winter months, which are not significant. In the summer months there will be **no change**, due to the screening by existing vegetation.
- 6.11.2.181 Ground modelling and new planting forms part of the proposed development (see Figure 6.5). As the new planting becomes established, it would not alter the predicted visual effect in the longer term, but would enhance the character of the view and soften views of the substation.

## Assessment of effects experienced by people at representative viewpoint 17 – View southwest from public footpath 208/10 to the west of Upper Denbigh Road

- 6.11.2.182 The ZTV of the Onshore Substation indicated that visual impacts could potentially be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

### Summary of visual baseline

- 6.11.2.183 This is a framed view looking southwest, from a public footpath, to the west of Upper Denbigh Road. Representative of views available to people using the footpath road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

### Description of visual change

- 6.11.2.184 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 33 and 34).

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- 6.11.2.185 There will be no change in the visual baseline, as the Onshore Substation will be screened from view by existing vegetation from this viewpoint. As such this viewpoint is not assessed.

### Assessment of effects experienced by people at representative viewpoint 18 – View southwest from Graig Fawr summit, Clwydian Range and Dee Valley NL

- 6.11.2.186 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint, located within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19.

#### Summary of visual baseline

- 6.11.2.187 This is an elevated, panoramic view looking southwest from a high point within the Clwydian Range and Dee valley NL. Representative of views available to people at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

#### Description of visual change

- 6.11.2.188 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 35 and 36).
- 6.11.2.189 The Onshore Substation is partly screened by existing vegetation from this viewpoint, both in winter and summer views, due to the layers of vegetation between the viewpoint and the location of the substation. The distance from the view means that the tops of the substation are barely noticeable within this elevated, wide view. Cefn Meriadog and the higher hills to the south provide the backdrop.

### Construction and decommissioning phases

#### Magnitude of impact

- 6.11.2.190 A visual impact will be experienced by people during construction and decommissioning at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.191 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **negligible** during the construction and decommissioning phases.

#### Sensitivity of the receptor

- 6.11.2.192 The views/visual amenity of people at this viewpoint is of high value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

#### Significance of the effect

- 6.11.2.193 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is negligible and the sensitivity of the receptor is high. The temporary effects will be **negligible to minor adverse**, which are not significant.

## Operations and maintenance phase

### Magnitude of impact

- 6.11.2.194 A visual impact will be experienced by people at this representative viewpoint due to the operations and maintenance of the transmission assets within the Mona Onshore Development Area. The project components (as described in Table 6.19) which have the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.195 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **negligible** during the operations and maintenance phase.

### Sensitivity of the receptor

- 6.11.2.196 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is, **high**.

### Significance of the effect

- 6.11.2.197 Overall, the magnitude of visual impact of the transmission assets within the Mona Onshore Development Area during operations and maintenance and, experienced by people at this viewpoint is negligible. The sensitivity of the receptor is high. The effects will, be **negligible to minor adverse**, which are not significant.
- 6.11.2.198 Ground modelling and new planting forms part of the proposed development (see Figure 6.5). As the new planting becomes established, it would not alter the predicted visual effect in the longer term, but would enhance the character of the view and soften views of the substation.

### Assessment of effects experienced by people at representative viewpoint 19 – View southwest from Offa's Dyke Path / public footpath 405/12, Prestatyn hillside, Clwydian Range and Dee Valley NL

- 6.11.2.199 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint, located within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19.

### Summary of visual baseline

- 6.11.2.200 This is an elevated, directed view looking southwest from the Offa's Dyke Path National Trail within the Clwydian Range and Dee Valley NL. Representative of views available to people using the National Trail at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

### Description of visual change

- 6.11.2.201 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 37 and 38).
- 6.11.2.202 The Onshore Substation is partly screened by existing vegetation from this viewpoint, both in winter and summer views, due to the layers of vegetation between the viewpoint and the location of the substation. The distance from the view means that the tops of the substation are barely noticeable within this elevated, wide view. Cefn Meriadog and the higher hills to the south provide the backdrop.

## Construction and decommissioning phases

### Magnitude of impact

- 6.11.2.203 A visual impact will be experienced by people during construction and decommissioning at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.204 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **negligible** during the construction and decommissioning phases.

### Sensitivity of the receptor

- 6.11.2.205 The views/visual amenity of people at this viewpoint is of very high value and high susceptibility to the proposed development. The sensitivity of the receptor is **very high**.

### Significance of the effect

- 6.11.2.206 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is negligible and the sensitivity of the receptor is very high. The temporary effects will be **minor adverse**, which are not significant.

## Operations and maintenance phase

### Magnitude of impact

- 6.11.2.207 A visual impact will potentially be experienced by people at this representative viewpoint due to the operations and maintenance of the transmission assets within the Mona Onshore Development Area. The project components (as described in Table 6.19) which have the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.208 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **negligible** during the operations and maintenance phase.

### Sensitivity of the receptor

- 6.11.2.209 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is, **very high**.

### Significance of the effect

- 6.11.2.210 Overall, the magnitude of visual impact of the transmission assets within the Mona Onshore Development Area during operations and maintenance and, experienced by people at this viewpoint is negligible. The sensitivity of the receptor is high. The effects will, be **minor adverse**, which are not significant.

**Assessment of effects experienced by people at representative viewpoint 20 – View southeast from Wales Coast Path at Pont y Ddraig footbridge over the River Clwyd, Kinmel Bay, Rhyl**

6.11.2.211 The ZTV of the Onshore Substation indicated that visual impacts could potentially be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

**Summary of visual baseline**

6.11.2.212 This is an open view from the Wales Coast Path, at the sea front at Kinmel Bay. It is representative of views available to people at/using the coast path at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

**Description of visual change**

6.11.2.213 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 39 and 40).

6.11.2.214 There will be no change in the visual baseline, as the Onshore Substation will be screened from view by existing vegetation from this viewpoint. As such this viewpoint is not assessed.

**Assessment of effects experienced by people at representative viewpoint 21 – View southwest from B4529, adjacent to Criccin cross, southeast of Rhuddlan**

6.11.2.215 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint, located within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19.

**Summary of visual baseline**

6.11.2.216 This is an open view looking southwest from the B4529 southeast of Rhuddlan. It is representative of views available to people using the road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

**Description of visual change**

6.11.2.217 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 41 and 42).

6.11.2.218 The Onshore Substation is visible across the rolling landscape from this viewpoint. However, due to the layers of vegetation between the viewpoint and the location of the substation, it is partly screened. The distance from the view means that the tops of the substation are barely noticeable within this wide view that includes other large structures, such as barns. Cefn Meriadog and the higher hills to the south provide the backdrop.

## Construction and decommissioning phases

### Magnitude of impact

- 6.11.2.219 A visual impact will potentially be experienced by people during construction and decommissioning at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.220 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **negligible** during the construction and decommissioning phases.

### Sensitivity of the receptor

- 6.11.2.221 The views/visual amenity of people at this viewpoint is of medium value and low susceptibility to the proposed development. The sensitivity of the receptor is **low**.

### Significance of the effect

- 6.11.2.222 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is negligible and the sensitivity of the receptor is low. The temporary effects will be **negligible adverse**, which are not significant.
- 6.11.2.223 Ground modelling and new planting forms part of the proposed development (see Figure 6.5). As the new planting becomes established, it would not alter the predicted visual effect in the longer term, but would enhance the character of the view and soften views of the substation.

## Operations and maintenance phase

### Magnitude of impact

- 6.11.2.224 A visual impact will potentially be experienced by people at this representative viewpoint due to the operations and maintenance of the transmission assets within the Mona Onshore Development Area. The project components (as described in Table 6.19) which have the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.225 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **negligible** during the operations and maintenance phase.

### Sensitivity of the receptor

- 6.11.2.226 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is, **low**.

### Significance of the effect

- 6.11.2.227 Overall, the magnitude of visual impact of the transmission assets within the Mona Onshore Development Area during operations and maintenance and, experienced by people at this viewpoint is negligible. The sensitivity of the receptor is high. The effects will, be **negligible adverse**, which are not significant.

**Assessment of effects experienced by people at representative viewpoint 22 – View west from public footpath 210/6 north of Wern Ddu**

6.11.2.228 The ZTV of the Onshore Substation indicated that visual impacts could potentially be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19 which will potentially affect the views/visual amenity of people at this location.

**Summary of visual baseline**

6.11.2.229 This is a view across a rolling landscape, from a public footpath north of Wern Ddu. It is representative of views available to people using the footpath at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

**Description of visual change**

6.11.2.230 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 43 and 44).

6.11.2.231 There will be no change in the visual baseline, as the Onshore Substation will be screened from view by existing vegetation from this viewpoint. As such this viewpoint is not assessed.

**Assessment of effects experienced by people at representative viewpoint 23 – View east from Wales Coast Path, to the east of Llandulas Beach**

6.11.2.232 Visual impacts will be experienced by people during the construction phases of the Onshore Cable Corridor at the landfall. These impacts would be caused by visibility the works at the landfall described in Table 6.19.

**Summary of visual baseline**

6.11.2.233 This is an open view looking east along the coast from the Wales Coast Path at Llandulas beach. It is representative of views available to people using the coast path at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement (baseline panoramas are at Figure B23 of Appendix B of Annex 6.3).

**Description of visual change**

6.11.2.234 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19. No visualisations of the landfall or Onshore Cable Corridor have been undertaken, as these only have the potential to have significant effects at the construction phase.

**Construction phase**

**Magnitude of impact**

6.11.2.235 A visual impact will be experienced by people during construction at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people’s appreciation of the surrounding landscape.

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6.11.2.236 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **small**.

### **Sensitivity of the receptor**

6.11.2.237 The views/visual amenity of people at this viewpoint is of high value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

### **Significance of the effect**

6.11.2.238 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction is small and the sensitivity of the receptor is high. The temporary effects will be **minor to moderate adverse**, which are not significant.

### **Assessment of effects experienced by people at representative viewpoint 24 – View west from Wales Coast Path to the west of Abergele Beach**

6.11.2.239 Visual impacts will be experienced by people during the construction phases of the Onshore Cable Corridor at the landfall. These impacts would be caused by visibility the works at the landfall, described in Table 6.19.

### **Summary of visual baseline**

6.11.2.240 This is an open view looking west along the coast from the Wales Coast Path at Abergele beach. It is representative of views available to people using the coast path at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement (baseline panoramas are at Figure B24 of Appendix B of Annex 6.3).

### **Description of visual change**

6.11.2.241 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19. No visualisations of the landfall or Onshore Cable Corridor have been undertaken, as these only have the potential to have significant effects at the construction phase.

### **Construction phase**

### **Magnitude of impact**

6.11.2.242 A visual impact will be experienced by people during construction at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.

6.11.2.243 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **small**.

### **Sensitivity of the receptor**

6.11.2.244 The views/visual amenity of people at this viewpoint is of high value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

### **Significance of the effect**

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6.11.2.245 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction is small and the sensitivity of the receptor is high. The temporary effects will be **moderate adverse**, which are not significant.

### Assessment of effects experienced by people at representative viewpoint 25 – View northeast from Moelfre Isaf summit on public footpath 19/26

6.11.2.246 Visual impacts will be experienced by people during the construction phases of the Onshore Cable Corridor. These impacts would be caused by visibility the works at the landfall described in Table 6.19.

#### Summary of visual baseline

6.11.2.247 This is an open view looking northeast from a public footpath on Moelfre Isaf. It is representative of views available to people using the public footpath at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement (baseline panoramas are at Figure B25 of Appendix B of Annex 6.3).

#### Description of visual change

6.11.2.248 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19. No visualisations of the Onshore Cable Corridor have been undertaken, as these only have the potential to have significant effects at the construction phase.

#### Construction phase

#### Magnitude of impact

6.11.2.249 A visual impact will be experienced by people during construction at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.

6.11.2.250 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **small**.

#### Sensitivity of the receptor

6.11.2.251 The views/visual amenity of people at this viewpoint is of high value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

#### Significance of the effect

6.11.2.252 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction is small and the sensitivity of the receptor is high. The temporary effects will be **moderate adverse**, which are not significant.

### Assessment of effects experienced by people at representative viewpoint 26 – View southeast from public footpath 16/14 at Tan y Gopa Road

6.11.2.253 Visual impacts will be experienced by people during the construction phases of the Onshore Cable Corridor. These impacts would be caused by visibility the works at the landfall described in Table 6.19.

### Summary of visual baseline

- 6.11.2.254 This is an open view looking southeast from a public footpath at Tan y Gopa Road. It is representative of views available to people using the public footpath or the road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement (baseline panoramas are at Figure B26 of Appendix B of Annex 6.3).

### Description of visual change

- 6.11.2.255 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19. No visualisations of the Onshore Cable Corridor have been undertaken, as these only have the potential to have significant effects at the construction phase.

### Construction phase

#### Magnitude of impact

- 6.11.2.256 A visual impact will be experienced by people during construction at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.257 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **small**.

#### Sensitivity of the receptor

- 6.11.2.258 The views/visual amenity of people using the public footpath at this viewpoint is of medium value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**. People in vehicles, using the road have a low susceptibility to changes in the same view and their sensitivity is **low**. Cyclists have a medium susceptibility to the proposed change and their sensitivity is **medium**.

#### Significance of the effect

- 6.11.2.259 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction is small and the sensitivity of the receptors vary between low and high. The temporary effects will be **minor to moderate adverse**, which are not significant.

### Assessment of effects experienced by people at representative viewpoint 27 – View east from B5381 at Bryn-Tirion/Ffynnon Wen southwest of Cwttir Lane

- 6.11.2.260 Visual impacts will be experienced by people during the construction phases of the Onshore Cable Corridor. These impacts would be caused by visibility the works at the landfall described in Table 6.19.

### Summary of visual baseline

- 6.11.2.261 This is an open view east from the B5381 at Bryn-Tirion, south of Cwttir Lane. It is representative of views available to people using the road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement (baseline panoramas are at Figure B27 of Appendix B of Annex 6.3).

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### Description of visual change

- 6.11.2.262 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19. No visualisations of the Onshore Cable Corridor have been undertaken, as these only have the potential to have significant effects at the construction phase.

### Construction phase

#### Magnitude of impact

- 6.11.2.263 A visual impact will be experienced by people during construction at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.
- 6.11.2.264 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **small**.

#### Sensitivity of the receptor

- 6.11.2.265 People in vehicles, using the road have a low susceptibility to changes in a view of medium value, their sensitivity is **low**. Cyclists have a medium susceptibility to the proposed change and their sensitivity is **medium**.

#### Significance of the effect

- 6.11.2.266 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction is small and the sensitivity of the receptors vary between low and high. The temporary effects will be **minor adverse**, which are not significant.

### Assessment of effects experienced by people at representative viewpoint 28 – View southeast from junction of B5831, at Glascoed Road

- 6.11.2.267 Visual impacts will be experienced by people during the construction phases of the Onshore Cable Corridor. These impacts would be caused by visibility the works at the landfall described in Table 6.19.

#### Summary of visual baseline

- 6.11.2.268 This is an open view, southeast from the B5381 at Glascoed Road. It is representative of views available to people using the road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement (baseline panoramas are at Figure B28 of Appendix B of Annex 6.3).

### Description of visual change

- 6.11.2.269 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19. No visualisations of the Onshore Cable Corridor have been undertaken, as these only have the potential to have significant effects at the construction phase.

### Construction phase

#### Magnitude of impact

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6.11.2.270 A visual impact will be experienced by people during construction at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.

6.11.2.271 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **small**.

### **Sensitivity of the receptor**

6.11.2.272 People in vehicles, using the road have a low susceptibility to changes in a view of medium value, their sensitivity is **low**. Cyclists have a medium susceptibility to the proposed change and their sensitivity is **medium**.

### **Significance of the effect**

6.11.2.273 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction is small and the sensitivity of the receptors vary between low and high. The temporary effects will be **minor adverse**, which are not significant.

### **Assessment of effects experienced by people at representative viewpoint 29 – View west-northwest from junction of B5381 at Glascoed Road**

6.11.2.274 Visual impacts will be experienced by people during the construction phases of the Onshore Cable Corridor. These impacts would be caused by visibility the works at the landfall described in Table 6.19.

### **Summary of visual baseline**

6.11.2.275 This is an open view west-northwest from the B5381 at Glascoed Road. It is representative of views available to people using the road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement (baseline panoramas are at Figure B29 of Appendix B of Annex 6.3).

### **Description of visual change**

6.11.2.276 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19. No visualisations of the Onshore Cable Corridor have been undertaken, as these only have the potential to have significant effects at the construction phase.

### **Construction phase**

#### **Magnitude of impact**

6.11.2.277 A visual impact will be experienced by people during construction at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.

6.11.2.278 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **small**.

#### **Sensitivity of the receptor**

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6.11.2.279 People in vehicles, using the road have a low susceptibility to changes in a view of medium value, their sensitivity is **low**. Cyclists have a medium susceptibility to the proposed change and their sensitivity is **medium**.

### Significance of the effect

6.11.2.280 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction is small and the sensitivity of the receptors vary between low and high. The temporary effects will be **minor adverse**, which are not significant.

### Assessment of effects experienced by people at representative viewpoint B30 – View east from the southern end of public bridleway 208/3, adjacent to Coed Esgob

6.11.2.281 Visual impacts will be experienced by people during the construction, operations and maintenance, and decommissioning phases at this representative viewpoint, located within the ZTV of the Onshore Substation. These impacts would be caused by visibility of some, or all the onshore transmission assets described in Table 6.19.

### Summary of visual baseline

6.11.2.282 This is an open view looking southwest from Coed Esgob, a local road at the access a farm track and bridleway (blocked to the south and inaccessible). Representative of views available to people at/using the PRoW and/or local road at this location. Described further in Volume 7, Annex 6.3: Visual baseline technical report – onshore development, of the Environmental Statement.

### Description of visual change

6.11.2.283 The assessment provided below is based on the description of the transmission assets within the Mona Onshore Development Area set out in Table 6.19 and the visualisations of the Onshore Substation (Volume 7, Annex 6.5: Landscape visualisations, Figure 45 and 46).

6.11.2.284 The Onshore Substation is visible on the lower slopes of Cefn Meriadog, across a treed farmed landscape from this viewpoint. Pylons carrying high voltage power lines are prominent in the landscape. Due to the layers of vegetation between the viewpoint and the location of the substation, it is partly screened.

### Construction and decommissioning phases

#### Magnitude of impact

6.11.2.285 A visual impact will potentially be experienced by people during construction and decommissioning at this viewpoint. This will be caused by the erection and dismantling of the transmission assets and associated equipment/activities and traffic movements (described in Table 6.19) which has the potential to affect people's appreciation of the surrounding landscape.

6.11.2.286 The direct, visual impact is predicted to be of local spatial extent, short-term duration, continuous (increasing during construction, decreasing during decommissioning) and high reversibility. The impact will affect receptors directly. The magnitude of visual impact is **medium** during the construction and decommissioning phases.

#### Sensitivity of the receptor

6.11.2.287 The views/visual amenity of people at this viewpoint is of high value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

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### Significance of the effect

6.11.2.288 Overall, the magnitude of the visual impact experienced by people at this viewpoint during construction and decommissioning is medium and the sensitivity of the receptor is high. The temporary effects will be **moderate adverse**, which are not significant.

### Operations and maintenance phase

#### Magnitude of impact

6.11.2.289 A visual impact will potentially be experienced by people at this representative viewpoint due to the operations and maintenance of the transmission assets within the Mona Onshore Development Area. The project components (as described in Table 6.19) which have the potential to affect people's appreciation of the surrounding landscape.

6.11.2.290 The impact is predicted to be of local spatial extent, long-term duration and continuous. The impact will affect views/visual amenity directly. The magnitude of impact is **small** during the operations and maintenance phase.

#### Sensitivity of the receptor

6.11.2.291 The sensitivity of the views/visual amenity at this viewpoint is as set out above for the construction and decommissioning phases, that is, **high**.

### Significance of the effect

6.11.2.292 Overall, the magnitude of visual impact of the transmission assets within the Mona Onshore Development Area during operations and maintenance and, experienced by people at this viewpoint is negligible. The sensitivity of the receptor varies from medium to high. The effects will, be **moderate adverse**, which are not significant.

## 6.12 Future monitoring

6.12.1.1 Table 6.21 outlines the proposed monitoring commitments for landscape and visual resources.

**Table 6.21: Monitoring Commitments.**

Environmental effect	Monitoring commitment	Means of implementation
Establishment of the proposed landscape mitigation, including the planting.	A LEMP.	The DCO will secure a LEMP as a Requirement.

## 6.13 Cumulative effects assessment methodology

### 6.13.1 Scope of cumulative assessment

6.13.1.1 The Cumulative Effects Assessment (CEA) is concerned with the potential cumulative effects that may result from the Mona onshore transmission assets together with other projects and plans. The projects and plans selected as relevant to the CEA presented within this chapter are based upon the results of a screening exercise (see Volume 5, Annex 5.1: Cumulative effects screening matrix of the Environmental Statement). Each project has been considered for screening in or out of this chapter's assessment based upon data confidence, effect-receptor pathways and the spatial/temporal scales involved. The short list of cumulative projects considered in the CEA is set out in Table 6.22 and shown on Figure 6.6 and Figure 6.7.

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- 6.13.1.2 The landscape, seascape and visual resources CEA methodology has followed the methodology set out in Volume 1, Chapter 5: EIA methodology of the Environmental Statement. As part of the assessment, all projects and plans considered alongside the Mona onshore transmission assets have been allocated into ‘tiers’ reflecting their current stage within the planning and development process, these are listed below.
- 6.13.1.3 A tiered approach to the cumulative assessment has been adopted with relevant projects categorised into three tiers as follows:
- Tier 1
    - Under construction
    - Permitted application
    - Submitted application
    - Existing – those currently operational that were not operational when baseline data were collected, and/or those that are operational but have an ongoing impact
  - Tier 2
    - Scoping report has been submitted
  - Tier 3
    - Scoping report has not been submitted
    - Identified in the relevant Development Plan
    - Identified in other plans and programmes.
- 6.13.1.4 This tiered approach is adopted to provide a clear assessment of the cumulative effects of Mona onshore transmission assets together with other projects. This also accords with guidance – Assessing the cumulative landscape and visual impact of onshore wind energy developments (NatureScot, 2021) which advises that an assessment of cumulative impacts associated with a specific development proposal should consider the proposal in combination with:
- Existing development, either built or under construction
  - Approved development, awaiting implementation
  - Proposals awaiting determination within the planning process, with design information in the public domain. Proposals and design information may be deemed to be in the public domain once an application has been lodged, and the decision-making authority has formally registered the application.
- 6.13.1.5 Planning Inspectorate Advice note seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects (2015) defines cumulative projects as those that are proposed or under construction, it does not include existing projects. This CEA has considered existing projects along with proposed projects and projects under construction following best practice detailed below.
- 6.13.1.6 In line with Advice Note 17 (2015), DTI (2005, GLVIA3, and NatureScot (2021), the cumulative assessment has split the LVIA cumulative projects into:
- Tier 1 existing projects (cumulative baseline) and proposed projects (projects under construction, permitted and submitted for planning approval)
  - Tier 2 projects (projects at scoping stage or identified in relevant plans)

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- Tier 3 projects (projects where scoping has not been submitted, where identified in the Local Development Plan, or in other plans or proposals where the development is reasonably likely to come forward).

6.13.1.7 The specific projects, plans and activities scoped into the CEA as a result of the aforementioned screening exercise, are outlined in Table 6.22 and shown on Figure 6.6 and Figure 6.7.

### Study area

6.13.1.8 The LVIA study area extent for the Onshore Substation is 10 km from the outer boundaries of the Onshore Substation. The CEA study area for offshore wind farms is 60 km (10 km + 50 km study areas). This distance allows for offshore wind farms to be included within the CEA for landscape and visual resources. The CEA study area for onshore wind farms is 45 km (10 km + 35 km) (Figure 6.6). The study area for onshore wind farms is reduced, as onshore wind farms currently have smaller turbines and so the potential effects will be exerted over a smaller area. For all other development, the CEA study area has been confined to 10 km.

6.13.1.9 Details of these projects are set out in Volume 5, Annex 5.1: Cumulative effects screening matrix of the Environmental Statement of the Environmental Statement. A further judgement was made as to whether there was the potential for significant effects, primarily based on the scale of the cumulative project – which is dependent on height, extent and distance. Based on this assessment, only those projects with the potential for significant cumulative effects have been taken forward to the assessment within this chapter.

6.13.1.10 For the Environmental Statement, individual ZTVs were run for the relevant offshore and onshore wind farms located within the respective study areas. Where the ZTV of the relevant cumulative schemes overlap with the ZTV of the Onshore Substation study area (10 km) there is the potential for cumulative effects on seascape, landscape and visual resources.

### Cumulative effects assessment – existing and proposed development projects (Tier 1)

6.13.1.11 Tier 1 existing offshore wind farms relevant to the CEA of the Mona onshore transmission assets and considered in this cumulative assessment have been grouped into one cluster, as follows:

- North Wales offshore wind farm cluster, consisting of Burbo Bank (and extension), Gwynt y Môr, North Hoyle and Rhyl Flats.

6.13.1.12 Tier 1 existing onshore wind farms relevant to the CEA of the Mona onshore transmission assets and considered in this cumulative assessment have been grouped into one cluster, as follows:

- North Wales onshore wind farm cluster.

6.13.1.13 Combined ZTVs of the North Wales onshore wind farm cluster and North Wales offshore wind farm cluster are shown on Figure 6.8 and Figure 6.10. The study areas for the individual wind farms have been calculated using the known heights of the turbines of each wind farm in line with the table in paragraph 48 of Scottish Natural Heritage's document on Visual Representation of Wind Farms (SNH, 2017).

6.13.1.14 Other onshore wind farm projects that form part of the cumulative baseline are not expected to result in significant cumulative effects on landscape, seascape and visual

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resources. This is due to the distance from the Mona onshore transmission assets and/or intervening topography.

- 6.13.1.15 The cumulative assessment considered Tier 1 projects under construction, permitted and those submitted for planning approval. In this regard, a cumulative ZTV has also been generated for the Onshore Substation in combination with the recently consented Awel y Môr Offshore Wind Farm onshore substation and is presented in Figure 6.9.

### **Cumulative effects assessment –proposed development projects (Tier 2)**

- 6.13.1.16 Cumulative ZTVs has been generated for the Mona onshore transmission assets in combination with Tier 2 proposed development projects. This has confirmed that there are no relevant Tier 2 projects as they are too far away with intervening wind farms, to topography and vegetation between the CEA projects and the Mona Offshore Wind Project. Where the ZTV of the cumulative schemes overlaps with the ZTV of the Morgan Generation Assets, there is the potential for cumulative seascape, landscape and visual effects.

### **Cumulative effects assessment –proposed development projects (Tier 3)**

- 6.13.1.17 The proposed Tier 3 project are the St Asaph solar farm and the National Grid Electricity Transmission (NGET) upgrade and extension to Bodelwyddan substation (Figure 6.7).

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**Table 6.22: List of other projects, plans and activities considered within the Mona Onshore Development Area cumulative effects assessment.**

Major Infrastructure project	Status	Distance from Mona Onshore Development Area (km)	Distance from the Onshore Substation (km)	Description of project/plan	Dates of construction (if applicable)	Dates of operation (if applicable)	Overlap with the Mona Offshore Wind Project
<b>Tier 1 Existing projects</b>							
Burbo Bank	Operational	N/A	31.8	25 wind turbines, 138m to tip	N/A	-	ZTV only
Burbo Bank Extension	Operational	N/A	26.8	32 wind turbines, 187m to tip	N/A	-	ZTV only
Gwynt y Môr	Operational	N/A	21	160 wind turbines, 138m to tip	N/A	-	ZTV only
North Hoyle	Operational	N/A	17.4	30 wind turbines, 107m to tip	N/A	-	ZTV only
Rhyl Flats	Operational	N/A	16	25 wind turbines, 138 m to tip.	N/A	-	ZTV only
Brenig wind farm	Operational	N/A	7.05	Onshore wind farm, capacity (MW): 37.6, number of wind turbines: 16, height of wind turbines (m): 110 m to tip	N/A	-	No
Clocaenog Forest wind farm	Operational	N/A	13.6	Onshore wind farm, capacity (MW): 96, number of wind turbines: 32, height of wind turbines (m): 145 m to tip	N/A	-	No

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Major Infrastructure project	Status	Distance from Mona Onshore Development Area (km)	Distance from the Onshore Substation (km)	Description of project/plan	Dates of construction (if applicable)	Dates of operation (if applicable)	Overlap with the Mona Offshore Wind Project
Hafoty Ucha wind farm	Operational	N/A	28.2	Onshore wind farm, capacity (MW): 3.2, number of wind turbines: 4, height of wind turbines (m): approximately 110 m to tip	N/A	-	No
Moel Maelogen	Operational	N/A	20.3	Onshore wind farm, capacity (MW): 14.3, number of wind turbines: 12, height of wind turbines (m): approximately 100 m to tip	N/A	-	No
Tir Mostyn and Foel Goch wind farm	Operational	N/A	13.2	Onshore wind farm, capacity (MW): 21.3, number of wind turbines: 25, height of wind turbines (m): 74 m to tip	N/A	-	No
Wern Ddu wind farm	Operational	N/A	24.7	Onshore wind farm, capacity (MW): 9.2, number of wind turbines: 4, height of wind turbines (m): circa 90 m to tip	N/A	-	No
Burbo Bank substation	Operational	N/A	0.5	Operational substation	N/A	-	Within same LANDMAP visual and sensory Aspect Area as the Onshore Substation (Figure 6.3).

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Major Infrastructure project	Status	Distance from Mona Onshore Development Area (km)	Distance from the Onshore Substation (km)	Description of project/plan	Dates of construction (if applicable)	Dates of operation (if applicable)	Overlap with the Mona Offshore Wind Project
Gwynt y Môr substation	Operational	N/A	0.487	Operational substation	N/A	-	Within same LANDMAP visual and sensory Aspect Area as the Onshore Substation (Figure 6.3).
<b>Tier 1 Proposed projects</b>							
Pant y Maen wind farm	Permitted	13.4	14.01	Onshore wind farm, capacity (MW): circa 14, number of wind turbines: 7, height of wind turbines (m): 125 m to tip	Construction to commence in 2024	Site to be commissioned in 2029.	Within ZTV
Awel y Môr offshore wind farm (offshore infrastructure)	Permitted	N/A	26.3	Offshore wind farm	Construction to commence in 2026	Site to be commissioned in 2030	Within ZTV
Awel y Môr offshore wind farm (onshore infrastructure)	Permitted	0.0	0.1	Onshore transmission assets (cable routes and Onshore Substation)	Construction to commence in 2026	Site to be commissioned in 2030	ZTV only. Southern end of cable route connecting through to the National Grid Bodelwyddan substation has some overlap with the Mona Onshore Development Area.

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Major Infrastructure project	Status	Distance from Mona Onshore Development Area (km)	Distance from the Onshore Substation (km)	Description of project/plan	Dates of construction (if applicable)	Dates of operation (if applicable)	Overlap with the Mona Offshore Wind Project
Pen y Bryn wind farm repowering	Application submitted	8.51	16.32	Onshore wind farm, capacity (MW): 0.85, number of wind turbines: 1, Height of wind turbines (m): 86.5 to tip	Construction to commence in 2026	Site to be commissioned in 2027	ZTV only
<b>Tier 3 Proposed projects</b>							
National Grid Bodelwyddan substation	Pre-application	0.0	0.3	Extension to the existing National Grid Bodelwyddan substation, GIS station and new overhead lines.	Construction to commence in 2026	Site to be commissioned in 2029	ZTV and within same LANDMAP visual and sensory Aspect Area as the Onshore Substation
St Asaph solar farm	Pre-application	0.00	0.37	DNS: the proposed development includes the construction, operation and decommissioning of a solar farm with a potential generating capacity of between 10 MW and 350 MW.	Construction to commence in 2026	Site to be commissioned in 2029	ZTV and within same LANDMAP visual and sensory Aspect Area as the Onshore Substation

## 6.13.2 Maximum Design Scenario

- 6.13.2.1 The MDSs identified in Table 6.23 have been selected as those having the potential to result in the greatest effect on an identified receptor or receptor group. The cumulative effects presented and assessed in this section have been selected from the Project Design Envelope provided in Volume 1, Chapter 3: Project description of the Environmental Statement as well as the information available on other projects and plans, to inform an MDS. Effects of greater adverse significance are not predicted to arise should any other development scenario, based on details within the Project Design Envelope (e.g. different wind turbine layout), to that assessed here, be taken forward in the final design scheme.
- 6.13.2.2 The CEA has considered the Mona Offshore Wind Project, alongside the National Grid Bodelwyddan substation extension proposal. The information publicly available up to three months before application (see Volume 1, Chapter 3: Environmental Impact Assessment Methodology of the Environmental Statement) was considered in this CEA. The CEA has therefore been undertaken based on the latest available information in the public domain up to the 21 November 2023, which is the Autumn 2023 consultation material (National Grid, 2023). If further information is available for the proposal before the Mona Offshore Wind Project receives Development Consent, the Applicant will review the information and provide any update needed to the CEA.

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**Table 6.23: Maximum design scenario considered for the assessment of potential cumulative effects on landscape, seascape and visual resources.**

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

Potential cumulative effect	Phasea Maximum Design Scenario			Justification	
	C	O	D		
<p>The LVIA considers the likely effects of the Mona onshore transmission assets on the landscape, seascape and visual resources and receptors of the LVIA study area resulting from its construction, operations and maintenance and decommissioning.</p> <p>The receptor groups considered in the LVIA are those located within 10 km from the Onshore Substation and 1 km from the landfall and Onshore Cable Corridor (LVIA study areas) as follows:</p> <p>Landscape/Seascape receptors:</p> <ul style="list-style-type: none"> <li>• Landscape/seascape/marine character areas               <ol style="list-style-type: none"> <li>1. Landscape/seascape character areas</li> <li>2. Special qualities of internationally / nationally designated landscapes.</li> </ol> </li> </ul> <p>Visual receptors:</p> <ul style="list-style-type: none"> <li>• People using National Trails/long distance paths               <ol style="list-style-type: none"> <li>3. People using Access Land</li> <li>4. Cyclists using national cycle routes</li> <li>5. People travelling along roads</li> <li>6. (pedestrians, cyclists, people in vehicles) of the above receptors.</li> </ol> </li> </ul>	✓	✓	✓	<p>Maximum design scenario as described for the Mona onshore transmission assets assessed cumulatively with the following other projects/plans:</p> <p><b>Tier 1 existing projects</b></p> <ul style="list-style-type: none"> <li>• North Wales offshore wind farm cluster</li> <li>• North Wales onshore wind farm cluster Figure 6.8</li> <li>• Other relevant existing onshore projects</li> </ul> <p><b>Tier 1 projects under construction, permitted and submitted for planning approval</b></p> <ul style="list-style-type: none"> <li>• Awel y Môr Offshore Wind Farm array and Onshore Substation</li> <li>• Pant y Maen onshore wind farm</li> <li>• Pant y Bryn onshore wind farm</li> </ul> <p><b>Tier 3 proposed projects</b></p> <ul style="list-style-type: none"> <li>• St Asaph Solar Farm</li> <li>• National Grid extension to Bodelwyddan substation</li> </ul>	<p>Outcome of the CEA will be greatest when the greatest number of other schemes are considered.</p>

### 6.13.3 Cumulative effects assessment approach

6.13.3.1 For a cumulative effect to occur, an additional effect must arise over and above the likely effect of implementing the Mona onshore transmission, measured against baseline conditions.

6.13.3.2 The assessment of cumulative seascape, landscape and visual effects is presented in two stages in line with guidance including the Planning Inspectorate Advice note seventeen (2015) as follows:

- Effects arising from the Mona onshore transmission assets in conjunction with existing offshore and onshore wind farm projects as well as other major onshore projects, as well as projects under construction, permitted and those submitted for planning approval (Tier 1). In this regard, ZTVs have been generated using the available data for the existing offshore and onshore wind farms, which have been grouped into two clusters. ZTVs have also been generated for the permitted Awel y Môr Offshore Wind Farm and the permitted Awel y Môr onshore substation, Pant y Maen and Pant y Bryn onshore wind farms
- Effects arising from the Mona onshore transmission assets in conjunction with the Tier 3 projects.

#### Types of cumulative landscape effects

6.13.3.3 The cumulative assessment considers the likely effects on landscape, seascape and visual resources against the baseline conditions current at the time of publication (February 2024). The baseline includes Tier 1 existing offshore and onshore operational wind farms, as well as other operational major projects of relevance, within the LVIA study area, the locations of which are indicated on Figure 6.6 and Figure 6.7. The LVIA findings and conclusions thus had regard to these major development factors and the influence they exert on existing landscape and seascape character as well as on views and visual amenity. This section provides a brief review of these findings and conclusions, in the light of GLVIA3 guidance on CEA, in particular the following recommendations:

- The ‘filling’ of an area with either the same or a different type of development, which may substantially alter the seascape, landscape resource, views or visual amenity
- Incremental change resulting from successive individual developments such that the combined landscape, seascape or visual effect is significant even though the individual effects may not be (GLVIA3, paragraph 7.17).

6.13.3.4 GLVIA3 identifies the likely potential cumulative landscape/seascape effects as including:

- Effects on the fabric of the landscape/seascape resulting from the removal of, or changes in, individual elements or features of the landscape, and/or the introduction of new elements or features in the landscape
- Effects on the aesthetic aspects of the landscape/seascape, e.g. scale, sense of enclosure, sense of naturalness, remoteness or tranquillity
- Effects on the overall character of the landscape/seascape, resulting from the above, leading to modification of key characteristics and possible creation of new landscape/seascape character.

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- 6.13.3.5 A description of those landscape, seascape, and visual effects that have the potential to be significant in terms of cumulative effects upon landscape, seascape and visual resources and receptors arising from each identified impact is given below.
- 6.13.3.6 The aesthetic aspects of landscape and seascape resources are expressed in their overall character, their distinctive characteristics and qualities, and the value attached to them by people/society. Regarding aesthetic aspects, GLVIA3 states:
- 6.13.3.7 *“Character is not just about the physical elements and features that make up a landscape, but also embraces the aesthetic, perceptual and experiential aspects of the landscape that make different places distinctive.”* (GLVIA3, paragraph 2.19 – a similar statement is made with respect to seascape at paragraph 5.6). And in defining them GLVIA3 states: *“...the aesthetic aspects of the landscape – for example its scale, sense of enclosure, diversity, pattern and colour, and/or on its perceptual or experiential attributes, such as a sense of naturalness, remoteness or tranquillity.”* (GLVIA3, paragraph 7.25)
- 6.13.3.8 GLVIA 3 adds that regarding the assessment of landscape/seascape value:
- 6.13.3.9 *“Scenic quality may also be relevant and will need to reflect factors such as sense of place and aesthetic and perceptual qualities.”* (GLVIA3, paragraph 5.29).

### Types of cumulative visual effects

- 6.13.3.10 GLVIA3 identifies two types of cumulative visual effects as follows:
- Combined – where the observer is able to see two or more developments from one viewpoint. The subsets of combined visual effects are:
    - In combination, where two or more developments are or would be within the observer’s arc of vision at the same time, without turning their head
    - In succession, where the observer has to turn their head to see the various developments, both existing and proposed
  - Sequential- where the observer has to move to another viewpoint to see the same or different developments. Sequential effects may occur along routes or roads and/or public rights of way. The subsets of sequential effects are:
    - Frequently sequential, where the features appear regularly and with short time lapses between instances (dependant on speed and distance)
    - Occasionally sequential, where longer time lapses between appearances occur, due to speed of the observer and/or longer distances between viewpoints.

## 6.14 Onshore cumulative effects assessment

### 6.14.1 Overview

- 6.14.1.1 The cumulative impact will be caused by both static and moving (construction only) elements of the development components of the cumulative projects, in combination with those of the transmission assets within the Mona Onshore Development Area (including the alternative Onshore Substation). Together these will potentially affect the characteristics and perceptions of the landscape and visual resource of the LVIA study area.
- 6.14.1.2 A description of the significance of cumulative effects of the Mona onshore transmission assets within the Mona Onshore Development Area (including the

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Onshore Substation location) upon landscape and visual resources receptors arising from each identified impact is given below.

6.14.1.3 For a cumulative effect to occur, an additional effect must arise over and above the likely effect of implementing the Mona onshore transmission assets within the Mona Onshore Development Area on their own, measured against baseline conditions.

6.14.1.4 The assessment of cumulative landscape and visual effects is presented in two stages as follows:

- Effects resulting from the transmission assets within the Mona Onshore Development Area in conjunction with existing developments of a similar nature as listed in Table 6.22
- Effects arising from transmission assets within the Mona Onshore Development Area in conjunction with proposed/permitted major onshore developments as listed in Table 6.22 (Tier 1 and Tier 3 projects).

### 6.14.2 Cumulative effects with existing developments

6.14.2.1 The LVIA of the Mona transmission assets within the Mona Onshore Development Area presented earlier in this chapter considered the likely effects on landscape and visual resources against the baseline conditions current at the time of submission (February 2024). The baseline included existing major development in the LVIA study area, both offshore and onshore, including operational wind farms (see Figure 6.6 and Figure 6.7). The LVIA findings and conclusions thus had regard to these major development factors and the influence they exert on existing landscape character and on views and visual amenity. This section provides a brief review of this, considering GLVIA3 guidance on CEA, in particular the following recommendations:

- The cumulative effect of ‘filling’ an area with either the same or a different type of development, which may substantially alter the landscape resource, views, or visual amenity
- The potential for incremental cumulative effects resulting from successive individual developments such that the combined landscape or visual effect is significant even though the individual effects may not be (GLVIA3, paragraph 7.17).

#### Cumulative effects on the fabric of the landscape – elements and features

6.14.2.2 Effects on the fabric of the landscape could be resulting from removal of, or changes in, individual elements or features of the landscape, and/or the introduction of new elements or features in the landscape. No nationally designated landscapes will be directly affected; hence the Clwydian Range and Dee Valley NL is not assessed in the following paragraphs. The Rhyd y Foel to Abergele SLA is directly affected by the Onshore Cable Corridor and is assessed below. The LANDMAP Visual and Sensory Aspect Areas (Figure 6.3) are the most relevant LANDMAP layers in relation to the LVIA CEA and those LANDMAP Aspect Areas that the Mona Onshore Development Area passes through are also directly affected and are assessed below.

6.14.2.3 The construction of the Onshore Cable Corridor and Mona 400kV grid connection corridor will see a period of disturbance due to construction compounds, increased traffic, spoil heaps and the plant. Similar impacts would be experienced during the construction of proposed Onshore Substation.

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6.14.2.4 During the operations and maintenance phase the Mona Offshore Wind Project onshore cable would be buried (using both trenched and trenchless technologies) and indistinguishable once the mitigation measures have been implemented and have established. The Onshore Substation will remain distinct from the operational, existing Gywnt y Môr and Burbo Bank Onshore Substations and the existing National Grid Bodelwyddan substation, the existing woodland and landscape mitigation substantially enclosing it.

6.14.2.5 At decommissioning the cable will be left underground and the impacts on the fabric of the landscape will be negligible. The cumulative decommissioning impact of the Onshore Substation will be similar in scale to the cumulative construction of the substation. However, as decommissioning will take place within a wooded and more hedged environment, the cumulative decommissioning effects on landscape and visual resources and receptors will be lower than at construction.

### Locally designated landscapes

6.14.2.6 The Onshore Cable Corridor passes through the Rhyd y Foel to Abergele SLA and will directly affect the fabric of that landscape during the construction phase. Thereafter, if it is disturbed, the landscape fabric will be reinstated as close to its original position as it can be. The Onshore Substation is not located within the SLA and its ZTV does not coincide with the SLA. The additional, cumulative impact during construction is low and thereafter is negligible.

6.14.2.7 It is judged that the potential for filling or incremental cumulative effects to arise on the fabric of landscape of the SLA would be **negligible** to **minor adverse**, which are not significant.

6.14.2.8 Following implementation of the mitigation measures outlined in Table 6.20 by Year 15, the landscape mitigation will have had time to establish, and the impact of the Onshore Substation will be reduced further, due to the softening effect of the planting.

### LANDMAP Visual and Sensory Aspect Areas

6.14.2.9 The LANDMAP Visual and Sensory Aspect Area layer is the most appropriate to use for this area of CEA (Figure 6.3). During the construction phase the impacts would be medium on those Aspect Areas directly affected. During the operations and maintenance phase and the decommissioning phase the additional, cumulative impact would remain at medium for those Aspect Areas directly affected. The filling or incremental cumulative effects on the fabric of the landscape would be **moderate** to **minor adverse**, which are not significant.

6.14.2.10 Following implementation of the mitigation measures outlined in Table 6.20, by Year 15, the landscape mitigation will have established and the impact of the Onshore Substation will be reduced further, due to the softening effect of the planting.

### Cumulative effects on the aesthetic aspects of the landscape resources

6.14.2.11 The aesthetic aspects of a landscape resources are expressed in their overall character, their distinctive characteristics and qualities, and the value attached to them by people/society. Regarding aesthetic aspects, GLVIA3 states: “*Character is not just about the physical elements and features that make up a landscape, but also embraces the aesthetic, perceptual and experiential aspects of the landscape that make different places distinctive.*” (GLVIA3, paragraph 2.19).

6.14.2.12 And in defining them GLVIA3 states: “*...the aesthetic aspects of the landscape – for example its scale, sense of enclosure, diversity, pattern and colour, and/or on its*

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*perceptual or experiential attributes, such as a sense of naturalness, remoteness or tranquillity.*" (GLVIA3, paragraph 7.25).

6.14.2.13 GLVIA3 adds regarding the assessment of landscape value: "*Scenic quality may also be relevant and will need to reflect factors such as sense of place and aesthetic and perceptual qualities.*" (GLVIA3, paragraph 5.29).

6.14.2.14 The potential effect of the Mona Onshore Development Area (including the Onshore Substation) together with existing infrastructure projects to have an incremental/infilling cumulative effect on the aesthetic aspects of landscape (as defined in GLVIA3 and summarised above) is assessed below.

### Nationally designated landscapes

6.14.2.15 National landscape designations represent the most sensitive landscape resources and thus the highest value and most susceptible aesthetic aspects in the LVIA study. By implication, the aesthetic aspects of other landscape resources in the LVIA study area are of a lower sensitivity. The LVIA assessed the characteristics and special qualities of national landscape designations in the LVIA onshore study area, that is the Clwydian Range and Dee Valley NL, and concluded that no significant effects would arise on them due to the Mona Onshore Development Area (including the Onshore Substation). The cumulative impacts are low at construction and negligible thereafter. The filling or incremental additional, cumulative effects on the aesthetic aspects of the non-designated national landscape character areas would be **moderate adverse** at construction and **minor adverse** thereafter, none of which are significant.

6.14.2.16 Following implementation of the mitigation measures outlined in Table 6.20, by Year 15, the landscape mitigation will have established, and the impact of the Onshore Substation will be reduced further, due to the softening effect of the planting.

### Locally designated landscapes

6.14.2.17 The cumulative effects of the installation of the Mona onshore transmission assets within the Mona Onshore Development Area would have a direct impact of the Rhyd y Foel to Abergele SLA and an indirect effect on the Elwy and Aled Valley SLA. The impacts would be low to negligible during construction and negligible thereafter, on these medium sensitivity receptors. The filling or incremental additional, cumulative effects would be **negligible** to **minor adverse** during construction and **negligible adverse** during the operations and maintenance phase and decommissioning phase. None of the effects are significant.

6.14.2.18 Following implementation of the mitigation measures outlined in Table 6.20, by Year 15, the landscape mitigation will have established, and the impact of the Onshore Substation will be reduced further, due to the softening effect of the planting.

### LANDMAP Visual and Sensory Aspect Areas

6.14.2.19 The LANDMAP Visual and Sensory Aspect Area layer is the most appropriate to use for this area of CEA (Figure 6.3). It is considered that the impacts on these aspects of the LANDMAP Aspect Areas will be low, throughout the construction, operations and maintenance and decommissioning phases of the project. The filling or incremental cumulative effects would be **minor adverse**, which are not significant.

6.14.2.20 Following implementation of the mitigation measures outlined in Table 6.20, by Year 15, the landscape mitigation will have established, and the effects of the Onshore Substation will be reduced further, due to the softening effect of the planting.

### Cumulative effects on the overall character of the landscape

- 6.14.2.21 This section concerns the effects on the overall character of the landscape, resulting from the proposals and whether the anticipated additional, cumulative change would lead to modification or domination of key characteristics or possible creation of a new landscape character type.
- 6.14.2.22 The impacts on the overall landscape character of the identified receptors would be as described in the sections above.
- 6.14.2.23 Due to the nature of the environs around the Mona Onshore Development Area there is no potential for the character of the surrounding landscape to be significantly adversely affected by the presence of the Mona onshore transmission assets with existing major projects (Figure 6.6). No significant, additional, cumulative filling/incremental effects on landscape character will arise from the Mona onshore transmission assets within the Mona Onshore Development Area and other existing major projects.

### **Nationally designated landscapes**

- 6.14.2.24 The Clwydian Range and Dee Valley NL is sufficiently distant from the Mona Onshore Development Area and the existing onshore energy infrastructure, for the addition of the Mona onshore transmission assets within the Mona Onshore Development Area to have a low impact during construction and a negligible impact thereafter. The filling or incremental, additional, cumulative effects would be **moderate adverse** during the construction phase and **minor adverse**, during the operations and maintenance and decommissioning phases. No effects are significant. A full assessment of the cumulative effects of the Mona Offshore Wind Project in combination with Tier 1 and Tier 2 cumulative projects on the special qualities of nationally designated landscapes is in Volume 6, Annex 8.5: Internationally and nationally designated landscape study, of the Environmental Statement, in summary these were found to be **negligible to minor adverse** and not significant.
- 6.14.2.25 Following implementation of the mitigation measures outlined in Table 6.20, by Year 15, the landscape mitigation will have established, and the impact of the Onshore Substation will be reduced further, due to the softening effect of the planting.

### **Locally designated landscapes**

- 6.14.2.26 The Onshore Cable Corridor crosses through the Rhyd y Foel SLA. The impact on the SLA will be low. The indirect impacts on the Elwy and Aled Valleys SLA will be negligible.
- 6.14.2.27 The Onshore Substation is not located in a locally designated landscape and is not visible from either the Rhyd y Foel to Abergele SLA or the Elwy and Aled Valleys SLA. The impacts during all three phases of the Onshore Substation on the overall character of the SLAs are negligible.
- 6.14.2.28 The filling or incremental, additional, cumulative effects on the overall character of the SLAs would be **negligible to minor adverse** during construction and **negligible adverse** thereafter, which are not significant.
- 6.14.2.29 Following implementation of the mitigation measures outlined in Table 6.20, by Year 15, the landscape mitigation will have established, and the impact of the Onshore Substation will be reduced further, due to the softening effect of the planting.

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### LANDMAP Visual and Sensory Aspect areas

- 6.14.2.30 As identified in Table 6.22, the cumulative effects on landscape character are limited to the Mona Onshore Development Area in conjunction with the operational Gywnt y Môr and Burbo Bank Onshore Substations and the National Grid Bodelwyddan substation, where there is the potential for significant cumulative filling/incremental effects on the character of the landscape as all three substations are located within LANDMAP Visual and Sensory Aspect Area DNBGHVS033 Cefn Estate Mosaic Rolling Lowland (Figure 6.3).
- 6.14.2.31 The existing character of the immediate landscape for the Onshore Substation is partially characterised by the light industrial use of the St Asaph Business Park and existing energy infrastructure, including the Gywnt y Môr, and Burbo Bank substations, overhead power lines and the Bodelwyddan National Grid substation.
- 6.14.2.32 Indirect cumulative effects may also potentially arise on LANDMAP Aspect Areas in the vicinity of the transmission assets within the Mona Onshore Development Area during the construction, operations and maintenance, and decommissioning phases. The cumulative effects will be due to the combined influence on the landscape of the existing National Grid, Gywnt y Môr and Burbo Bank substations with either the Onshore Cable Corridor and/or Onshore Substation. For this cumulative assessment, the Visual and Sensory LANDMAP character areas only have been used to make a judgement as this focuses on broader landscape character.
- 6.14.2.33 The potential significant cumulative effects will be restricted to the following LANDMAP Visual and Sensory Aspect Areas in which the Mona onshore transmission assets, within the Mona Onshore Development Area, would be located (Figure 6.3) details are included in Volume 7, Annex 6.2: Landscape and seascape character baseline technical report of the Environmental Statement:
- CNWVS052 Llandudno to Kinmel Bay intertidal (evaluation: high)
  - CNWVS062 Llandulas urban coast (evaluation: low)
  - CNWVS070 Abergele coastal plain (evaluation: moderate)
  - CNWVS020 Kinmel Manor environs, mosaic rolling lowland (evaluation: high)
  - CNWVS021 Cefn yr Ogof and environs (evaluation: high)
  - CNWVS023 Dulas lowlands (evaluation: moderate)
  - DNBGHVS037 Limestone valley – Cefn (evaluation: high)
  - DNBGHVS014 Area north and east of Bodelwyddan (evaluation: moderate)
  - DNBGHVS033 Cefn Estate mosaic rolling lowland (evaluation: moderate).
- 6.14.2.34 As described earlier in this Environmental Statement chapter, the character of these Aspect Area layers has changed since the original evaluations were made. These LANDMAP Aspect Areas have been assessed previously in this chapter which concluded that significant effects would arise only in those parts of them either hosting, or adjacent to Mona onshore transmission assets, within the Mona Onshore Development Area (section 6.10.5). The filling or incremental cumulative impacts on these areas will be negligible. The additional, cumulative effect is judged to be **minor adverse**, which is not significant.
- 6.14.2.35 The filling or incremental cumulative impact on LANDMAP Aspect Area DNBGHVS033 Cefn Estate mosaic rolling lowland is low. The effect is judged to be **moderate adverse** during construction and **minor adverse** thereafter, which are not significant.

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6.14.2.36 Following implementation of the mitigation measures outlined in Table 6.20, by Year 15, the landscape mitigation will have established, and the impact of the Onshore Substation will be reduced further, due to the softening effect of the planting.

### Cumulative visual effects

6.14.2.37 Desk study and fieldwork indicate that potentially significant filling or incremental cumulative visual effects together with existing development projects will be experienced by the following receptor groups in the LVIA study area, all of whom have a high or very high sensitivity to change:

- Users of public rights of way and cyclists using local roads (within 1 km of the Mona Onshore Development Area)
- Users of the Wales Coast Path long–distance trail (within 10 km of the Onshore Substation)
- Users of Offa’s Dyke Path National Trail (within 10 km of the Onshore Substation)
- Visitors to the Clwydian Range and Dee Valley NL (within 10 km of the Onshore Substation).

6.14.2.38 Only those receptors at publicly accessible locations that lie within the ZTV of the Onshore Substation have the potential to experience additional cumulative effects, over and above those of the Onshore Substation itself.

### **Cumulative visual effects experienced by people using public rights of way and cyclists using local roads within 1 km of the Mona Onshore Development Area**

6.14.2.39 These medium to high sensitivity visual receptors have been identified within the chapter as having the potential to experience significant effects using these routes resulting from the transmission assets within the Mona Onshore Development Area during construction and operations and maintenance phases. Only the decommissioning of the Onshore Substation has the potential to significantly affect visual resources and receptors, during this phase, as the Mona Onshore Cable Corridor assets will be left in situ (underground).

6.14.2.40 With respect to the Onshore Substation, the existing onshore and offshore wind farms within the LVIA study area have little intervisibility with this area due to topography. The Onshore Substation will cause negligible additional, cumulative visual impact when considered together with existing projects. The Mona Landfall and Onshore Cable Corridor have intervisibility with the offshore windfarms, but these are judged to be low additional, cumulative impacts.

6.14.2.41 The operational Gywnt y Môr and Burbo Bank substations have little intervisibility with these public rights of way. When considered together with the transmission assets within the Mona Onshore Development Area, the filling or incremental cumulative visual effects will be **moderate to minor** adverse during construction and **moderate to negligible adverse** thereafter, which are not significant.

6.14.2.42 During operations and maintenance, following implementation of the mitigation measures outlined in Table 6.20 and particularly by Year 15, the planting scheme will have had time to establish, and the impact of the Onshore Substation will be reduced further, due to the softening effect of the planting.

### Cumulative visual effects experienced by people using the Wales Coast Path long-distance trail

- 6.14.2.43 These high sensitivity receptors will have views of the landfall and Onshore Cable Corridor, as described earlier in the chapter. However, the additional, cumulative filling or incremental impacts with the existing projects will be low during the construction phase and negligible thereafter. These effects are judged to be **moderate to minor adverse** during construction, **minor to negligible adverse** during the operations and maintenance phase, and negligible during the decommissioning phase, all effects are not significant.
- 6.14.2.44 During operations and maintenance, following implementation of the mitigation measures outlined in Table 6.20 within the areas illustrated on Figure 6.5, and particularly by Year 15, the planting scheme will have had time to establish, and the impact of the Onshore Substation will be reduced further, due to the softening effect of the planting.

### Cumulative visual effects experienced by people using Offa's Dyke Path National Trail and the Clwydian Range and Dee Valley NL

- 6.14.2.45 The above visual receptors have been assessed earlier in the chapter which concluded that significant effects would potentially be experienced by people at these locations or using the Offa's Dyke Path National Trail due to the transmission assets within the Mona Onshore Development Area. These walkers are very high sensitivity receptors, where the Offa's Dyke Path National Trail crosses the Clwydian Range and Dee Valley NL.
- 6.14.2.46 There are locations on the Offa's Dyke Path National Trail, primarily where it crosses elevated areas of land within the NL (Figure 6.2) where views of the Mona array and the transmission assets within the Mona Onshore Development Area are available, and where they would be seen in combination with the existing onshore and offshore wind farms, by very high sensitivity receptors. This potential intervisibility is dependent on favourable atmospheric conditions, particularly with those more distant energy infrastructure projects.
- 6.14.2.47 With respect to the LVIA study area, the operational National Grid Bodelwyddan, Gywnt y Môr and Burbo Bank Onshore Substations have little intervisibility in this area. The construction of the onshore transmission assets within the Mona Onshore Development Area will cause a low additional, cumulative visual impact when considered together with existing operational wind farms and the National Grid Bodelwyddan, Gywnt y Môr and Burbo Bank substations.
- 6.14.2.48 The cumulative effect would be similar to that assessed in the LVIA, where in successive visibility of the existing wind farms may be discernible from the NL or from the Offa's Dyke Path National Trail, but the wind turbines would be small enough on a wide horizon to only cause **moderate to minor adverse** filling or incremental cumulative visual effects, which are not significant.
- 6.14.2.49 During operations and maintenance, following implementation of the mitigation measures outlined in Table 6.20 and particularly by Year 15, the landscape mitigation will have established, and the impact of the Onshore Substation will be reduced further, due to the softening effect of the planting.

### 6.14.3 Cumulative effects with proposed development projects

- 6.14.3.1 The proposed projects identified in Table 6.22 are considered within this section. The cumulative effects on landscape character are limited to where direct impacts of the

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transmission assets within the Mona Onshore Development Area may overlap with other major onshore developments.

- The proposed Tier 1 cumulative projects relevant to this assessment are:
  - Awel y Môr offshore wind farm array
  - Awel y Môr offshore wind farm Onshore Substation
  - Pant y Maen onshore wind farm
  - Pant y Bryn onshore wind farm

6.14.3.2 There are no proposed Tier 2 cumulative projects relevant to this assessment, as the three onshore wind farm that fall into this category are too distant for there to be potentially significant cumulative effects.

6.14.3.3 The proposed Tier 3 cumulative projects relevant to this assessment are:

- St Asaph solar farm
- National Grid extension to Bodelwyddan substation

### **Cumulative effects on the fabric of landscape – elements and features together with proposed development projects**

6.14.3.4 Effects on the fabric of the landscape could result from the removal of, or changes in, individual elements or features of the landscape, and/or the introduction of new elements or features into the baseline landscape (i.e. direct effects).

6.14.3.5 The LANDMAP Visual and Sensory Aspect Areas are the most relevant LANDMAP layers in relation to cumulative effects on the fabric of the landscape (Figure 6.3). Only those directly affected Aspect Areas have the potential for significant effects, these are assessed below.

6.14.3.6 As no nationally designated landscapes will be directly affected, the Clwydian Range and Dee Valley NL is not assessed in the following paragraphs.

6.14.3.7 The Rhyd y Foel to Abergele SLA is directly affected by the Onshore Cable Corridor, however, there are no major cumulative development projects that will have a potentially significant, additional cumulative effect on the fabric of the landscape, over and above that of the installation of the Mona onshore transmission assets on their own. Therefore, the SLAs are not assessed in the paragraphs below.

### **Construction and decommissioning phases**

#### **LANDMAP Visual and Sensory Aspect Areas**

6.14.3.8 The Tier 1 Awel y Môr 400 kV cable corridor, the Tier 3 St. Asaph solar farm and extension to National Grid's Bodelwyddan substation are located within the same Visual and Sensory Aspect Areas as the Onshore Substation (Figure 6.3). The construction periods of the Mona Onshore Substation and the Tier 3 National Grid Bodelwyddan substation will overlap. Additional, cumulative effects on the aesthetic aspects of the Visual and Sensory Aspect Areas are anticipated. The decommissioning phases have not been reported, but it is presumed that they could be scheduled not to be coincidental.

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### Magnitude of impact

- 6.14.3.9 During the construction phase, the Mona Onshore substation and the Tier 1 Awel y Môr 400 kV cable connection, as well as the Tier 3 St. Asaph solar farm and extension to National Grid's Bodelwyddan substation that lie within the Cefn Estate mosaic rolling lowland Visual and Sensory LANDMAP Aspect Area, may be being constructed at the same time. This LANDMAP Aspect Area will experience a **medium** direct impact. The Tier 1 Awel y Môr Onshore Substation will be located in an adjacent Visual and Sensory LANDMAP Aspect Area, Land north and east of Bodelwyddan, this Aspect Area will experience a **small** indirect impact.

### Sensitivity of the receptor

- 6.14.3.10 The two LANDMAP Aspect Areas in question have sensitivity evaluations deemed to be of medium value to the proposed development. The sensitivity of the receptors is **medium**.

### Significance of effect

- 6.14.3.11 The temporary, additional, cumulative effects on the fabric of the Cefn Estate mosaic rolling lowland Aspect Area is judged to be **moderate adverse** and the temporary, additional, cumulative effects on the fabric of the Land north and east of Bodelwyddan Aspect Area, are judged to be **minor adverse**. Both of which are not significant.

### Operations and maintenance phase

- 6.14.3.12 During the operations and maintenance phase the Mona Offshore Wind Project onshore cable would be buried and indistinguishable once the mitigation measures have been implemented and have established. The Onshore Substation will remain distinct from the proposed Awel y Môr substation but will be seen together with Tier 3 St. Asaph solar farm and extension to National Grid's Bodelwyddan substation that lie within the same Visual and Sensory LANDMAP Aspect Area.

## LANDMAP Visual and Sensory Aspect Areas

### Magnitude of impact

- 6.14.3.13 All the projects, both Tier 1 and Tier 3 will have landscape mitigation associated with them. This will follow the management guidelines for the Aspect Areas that the projects are located in. The landscape mitigation proposed for the land surrounding the Onshore Substation is sufficient to keep the separation from the other projects. The additional, cumulative impact on the fabric of the landscape will be **small**.

### Sensitivity of receptor

- 6.14.3.14 The sensitivity of the receptor to the proposed change is **medium**.

### Significance of effect

- 6.14.3.15 The additional, cumulative effects of the Mona onshore transmission assets within the Mona Onshore Development Area with the Tier 1 and Tier 3 projects, on the fabric of the LANDMAP Aspect Area Cefn Estate mosaic rolling lowland, during the operations and maintenance phase, over and above those for the Mona onshore transmission assets on their own, are judged to be **minor adverse**, which are not significant.

## Cumulative effects on the aesthetic aspects of landscape resources together with proposed development projects

### Nationally designated landscapes

#### Construction and decommissioning phases

##### Magnitude of impact

- 6.14.3.16 There will be no direct effects on the nationally designated landscape, as all construction works associated with the Tier 1 and Tier 3 projects, are located outside the Clwydian Range and Dee Valley NL. One of the special qualities of the Clwydian Range and Dee Valley NL is expansive views. The construction periods of the Mona Onshore Substation and the Tier 3 National Grid Bodelwyddan substation will overlap. There will be temporary, additional, cumulative effects on this special quality during the construction phase. The decommissioning phases have not been reported, but it is presumed that they could be scheduled so as not to be coincidental.

##### Magnitude of impact

- 6.14.3.17 During the construction phase of the Onshore Substation, with the Tier 1 Awel y Môr offshore and onshore projects and the Tier 3 extension to National Grid's Bodelwyddan substation, the Clwydian Range and Dee Valley NL would experience **small** indirect cumulative impacts. The Tier 3 St, Asaph solar farm would not be visible from the NL.

##### Sensitivity of receptor

- 6.14.3.18 The sensitivity of the Clwydian Range and Dee Valley NL is **high**.

##### Significance of effect

- 6.14.3.19 During the construction phase, the temporary, additional, cumulative effects are judged to be **moderate adverse**, which are not significant.

#### Operations and maintenance phase

##### Magnitude of impact

- 6.14.3.20 During the operations and maintenance phase of the Onshore Substation, with the Tier 1 Awel y Môr offshore and onshore projects and the Tier 3 extension to National Grid's Bodelwyddan substation, the Clwydian Range and Dee Valley NL would experience **small** indirect cumulative impacts. The Tier 3 St, Asaph solar farm would not be visible from the NL.

##### Sensitivity of receptor

- 6.14.3.21 The sensitivity of the Clwydian Range and Dee Valley NL is **high**.

##### Significance of effect

- 6.14.3.22 During the operations and maintenance phase, following implementation of the mitigation measures for all the projects, the additional, cumulative effects at the operations and maintenance phase are judged to be **moderate adverse**, which are not significant, reducing as the landscape mitigation becomes established.

## Locally designated landscapes

### All phases

- 6.14.3.23 Both the Rhyd y Foel to Abergele and Elwy and Aled Valleys SLAs (Figure 6.2), fall outside the cumulative ZTV of the Onshore Substation (Figure 6.8). As such there is no potential for the aesthetic aspects of these medium sensitivity landscapes to be significantly affected.

### LANDMAP Visual and Sensory Aspect Areas

- 6.14.3.24 For a direct cumulative impact on a LANDMAP Aspect Area, the developments under consideration would need to be located within the same aspect area. However indirect cumulative effects on the aesthetic aspects of adjacent landscape character areas can be exerted by one or more cumulative projects together with the Onshore Substation if they are both visible.

### Construction and decommissioning phases

- 6.14.3.25 The Tier 1 Awel y Môr 400 kV cable corridor, the Tier 3 St. Asaph solar farm and extension to National Grid's Bodelwyddan substation are located within the same Visual and Sensory Aspect Areas as the Onshore Substation (Figure 6.3). The construction periods of the Mona Onshore Substation and the Tier 3 National Grid Bodelwyddan substation will overlap. Additional, cumulative effects on the aesthetic aspects of the Visual and Sensory Aspect Areas are anticipated. The decommissioning phases have not been reported, but it is presumed that they could be scheduled not to be coincidental.

### Magnitude of impact

- 6.14.3.26 During the construction phase, the Mona Onshore substation and the Tier 1 Awel y Môr 400 kV cable connection, as well as the Tier 3 St. Asaph solar farm and extension to National Grid's Bodelwyddan substation that lie within the Cefn Estate mosaic rolling lowland Visual and Sensory LANDMAP Aspect Area, may be being constructed at the same time. This LANDMAP Aspect Area will experience a **medium** direct impact. The Tier 1 Awel y Môr Onshore Substation will be located in an adjacent Visual and Sensory LANDMAP Aspect Area, Land north and east of Bodelwyddan, this Aspect Area will experience a **small** indirect impact.

### Sensitivity of the receptor

- 6.14.3.27 The two LANDMAP Aspect Areas in question have sensitivity evaluations deemed to be of medium value to the proposed development. The sensitivity of the receptors is **medium**.

### Significance of effect

- 6.14.3.28 The temporary, additional, cumulative effects on the aesthetic aspects of the Cefn Estate mosaic rolling lowland Aspect Area is judged to be **moderate adverse** and the temporary, additional, cumulative effects on the aesthetic aspects of the Land north and east of Boddelwyddan Aspect Area, are judged to be **minor adverse**. Both of which are not significant.

## Operations and maintenance phase

### Magnitude of impact

- 6.14.3.29 During the operations and maintenance phase, the Mona Onshore Cable Corridor and the Tier 1 Awel y Môr 400 kV cable connection would be buried. Only those upstanding (above ground) elements of the Tier 1 and Tier 3 projects might have a cumulative impact on the LANDMAP Aspect Areas. The Tier 1 Awel y Môr 400 kV cable connection and the Tier 3 proposed projects lie within the Cefn Estate mosaic rolling lowland Visual and Sensory LANDMAP Aspect Area. This will experience a medium direct impact. The Tier 1 Awel y Môr Onshore Substation will be located in an adjacent Visual and Sensory LANDMAP Aspect Area, Land north and east of Bodelwyddan, this Aspect Area will experience a **negligible** indirect impact.

### Sensitivity of the receptor

- 6.14.3.30 The two LANDMAP Aspect Areas in question have sensitivity evaluations deemed to be of medium value to the proposed development. The sensitivity of the receptors is **medium**.

### Significance of effect

- 6.14.3.31 The additional, cumulative effects on the aesthetic aspects of the Cefn Estate mosaic rolling lowland Aspect Area is judged to be **minor adverse** and the additional, cumulative effects on the aesthetic aspects of the Land north and east of Bodelwyddan Aspect Area, are judged to be **negligible adverse**. Both of which are not significant.

## Cumulative effects on the overall character of the landscape resources together with proposed development projects

### Nationally designated landscapes

- 6.14.3.32 A detailed assessment of the effects on the special qualities of the Clwydian Range and Dee Valley NL is undertaken at Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement. A summary of the findings is below.

### Construction and decommissioning phases

- 6.14.3.33 There will be no direct cumulative effects on the nationally designated landscape, as all construction works associated with the Tier 1 and Tier 3 projects, are located outside the Clwydian Range and Dee Valley NL.
- 6.14.3.34 The construction periods of the Mona Onshore Substation and the Tier 3 National Grid Bodelwyddan substation will overlap. Indirect, cumulative effects on the overall character of the NL are anticipated. The decommissioning phases for the cumulative projects have not been reported, but it is presumed that they could be scheduled not to be coincidental.

### Magnitude of impact

- 6.14.3.35 During the construction phase the tallest elements of plant constructing the Onshore Substation will be visible from certain parts of the NL, in combination with the construction of the upper parts of the Awel y Môr Onshore Substation and potentially

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the Tier 3 extension to National Grid's Bodelwyddan substation, although details for both these cumulative projects have not been finalised. The magnitude of impact on the overall character of the NL is **negligible**.

### Sensitivity of receptor

6.14.3.36 The sensitivity of the Clwydian Range and Dee Valley NL to the Mona onshore transmission assets within the Mona Onshore Development Area is **high**.

### Significance of effect

6.14.3.37 The temporary additional, cumulative effects on the overall character of the NL will be **minor adverse**, which are not significant. The temporary cumulative effects of the Mona onshore transmission assets together with the Tier 1 and Tier 3 cumulative projects will not compromise the reasons for the designation.

### Operations and maintenance phase

#### Magnitude of impact

6.14.3.38 During the operations and maintenance phase the upper parts of the Onshore Substation will be visible from certain parts of the NL, in combination with the upper parts of the Awel y Môr Onshore Substation and potentially the Tier 3 extension to National Grid's Bodelwyddan substation, although details for both these cumulative projects have not been finalised. The magnitude of impact on the overall character of the NL is **negligible**.

#### Sensitivity of receptor

6.14.3.39 The sensitivity of the Clwydian Range and Dee Valley NL to the Mona onshore transmission assets within the Mona Onshore Development Area is **high**.

#### Significance of effect

6.14.3.40 The additional, cumulative effects on the overall character of the NL will be **minor adverse**, which are not significant. The cumulative effects of the Mona onshore transmission assets together with the Tier 1 and Tier 3 cumulative projects will not compromise the reasons for the designation.

6.14.3.41 Following implementation, the mitigation measures associated with the projects will reduce the cumulative effects.

### Locally designated landscapes

#### Construction and decommissioning phases

6.14.3.42 The Rhyd y Foel to Abergele SLA is directly affected by the Onshore Cable Corridor, however, there are no major cumulative development projects that will have a potentially significant, additional, cumulative effect on the overall character of the SLA.

#### Operations and maintenance phase

##### Magnitude of impact

6.14.3.43 During the operations and maintenance phase there will be no significant effects on the SLA, as the Mona onshore cable will be buried.

## LANDMAP Visual and Sensory Aspect Areas

### Construction and decommissioning phases

6.14.3.44 The Tier 1 Awel y Môr onshore transmission infrastructure and the Tier 3 St. Asaph solar farm and extension to National Grid's Bodelwyddan substation are located within the same Visual and Sensory Aspect Areas as the Onshore Substation. The construction periods of the Mona Onshore Substation and the Tier 3 National Grid Bodelwyddan substation will overlap. Additional, cumulative effects on the overall character of the visual and Sensory Aspect Areas are anticipated. The decommissioning phases have not been reported, but it is presumed that they could be scheduled not to be coincidental.

#### Magnitude of impact

6.14.3.45 During the construction phase of the Mona onshore transmission assets, the Tier 1 projects and the Tier 3 projects the LANDMAP Visual and Sensory Aspect Areas (Figure 6.3) would experience **small** impacts on their overall character.

#### Sensitivity of receptor

6.14.3.46 The sensitivity of the Aspect Areas is **medium**.

#### Significance of effect

6.14.3.47 The temporary, additional, cumulative effects at the construction phase are judged to be **minor adverse**, which are not significant.

6.14.3.48 Following implementation, the mitigation measures associated with the projects will reduce the cumulative effects.

### Operations and maintenance phase

#### Magnitude of impact

6.14.3.49 During the operations and maintenance phase of the Mona onshore transmission assets, the Tier 1 projects and the Tier 3 projects the LANDMAP Visual and Sensory Aspect Areas (Figure 6.3) would experience **negligible** to **small** impacts on their overall character.

#### Sensitivity of receptor

6.14.3.50 The sensitivity of the Aspect Areas is **medium**.

#### Significance of effect

6.14.3.51 The additional, cumulative effects at the operations and maintenance phase are judged to be **negligible to minor adverse**, which are not significant.

6.14.3.52 Following implementation, the mitigation measures associated with the projects will reduce the cumulative effects.

**Cumulative visual effects experienced by users of the public rights of way network and Access Land within the Clwydian Range and Dee Valley NL, together with proposed development projects**

6.14.3.53 Desk study and fieldwork indicate that potential significant cumulative visual effects together with existing development projects will be restricted to the following receptor groups in the LVIA study area:

- Users of nearby public rights of way (within 1 km from the Onshore Substation)
- Users of the Wales Coast Path long-distance trail
- Users of Offa's Dyke Path National Trail
- Visitors to Access Land within the Clwydian Range and Dee Valley NL.

**Cumulative visual effects experienced by users of public rights of way within 1 km of the Onshore Substation**

**Construction and decommissioning phases**

6.14.3.54 The Tier 1 Awel y Môr Onshore Substation and the Tier 3 St. Asaph solar farm and extension to National Grid's Bodelwyddan substation will be visible together in some local views, either in combination or sequentially (Figure 6.7). The construction periods of the Mona Onshore Substation and the Tier 3 National Grid Bodelwyddan substation will overlap. Additional, cumulative effects on the views from the local PRow network, during the construction phases of the Mona Onshore Development Area are anticipated. The decommissioning phases have not been reported, but it is presumed that they could be scheduled not to be coincidental.

**Magnitude of impact**

6.14.3.55 During the construction phase the likelihood of views altering due to the combined nature of the Mona onshore transmission assets and the proposed Tier 1 and Tier 3 major developments is **negligible to small**.

**Sensitivity of receptor**

6.14.3.56 The sensitivity of the receptors is **medium to high**.

**Significance of effect**

6.14.3.57 In summary, only high sensitivity PRow users travelling within 1 km of the Onshore Substation and within similar distances to the Tier 1 Awel y Môr Onshore Substation and Tier 3 National Grid extension to Bodelwyddan substation cumulative projects may experience significant and successive additional cumulative visual effects as a result, depending on the routes followed.

6.14.3.58 The magnitude of the temporary visual impact experienced by users of these local PRow is negligible and the sensitivity of the receptor is medium to high. The temporary cumulative sequential effects will be **minor to moderate**, which are not significant.

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### Operations and maintenance phase

#### Magnitude of impact

6.14.3.59 During operations and maintenance, the likelihood of views altering due to the combined nature of the Mona onshore transmission assets and the proposed Tier 1 and Tier 3 major developments would reduce as most of the cabling sections of the proposals would now be hidden within available views, as such the magnitude of impact for potential sequential visibility would be less.

6.14.3.60 People using the PRow in close proximity to the Onshore Substation may experience sequential visibility together with the Tier 1 cumulative projects, in particular the Awel y Môr Onshore Substation, as well as combined and sequential visibility with the Tier 3 projects (St. Asaph solar farm and the extension to National Grid's Bodelwyddan substation) (Figure 6.8). Such receptors will be occasionally afforded successive views from the PRows in the local area. Given that these projects will include landscape mitigation, to reduce the impacts on landscape character, views and visual amenity, as the Onshore Substation does, the magnitude of additional, cumulative visual impact is small, reducing to **negligible** in some cases as the planting becomes established.

#### Sensitivity of receptor

6.14.3.61 The sensitivity of the receptors is as set out for the construction and phase, above, that is **high to medium**.

#### Significance of effect

6.14.3.62 In summary, only high sensitivity PRow users travelling within 1 km of the Onshore Substation and also within similar distances to the Tier 1 cumulative projects may experience significant and successive additional cumulative visual effects as a result, depending on the routes followed.

6.14.3.63 The magnitude of the visual impact experienced by users of these local PRow is small to medium and the sensitivity of the receptor is high. The cumulative sequential effects will be **moderate to minor adverse**, which are not significant.

6.14.3.64 By Year 15, following implementation of the mitigation measures outlined in Table 6.20, the planting scheme will have had time to establish, and the impact of the Onshore Substation will be reduced further, due to the softening effect of the planting.

### Cumulative visual effects – people using the Wales Coast Path long-distance trail together with proposed development projects

#### Construction and decommissioning phases

#### Magnitude of impact

6.14.3.65 It is unlikely that the Tier 1 Awel y Môr onshore substation and the Tier 3 St. Asaph solar farm and extension to National Grid's Bodelwyddan substation will be visible together, with the Onshore Substation in views from this path. If they are, the construction periods of the Mona Onshore Substation and the Tier 3 National Grid Bodelwyddan substation will overlap. Additional, cumulative effects on the Views from the Wales Coast Path, during the construction phases of the Mona onshore transmission assets may occur. The decommissioning phases have not been reported, but it is presumed that they could be scheduled not to be coincidental.

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### Magnitude of impact

- 6.14.3.66 The construction phase of the Mona onshore transmission assets will result in very little visual intrusion for people using the Wales Coast Path. The additional, cumulative impact of the Onshore Substation will be **negligible**.

### Sensitivity of receptor

- 6.14.3.67 The sensitivity of the people using the Wales Coast Path is **high**.

### Significance of effect

- 6.14.3.68 During the construction phase the temporary, additional, cumulative visual impact of the Onshore Substation together with the Tier 1 Awel y Môr onshore substation and the Tier 3 extension to National Grid's Bodelwyddan substation, experienced by people using the Wales Coast Path would be **negligible adverse**, which is not significant. The Tier 3 St. Asaph solar farm would not be visible by people using the path.

### Operations and maintenance phase

#### Magnitude of impact

- 6.14.3.69 The operations and maintenance phase of the Mona onshore transmission assets will result in very little visual intrusion for people using the Wales Coast Path. The additional, cumulative impact of the Onshore Substation will be **negligible**.

#### Sensitivity of receptor

- 6.14.3.70 The sensitivity of the people using the Wales Coast Path is **high**.

#### Significance of effect

- 6.14.3.71 During the operations and maintenance phase the additional, cumulative visual impact of the installed Onshore Substation together with the Tier 1 Awel y Môr onshore substation and the Tier 3 extension to National Grid's Bodelwyddan substation, experienced by people using the Wales Coast Path would be **negligible adverse**, which is not significant. The Tier 3 St. Asaph solar farm would not be visible by people using the path. Similarly, the buried cable corridors would not be visible to people using the path.

### Cumulative visual effects – people using the Offa's Dyke Path National Trail together with proposed development projects

#### Construction and decommissioning phases

- 6.14.3.72 The Tier 1 Awel y Môr offshore array and onshore substation and the Tier 3 extension to National Grid's Bodelwyddan substation have the potential to be visible together, with the Onshore Substation in views from the National Trail. The construction periods of the Mona Onshore Substation and the Tier 3 National Grid Bodelwyddan substation will overlap. Additional, cumulative effects on the Views from the Offa's Dyke Path National Trail, during the construction phases of the Mona onshore transmission assets may occur. The decommissioning phases for these cumulative projects have not been reported, but it is presumed that they could be scheduled not to be coincidental. The Tier 3 St. Asaph solar farm is not visible from the National Trail.

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### Magnitude of impact

- 6.14.3.73 People walking the Offa's Dyke Path National Trail may experience combined and sequential visibility of the construction of the Tier 1 onshore and offshore projects. In particular, the Awel y Môr Offshore Wind Farm offshore array and onshore substation, as well as the Tier 3 extension to National Grid's Bodelwyddan substation project. (Figure 6.6). However, given the distance of the National Trail from the Mona onshore transmission assets and the Tier 1 and Tier 3 cumulative projects, the magnitude of visual impact will be **small**.

### Sensitivity of receptor

- 6.14.3.74 People walking the Offa's Dyke Path National Trail where it crosses the Clwydian Range and Dee Valley NL have a very high susceptibility to the construction of the Mona Offshore Wind Project, the views are of high value. The overall sensitivity of the receptor to the proposed cumulative changes in the available views is **very high**.

### Significance of effect

- 6.14.3.75 At the construction phase, due to distance the additional, cumulative effects on walkers will be **moderate adverse**, which are not significant.

### Operations and maintenance phase

#### Magnitude of impact

- 6.14.3.76 People walking the Offa's Dyke Path National Trail may experience combined and sequential visibility of the Tier 1 onshore and offshore projects. In particular, the Awel y Môr Offshore Wind Farm offshore array and onshore substation, as well as the Tier 3 extension to National Grid's Bodelwyddan substation project. They will also have views of the existing Tier 1 offshore wind energy developments (Figure 6.6). However, given the distance of the National Trail from the Mona onshore transmission assets and the Tier 1 cumulative projects, the magnitude of visual impact will be **small**.

#### Sensitivity of receptor

- 6.14.3.77 People walking the Offa's Dyke Path National Trail where it crosses the Clwydian Range and Dee Valley NL have a very high susceptibility to the Mona Offshore Wind Project, the views are of high value. The overall sensitivity of the receptor to the proposed cumulative changes in the available views is **very high**.

#### Significance of effect

- 6.14.3.78 At operations and maintenance, due to distance the additional, cumulative effects on walkers will be **moderate adverse**, which is not significant. Although the cumulative ZTVs indicate that there is theoretical visibility of the Onshore Substation with some existing and proposed Tier 1 onshore wind farms (Figure 6.8) the additional, cumulative effects experienced by people using the Offa's Dyke Path National Trail do not have the potential to be significant, due to the distance and so are not assessed further.

## Cumulative visual effects –visitors to the Clwydian Range and Dee Valley NL together with proposed development projects

### Construction and decommissioning phases

6.14.3.79 The Tier 1 Awel y Môr offshore array and Onshore Substation and the Tier 3 extension to National Grid’s Bodelwyddan substation have the potential to be visible together, with the Onshore Substation in views from the Clwydian Range and Dee Valley National Landscape. The construction periods of the Mona Onshore Substation and the Tier 3 National Grid Bodelwyddan substation will overlap. Additional, cumulative effects on views from the NL, during the construction phases of the Mona onshore transmission assets are anticipated. The decommissioning phases for these cumulative projects have not been reported, but it is presumed that they could be scheduled not to be coincidental. The Tier 3 St. Asaph solar farm is not visible from the NL.

### Magnitude of impact

6.14.3.80 People within the Clwydian Range and Dee Valley National Landscape may experience combined visibility of the construction of the Tier 1 onshore and offshore projects. In particular, the Awel y Môr Offshore Wind Farm offshore array and onshore substation, as well as the Tier 3 extension to National Grid’s Bodelwyddan substation project. (Figure 6.6). However, given the distance of the NL from the Mona onshore transmission assets and the Tier 1 and Tier 3 cumulative projects, the magnitude of visual impact will be **small**.

### Sensitivity of receptor

6.14.3.81 People within the National Landscape have a high susceptibility to the construction of the Mona Offshore Wind Project and the other Tier 1 and Tier 3 projects. The overall sensitivity of the receptor to the proposed cumulative changes in the available views is **high**.

### Significance of effect

6.14.3.82 At the construction phase, due to distance the temporary, additional, cumulative effects on visitors to the NL will be **moderate adverse**, which are not significant.

### Operations and maintenance phase

#### Magnitude of impact

6.14.3.83 Visitors to the NL may experience sequential visibility of the other major onshore development projects, in particular the Tier 1 Awel y Môr offshore wind farm and Onshore Substation and the Tier 3 extension to National Grid’s Bodelwyddan substation. Such receptors will be occasionally afforded combined and sequential views from elevated, open areas within the NL, which would also include other Tier 1 offshore wind farms (Figure 6.6). The magnitude of cumulative visual impact is **small**.

#### Sensitivity of receptor

6.14.3.84 Users of the NL are deemed to be of high value and high susceptibility to the proposed development. The sensitivity of the receptor is **high**.

## Significance of effect

- 6.14.3.85 The magnitude of the visual impact on users of the NL is small due to the visibility of the Onshore Substation, the Tier 1 Awel y Môr offshore wind farm and Onshore Substation and the Tier 3 extension to National Grid's Bodelwyddan substation, together with the existing Tier 1 offshore wind farms. The sensitivity of the receptor is high. The sequential cumulative effect will be **moderate adverse**, which is not significant.

## 6.15 Transboundary effects

- 6.15.1.1 A screening of transboundary impacts has been carried out within Volume 5, Annex 5.2: Transboundary impacts screening of the Environmental Statement and has identified that there is no potential for significant transboundary effects regarding landscape, seascape and visual resources from the Mona Offshore Wind Project upon the seascapes of the Republic of Ireland territorial waters.

## 6.16 Inter-related effects

- 6.16.1.1 Inter-relationships are the impacts and associated effects of different aspects of the proposal on the same receptor. These are:

- Project lifetime effects: Assessment of the scope for effects that occur throughout more than one phase of the Mona Offshore Wind Project (construction, operations and maintenance, and decommissioning) to interact to potentially create a more significant effect on a receptor than if just assessed in isolation in these three phases (e.g. indirect effects on landscape character of the removal of vegetation)
- Receptor led effects: Assessment of the scope for all effects to interact, spatially and temporally, to create inter-related effects on a receptor. As an example, all effects on landscape, seascape and visual resources, such as direct vegetation loss, direct effects on views experienced by sensitive receptors, may interact to produce a different, or greater effect on this receptor than when the effects are considered in isolation. Receptor-led effects may be short-term, temporary, or transient effects, or incorporate longer term effects.

- 6.16.1.2 A description of the likely interactive effects arising from the Mona Offshore Wind Project on landscape and visual resources is provided in Volume 3, Chapter 11: Inter-related effects – onshore of the Environmental Statement.

## 6.17 Summary of impacts, mitigation measures and monitoring

### 6.17.1 Overview

- 6.17.1.1 Baseline information on landscape, seascape and visual resources within the LVIA onshore transmission assets study areas was collected through of a combination of desktop studies, fieldwork, site surveys and consultation. These desk and field studies supported the impact assessment work and judgements on significance of effects.

- 6.17.1.2 Table 6.24 and Table 6.25 present a summary of the potential impacts, measures adopted as part of the project and residual effects in respect to seascape, landscape and visual resources.

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### 6.17.2 Landscape Effects

#### Designated Landscapes

- 6.17.2.1 The special qualities of the Clwydian Range and Dee Valley NL will not be significantly affected and the reasons for their designation will not be compromised (assessed in detail in Volume 6, Annex 8.5: Internationally and nationally designated landscapes study, of the Environmental Statement). The work along the Mona Onshore Cable Corridor will not be visible from the NL.
- 6.17.2.2 Gwyrch Castle RPaG has the potential to experience direct significant effects from the Onshore Cable Corridor, during the construction phase. It is crossed using both trenched and trenchless techniques, but the effects are not judged to be significant. Bodelwyddan Castle, Brynbella and St. Bueno's College RPaGs have the potential to experience significant indirect effects due to the proximity to the Onshore Substation or due to their elevation. However, these three RPaGs have very limited visibility due to intervening vegetation/structures and/or distance. There is no potential for indirect effects of the Onshore Substation to be experienced by other RPaGs, as they are only coincidental small areas of the Onshore Substation ZTV. Further information on the effects of the Mona onshore transmission assets on RPaGs is set out in Volume 3, Chapter 5: Historic Environment, of the Environmental Statement.
- 6.17.2.3 The work at the Onshore Substation site will not be visible from the SLAs. However, the western part of the Onshore Cable Corridor passes through the Rhyd y Foel to Abergele SLA. The works will not have a significant effect on the SLA during the construction phase. During the operations and maintenance and the decommissioning phases there will be negligible/no change to the SLAs.

#### Undesignated Landscapes

- 6.17.2.4 A major adverse and significant effect on landscape character is predicted during construction, operations and maintenance and decommissioning for land at the Onshore Substation, due to loss of pasture/arable farmland, hedgerows, mature hedgerow trees or isolated trees, which will directly affect the landscape character of LANDMAP Visual and Sensory Aspect Area DNBGHVS033 Cefn Estate Mosaic Rolling Lowland (Figure 6.3). The Onshore Substation also lies within Geological Landscape Aspect Area DNBGHGL031 Cefn Meiriadog, which contains RIGS. However, on assessment, it was judged DNBGHGL031 would not experience significant effects, due to intervening vegetation and topography.
- 6.17.2.5 The Onshore Substation has the potential to significantly, indirectly affect LANDMAP Visual and Sensory Aspect Areas that are coincidental with the ZTV of the substation (Figure 6.3). The Historic Landscape LANDMAP Aspect Area DNBGHHL005 Bodelwyddan Park also has the potential to be significantly, indirectly affected due to the presence of Boddelwyddan Castle RpaG. However, on assessment it was judged that these indirect effects would not be significant, due to distance, intervening vegetation, buildings or topography.
- 6.17.2.6 The Mona Onshore Cable Corridor will directly affect LANDMAP Visual and Sensory Aspect Areas (see Volume 7, Annex 6.2: Landscape and seascape character baseline technical report, of the Environmental Statement) but as all the cables will be buried (a substantial amount of the route using trenchless techniques) it was judged that there would be no potential for these Aspect Areas to be significantly affected, after the construction. During the construction phase LANDMAP Visual and Sensory Aspect

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Area CNWVS021 Cefn yr Ogof and Environs would be significantly affected by the Mona Onshore Cable Corridor and compounds, with no significant effects thereafter.

### 6.17.3 Visual Effects

#### People using National Trails and long-distance paths

6.17.3.1 People using the Offa's Dyke National Trail and the Wales Coast Path will not experience significant visual, effects from the development of the Mona onshore transmission assets, due to distance, and or intervening vegetation and structures.

#### People using the wider public rights of way network

6.17.3.2 Potentially significant impacts may arise for a few, close proximity visual receptors during the construction, operations and maintenance, and decommissioning phases on the views from and visual amenity of walkers using public footpath 105/6 to the east of Pentre-mawr (to the west of the Onshore Substation). The view east from the southern end of public bridleway 208/3 adjacent to Coed Esgob (currently not publicly accessible) would not be significantly affected due to intervening vegetation.

#### People using local roads

6.17.3.3 Walkers and cyclists using the local road south of the Onshore Substation at the base of Cefn Meiriadog have the potential to experience significant visual effects, from the change in views, due to the development of the Onshore Substation.

6.17.3.4 No other significant visual effects are predicted to be experienced by people using local roads, during the construction, operations and maintenance and decommissioning of the Mona onshore transmission assets.

### 6.17.4 Summary of the cumulative effects of the Mona Offshore Wind Project

6.17.4.1 The assessment of the additional, cumulative landscape, seascape and visual direct effects have been assessed on: The fabric of the landscape in which the Mona onshore transmission assets are located; The aesthetic aspects of the landscape and seascape; the overall character of the landscape, seascape; effects on visual receptors (during construction for the Mona Onshore Cable Corridor and during all three phases for the Onshore Substation).

6.17.4.2 No additional, cumulative effects were judged to be significant on landscape and seascape character or on people's views or visual amenity.

### 6.17.5 Summary of the transboundary effects of the Mona Offshore Wind Project

6.17.5.1 There is no potential for significant transboundary effects regarding landscape, seascape and visual resources and receptors from the Mona onshore transmission assets.

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**Table 6.24: Summary of potential landscape and visual effects, mitigation and monitoring.**

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

Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
<b>Assessment of effects on the special qualities of national landscape designations</b>										
Special qualities of the Clwydian Range and Dee Valley NL	✓	✓	✓	Implementation measures set out in Table 6.20 and within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Negligible O: Negligible D: Negligible	C: High O: High D: High	C: negligible to minor adverse (not significant)  O: no change to negligible adverse (not significant)  D: negligible to minor adverse (not significant)	None	C: negligible to minor adverse (not significant)  O: no change to negligible adverse (not significant)  D: negligible to minor adverse (not significant)	A LEMP will be a requirement of the DCO.
Landscape setting of the Clwydian Range and Dee Valley NL	✓	✓	✓	Implementation measures set out in Table 6.20 and within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Small O: Small D: Small	C: Medium O: Medium D: Medium	C: minor adverse (not significant)  O: negligible adverse year 15 (not significant)  D: negligible adverse (not significant)	None	C: minor adverse (not significant)  O: negligible adverse year 15 (not significant)  D: negligible adverse (not significant)	A LEMP will be a requirement of the DCO.
Rhyd y Foel to Abergele SLA and Elwy and Aled Valleys SLA	✓			Implementation measures set out in Table 6.20.	Medium	Medium	Moderate adverse (not significant)	None	Moderate adverse	A LEMP will be a requirement of the DCO.
Registered Parks and Gardens	✓			Implementation measures set out in Table 6.20.	Medium	Medium	Moderate adverse (not significant)	None	Moderate adverse	A LEMP will be a requirement of the DCO.

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Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
<b>Assessment of effects on LANDMAP Aspect Areas</b>										
DNBGHVS033 Cefn Estate Mosaic Rolling Lowland (Visual and Sensory)	✓	✓	✓	Implementation measures set out in Table 6.20 and within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Large O: High D: High	C: Medium O: Medium D: Medium	C: major adverse (significant) O: moderate adverse (not significant) D: major adverse (significant)	None	C: major adverse (significant) O: moderate adverse (not significant) D: major adverse (significant)	A LEMP will be a requirement of the DCO.
DNBGHGL031 Cefn Meiriadog Other (Geological Landscape)	✓	✓	✓	Implementation measures set out in Table 6.20 and within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Negligible to small O: Small D: Negligible to small	C: Medium O: Medium D: Medium	C: moderate adverse (not significant) O: moderate adverse (not significant) D: moderate adverse (not significant)	None	C: moderate adverse (not significant) O: moderate adverse (not significant) D: moderate adverse (not significant)	A LEMP will be a requirement of the DCO.
CNWVS052 Landudno to Kinmel Bay intertidal	✓		✓	Implementation measures set out in Table 6.20.	C: Medium D: Medium	C: Medium D: Medium	C: moderate adverse (not significant) D: moderate adverse (significant)	None	C: moderate adverse (not significant) D: moderate adverse (significant)	A LEMP will be a requirement of the DCO.

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Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
CNWVS062 Llandulas Urban Coast	✓		✓	Implementation measures set out in Table 6.20.	C: Small D: Small	C: Low D: Low	C: minor adverse (significant) D: minor adverse (significant)	None	C: minor adverse (significant) D: minor adverse (significant)	A LEMP will be a requirement of the DCO.
CNWVS070 Abergele Coastal Plain (western section)	✓		✓	Implementation measures set out in Table 6.20.	C: Large D: Large	C: Low D: Low	C: moderate adverse (significant) D: moderate adverse (significant)	None	C: moderate adverse (significant) D: moderate adverse (significant)	A LEMP will be a requirement of the DCO.
CNWVS021 Cefn yr Ogof and Environs	✓		✓	Implementation measures set out in Table 6.20.	C: Medium D: Medium	C: High D: High	C: major adverse (significant) D: major adverse (significant)	None	C: major adverse (significant) D: major adverse (significant)	A LEMP will be a requirement of the DCO.
CNWVS023 Dulas Lowlands	✓		✓	Implementation measures set out in Table 6.20.	C: Medium D: Medium	C: Medium D: Medium	C: moderate adverse (not significant) D: moderate adverse (significant)	None	C: moderate adverse (not significant) D: major adverse (significant)	A LEMP will be a requirement of the DCO.
DNBGHVS037 Limestone Valley-Cefn	✓		✓	Implementation measures set out in Table 6.20.	C: Medium D: Medium	C: Medium D: Medium	C: major adverse (significant) D: major adverse (significant)	None	C: major adverse (significant) D: major adverse (significant)	A LEMP will be a requirement of the DCO.

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Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
CNWVS070 Abergele Coastal Plain (eastern section)	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Negligible O: Negligible D: Negligible	C: Low O: Low D: Low	C: negligible adverse (not significant) O: negligible adverse (not significant) D: negligible adverse (not significant)	None	C: negligible adverse (not significant) O: negligible adverse (not significant) D: negligible adverse (not significant)	A LEMP will be a requirement of the DCO.
DNBGHVS013 Coastal Fields near Towyn	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Negligible O: Negligible D: Negligible	C: Low O: Low D: Low	C: negligible adverse (not significant) O: negligible adverse (not significant) D: negligible adverse (not significant)	None	C: negligible adverse (not significant) O: negligible adverse (not significant) D: negligible adverse (not significant)	A LEMP will be a requirement of the DCO.
DNBGHVS014 Area North and East of Bodelwyddan	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Negligible to small O: Negligible to small D: Negligible to small	C: Medium O: Medium D: Medium	C: negligible to minor adverse (not significant) O: negligible to minor adverse (not significant)	None	C: negligible to minor adverse (not significant) O: negligible to minor adverse (not significant)	A LEMP will be a requirement of the DCO.

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Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
							D: negligible to minor adverse (not significant)		D: negligible to minor adverse (not significant)	
DNBGHVS015 River Valley of Clwyd/Elwy – North of St. Asaph	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Negligible O: Negligible D: Negligible	C: Low O: Low D: Low	C: negligible adverse (not significant) O: moderate adverse (not significant) D: negligible adverse (not significant)	None	C: negligible adverse (not significant) O: moderate adverse (not significant) D: negligible adverse (not significant)	A LEMP will be a requirement of the DCO.
DNBGHVS016 Vale Wooded Estate – South of Dyserth	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Negligible O: Negligible D: Negligible	C: Low O: Low D: Low	C: negligible adverse (not significant) O: negligible adverse (not significant) D: negligible adverse (not significant)	None	C: negligible adverse (not significant) O: negligible adverse (not significant) D: negligible adverse (not significant)	A LEMP will be a requirement of the DCO.
DNBGHVS028 Clwydian Slopes South of Rhuallt	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Negligible O: Negligible D: Negligible	C: High O: High D: High	C: minor adverse (not significant) O: minor adverse (not significant)	None	C: minor adverse (not significant) O: minor adverse (not significant)	A LEMP will be a requirement of the DCO.

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Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
							D: minor adverse (not significant)		D: minor adverse (not significant)	
DNBGHVS029 Graig Tremerchion	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Negligible O: Negligible D: Negligible	C: Medium O: Medium D: Medium	C: minor adverse (not significant) O: minor adverse (not significant) D: minor adverse (not significant)	None	C: minor adverse (not significant) O: minor adverse (not significant) D: minor adverse (not significant)	A LEMP will be a requirement of the DCO.
DNBGHVS031 Vale of Clwyd – North of Denbigh	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Negligible O: High D: Negligible	C: Medium O: Medium D: Medium	C: minor adverse (not significant) O: minor adverse (not significant) D: minor adverse (not significant)	None	C: minor adverse (not significant) O: minor adverse (not significant) D: minor adverse (not significant)	A LEMP will be a requirement of the DCO.
DNBGHVS035 Wooded Parkland and Parkland Remnants	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Small O: Small D: Small	C: High O: High D: High	C: moderate adverse (not significant) O: moderate adverse (not significant) D: moderate adverse (not significant)	None	C: moderate adverse (not significant) O: moderate adverse (not significant) D: moderate adverse (not significant)	A LEMP will be a requirement of the DCO.

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Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
DNBGHHL005 Bodelwyddan Park	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Small  O: Small  D: Small	C: High  O: High  D: High	C: moderate adverse (not significant)  O: moderate adverse (not significant)  D: moderate adverse (not significant)	None	C: moderate adverse (not significant)  O: moderate adverse (not significant), negligible to minor adverse at Year 15.  D: moderate adverse (not significant)	A LEMP will be a requirement of the DCO.
<b>Visual receptor groups – Onshore Substation</b>										
Visual effects on people travelling along national trails/long distance paths – Wales Coast Path National Trail	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Small  O: N/A  D: Small	C: High  O: N/A  D: High	C: moderate adverse (not significant)  O: N/A  D: moderate adverse (not significant)	None	C: moderate adverse (not significant)  O: N/A  D: moderate adverse (not significant)	A LEMP will be a requirement of the DCO.
Visual effects on people travelling along national trails/long distance paths – Offa's Dyke Path National Trail	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Negligible  O: Negligible  D: Negligible	C: Very high  O: Very high  D: Very high	C: minor adverse (not significant)  O: minor adverse (not significant)	None	C: minor adverse (not significant)  O: minor adverse (not significant)	A LEMP will be a requirement of the DCO.

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Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
Visual effects on people travelling along public rights of way and local roads	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)	C: Large to medium  O: Medium  D: Large to medium	C: Low (occupiers of vehicles) to high (walkers)  O: Low to High  D: Low to High	D: minor adverse (not significant)  C: minor to major adverse (not significant to significant)  O: minor to major adverse (not significant to significant)  moderate adverse (not significant) at Year 15  D: moderate (not significant)	None	D: minor adverse (not significant)  C: minor to major adverse (not significant to significant)  O: minor to major adverse (not significant to significant)  moderate adverse (not significant) at Year 15  D: moderate adverse (not significant)	A LEMP will be a requirement of the DCO.

**Receptors at representative viewpoint locations – Onshore Substation**

Representative viewpoint 1 – View southeast along farm track from minor road to Tyddyn Meredydd (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 1 and 2).	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Large  O: Medium  D: Large	C: Low to medium  O: Low to medium  D: Low to medium	C: minor to moderate adverse (not significant)  O: minor to moderate adverse (not significant)  negligible to minor adverse (not significant) at Year 15	None	C: moderate adverse (not significant)  O: minor to moderate adverse (not significant)  negligible to minor adverse (not significant) at Year 15	A LEMP will be a requirement of the DCO.
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Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
							D: minor to moderate adverse (not significant)		D: minor to moderate adverse (not significant)	
<p>Representative viewpoint 2 – View north from minor road adjacent to Hendy Farm</p> <p>(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 3 and 4).</p>	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	<p>C: Large</p> <p>O: Large to Medium</p> <p>D: Large</p>	<p>C: Low to medium</p> <p>O: Low to medium</p> <p>D: Low to medium</p>	<p>C: moderate to major adverse (not significant)</p> <p>O: major adverse (significant) at Year 1 to moderate adverse (not significant) at Year 15</p> <p>D: moderate to major adverse (not significant)</p>	None	<p>C: moderate to major adverse (not significant)</p> <p>O: major adverse (significant) at Year 1 to moderate adverse (not significant) at Year 15</p> <p>D: moderate to major adverse (not significant)</p>	A LEMP will be a requirement of the DCO.
<p>Representative viewpoint 3 – View east-southeast from public footpath 105/6 to the southeast of Pentre-mawr</p> <p>(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 5 and 6).</p>	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	<p>C: Medium</p> <p>O: Medium</p> <p>D: Medium</p>	<p>C: High</p> <p>O: High</p> <p>D: High</p>	<p>C: major adverse (significant)</p> <p>O: major adverse (significant) at Year 1 moderate adverse (not significant) at Year 15</p> <p>D: major adverse (significant)</p>	None	<p>C: major adverse (significant)</p> <p>O: major adverse (significant) at Year 1 moderate adverse (not significant) at Year 15</p> <p>D: major adverse (significant)</p>	A LEMP will be a requirement of the DCO.

**MONA OFFSHORE WIND PROJECT**

Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
<p>Representative viewpoint 4 – View southeast from public footpath 105/7 to the southwest of Waen-Meredydd</p> <p>(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 7 and 8).</p>	✓	✓	✓	<p>Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).</p>	<p>C: Small</p> <p>O: Small</p> <p>D: Small</p>	<p>C: High</p> <p>O: High</p> <p>D: High</p>	<p>C: minor to moderate adverse (not significant)</p> <p>O: minor to moderate adverse (not significant)</p> <p>negligible adverse (not significant) at Year 15</p> <p>D: minor to moderate adverse (not significant)</p>	None	<p>C: minor to moderate adverse (not significant)</p> <p>O: minor to moderate adverse (not significant)</p> <p>negligible adverse (not significant) at Year 15</p> <p>D: minor to moderate adverse (not significant)</p>	A LEMP will be a requirement of the DCO.
<p>Representative viewpoint 5 – View southeast from junction of farm track with minor road at Waen-Meredydd</p> <p>(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 9 and 10).</p>	✓	✓	✓	<p>Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5)</p>	<p>C: Small</p> <p>O: Small</p> <p>D: Small</p>	<p>C: Low to medium</p> <p>O: Low to medium</p> <p>D: Low to medium</p>	<p>C: minor to moderate adverse (not significant)</p> <p>O: minor to moderate adverse (not significant)</p> <p>minor adverse (not significant) at Year 15</p> <p>D: minor to moderate adverse (not significant)</p>	None	<p>C: minor to moderate adverse (not significant)</p> <p>O: minor to moderate adverse (not significant)</p> <p>minor adverse (not significant) at Year 15</p> <p>D: minor to moderate</p>	A LEMP will be a requirement of the DCO.

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Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
									adverse (not significant)	
<p>Representative viewpoint 6 – View northwest from minor road at Tyn y Ffordd Fawr</p> <p>(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 11 and 12).</p>	✓	✓	✓	<p>Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).</p>	<p>C: Small</p> <p>O: Small to negligible at Year 1 summer</p> <p>D: Low</p>	<p>C: Low to medium</p> <p>O: Low to medium</p> <p>D: Low to medium</p>	<p>C: minor to moderate adverse (not significant)</p> <p>O: minor adverse (not significant) negligible adverse (not significant) at Year 1 summer</p> <p>D: minor to moderate adverse (not significant)</p>	None	<p>C: minor to moderate adverse (not significant)</p> <p>O minor adverse (not significant) negligible adverse (not significant) at Year 1 summer</p> <p>D: minor to moderate adverse (not significant)</p>	A LEMP will be a requirement of the DCO.
<p>Representative viewpoint 7 – View southwest from public footpath 208/13 west of St. Asaph</p> <p>(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 13 and 14).</p>	No potential for significant effects.									
<p>Representative viewpoint 8 – View southeast from farm gate off Glascoed Road, adjacent to Bryncelyn</p>	No potential for significant effects.									

**MONA OFFSHORE WIND PROJECT**

Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 15 and 16).										
Representative viewpoint 9 – View south-southeast from public bridleway 201/9 east of Bodelwyddan Park  (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 17 and 18).	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Negligible O: Negligible D: Negligible	C: High O: High D: High	C: negligible to minor adverse (not significant)  O: no change to negligible adverse (not significant)  D: negligible to minor adverse (not significant)	None	C: negligible to minor adverse (not significant)  O: no change to negligible adverse (not significant)  D: negligible to minor adverse (not significant)	A LEMP will be a requirement of the DCO.
Representative viewpoint 10 – View south from Twthill adjacent to public footpath 206/27 / access track to Rhuddlan Castle  (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 19 and 20).	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Negligible O: Negligible D: Negligible	C: High O: High D: High	C: negligible to minor adverse (not significant)  O: negligible to minor adverse (not significant)  D: negligible to minor adverse (not significant)	None	C: negligible to minor adverse (not significant)  O: negligible to minor adverse (not significant)  D: negligible to minor adverse (not significant)	A LEMP will be a requirement of the DCO.
Representative viewpoint 11 – View west-southwest from Offa's Dyke Path, to the south of Moel Maenefa  (Volume 7, Annex 6.5: Landscape visualisations,	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Negligible O: Negligible	C: Very high O: Very high	C: minor adverse (not significant)  O: minor adverse (not significant)	None	C: minor adverse (not significant)  O: minor adverse (not significant)	A LEMP will be a requirement of the DCO.

**MONA OFFSHORE WIND PROJECT**

Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
of the Environmental Statement, Figures 21 and 22).					D: Negligible	D: Very high	D: minor adverse (not significant)		D: minor adverse (not significant)	
Representative viewpoint 12 – View west-southwest from Offa's Dyke Path, to the south of Pen-y-Mynydd (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 23 and 24).	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Negligible O: Negligible D: Negligible	C: Very high O: Very high D: Very high	C: minor adverse (not significant) O: minor adverse (not significant) negligible to minor adverse (not significant) at Year 15 D: minor adverse (not significant)	None	C: minor adverse (not significant) O: minor adverse (not significant) negligible to minor adverse (not significant) at Year 15 D: minor adverse (not significant)	A LEMP will be a requirement of the DCO.
Representative viewpoint 13 – View southwest from Cwtir Lane, south of junction with Heol Esgob (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 25 and 26).	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Negligible O: Negligible D: Negligible	C: High O: High D: High	C: minor adverse (not significant) O: negligible to minor adverse (not significant) D: minor adverse (not significant)	None	C: minor adverse (not significant) O: negligible to minor adverse (not significant) D: minor adverse (not significant)	A LEMP will be a requirement of the DCO.
Representative viewpoint 14 – View northwest from minor road close to junction with access track to Coed Kendrick/Wigfair Home Farm (Volume 7, Annex 6.5: Landscape visualisations,	No potential for significant effects.									

**MONA OFFSHORE WIND PROJECT**

Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
of the Environmental Statement, Figures 27 and 28).										
Representative viewpoint 15 – View south from North Wales Path (public footpath 26/30) / NCN 84 northwest of Rhuddlan  (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 29 and 30).	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Negligible  O: Negligible  D: Negligible	C: High  O: High  D: High	C: negligible to minor adverse (not significant)  O: negligible to minor adverse (not significant)  D: Moderate to minor adverse (not significant)	None	C: negligible to minor adverse (not significant)  O: negligible to minor adverse (not significant)  D: negligible to minor adverse (not significant)	A LEMP will be a requirement of the DCO.
Representative viewpoint 16 – View southwest from public footpath 206/999 to the southeast of Pengwern College  (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 31 and 32).	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Negligible  O: Negligible to no change  D: Negligible	C: High  O: High  D: High	C: negligible to minor adverse (not significant)  O: negligible to minor adverse (not significant) in winter to no change in summer  D: negligible to minor adverse (not significant)	None	C: negligible to minor adverse (not significant)  O: negligible to minor adverse (not significant) in winter to no change in summer  D: negligible to minor adverse (not significant)	A LEMP will be a requirement of the DCO.
Representative viewpoint 17 – View southwest from public footpath 208/10 to the west of Upper Denbigh Road	No potential for significant effects.									

**MONA OFFSHORE WIND PROJECT**

Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 33 and 34).										
<p>Representative viewpoint 18 – View southwest from Graig Fawr summit, Clwydian Range and Dee Valley NL</p> <p>(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 35 and 36).</p>	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	<p>C: Negligible</p> <p>O: Negligible</p> <p>D: Negligible</p>	<p>C: High</p> <p>O: High</p> <p>D: High</p>	<p>C: negligible to minor adverse (not significant)</p> <p>O: negligible to minor adverse (not significant)</p> <p>D: negligible to minor adverse (not significant)</p>	None	<p>C: negligible to minor adverse (not significant)</p> <p>O: negligible to minor adverse (not significant)</p> <p>D: negligible to minor adverse (not significant)</p>	A LEMP will be a requirement of the DCO.
<p>Representative viewpoint 19 – View southwest from Offa's Dyke Path / public footpath 405/12, Prestatyn hillside, Clwydian Range and Dee Valley NL</p> <p>(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 37 and 38).</p>	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	<p>C: Negligible</p> <p>O: Negligible</p> <p>D: Negligible</p>	<p>C: Very high</p> <p>O: Very high</p> <p>D: Very high</p>	<p>C: minor adverse (not significant)</p> <p>O: minor adverse (not significant)</p> <p>D: minor adverse (not significant)</p>	None	<p>C: minor adverse (not significant)</p> <p>O: minor adverse (not significant)</p> <p>D: minor adverse (not significant)</p>	A LEMP will be a requirement of the DCO.
<p>Representative viewpoint 20 – View southeast from the Wales Coast Path at Pont y Ddraig footbridge over the River Clwyd, Kinmel Bay, Rhyl</p>	No potential for significant effects.									

**MONA OFFSHORE WIND PROJECT**

Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 39 and 40).										
<p>Representative viewpoint 21 – View southwest from B5429, adjacent to Criccin Cross, southeast of Rhuddlan</p> <p>(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 41 and 42).</p>	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	<p>C: Negligible</p> <p>O: Negligible</p> <p>D: Negligible</p>	<p>C: Low</p> <p>O: Low</p> <p>D: Low</p>	<p>C: negligible adverse (not significant)</p> <p>O: negligible adverse (not significant)</p> <p>D: negligible adverse (not significant)</p>	None	<p>C: negligible adverse (not significant)</p> <p>O: negligible adverse (not significant)</p> <p>D: negligible adverse (not significant)</p>	A LEMP will be a requirement of the DCO.
<p>Representative viewpoint 22 – View west from public footpath 210/6 north of Wern Ddu</p> <p>(Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 43 and 44).</p>	No potential for significant effects.									
<p>Representative viewpoint 23 – View east from Wales Coast Path, to the east of Llandulas Beach</p>	✓			Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Small	C: High	C: minor to moderate adverse (not significant)	None	C: minor to moderate adverse (not significant)	A LEMP will be a requirement of the DCO.

**MONA OFFSHORE WIND PROJECT**

Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
Representative viewpoint 24 – View west from Wales Coast Path to the west of Abergele Beach	✓			Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Small	C: High	C: moderate adverse (not significant)	None	C: moderate adverse (not significant)	A LEMP will be a requirement of the DCO.
Representative viewpoint 25 – View northeast from Moelfre Isaf summit on public footpath 19/26	✓			Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Small	C: High	C: moderate adverse (not significant)	None	C: moderate adverse (not significant)	A LEMP will be a requirement of the DCO.
Representative viewpoint 26 – View southeast from public footpath 16/14 at Tan y Gopa Road	✓			Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Small	C: High (Medium for cyclists and low for drivers)	C: minor to moderate adverse (not significant)	None	C: minor to moderate adverse (not significant)	A LEMP will be a requirement of the DCO.
Representative viewpoint 27 – View east from B5381 at Bryn-Tirion/Ffynnon Wen southwest of Cwttir Lane	✓			Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Small	C: Low (Medium for cyclists)	C: minor adverse (not significant)	None	C: minor adverse (not significant)	A LEMP will be a requirement of the DCO.
Representative viewpoint 28 – View southeast from junction of B5831, at Glascoed Road	✓			Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape	C: Small	C: Low (Medium for Cyclists)	C: minor adverse (not significant)	None	C: minor adverse (not significant)	A LEMP will be a requirement of the DCO.

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Description of impact	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
				and Ecology Strategy Plan (Figure 6.5).						
Representative viewpoint 29 – View west-northwest from junction of B5381 at Glascoed Road	✓			Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Small	C: Low (Medium for Cyclists)	C: minor adverse (not significant)	None	C: minor adverse (not significant)	A LEMP will be a requirement of the DCO.
Representative viewpoint 30 – View east beyond southern end of public bridleway 208/3, adjacent to Coed Esgob  (Volume 7, Annex 6.5: Landscape visualisations, of the Environmental Statement, Figures 45 and 46).	✓	✓	✓	Implementation measures set out in Table 6.20, within the areas shown on the Illustrative Landscape and Ecology Strategy Plan (Figure 6.5).	C: Medium  O: Small  D: Medium	C: High  O: High  D: High	C: moderate adverse (not significant)  O: moderate adverse (not significant)  D: moderate adverse (not significant)	None	C: moderate adverse (not significant)  O: moderate adverse (not significant)  D: moderate adverse (not significant)	A LEMP will be a requirement of the DCO.

**MONA OFFSHORE WIND PROJECT**

**Table 6.25: Summary of potential cumulative environmental effects, mitigation, and monitoring.**

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

Landscape and visual resources and receptors	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
Visual receptors – Users of public rights of way (within 1 km of the Onshore Substation)		✓		Implementation of measures set out in Table 6.20, within the areas shown on Figure 6.5.	C:Negligible to small O: Negligible D: Negligible to small	C: Medium to high O: High to medium D: Medium to high	C: Minor to moderate (not significant) O: Moderate to minor adverse (not significant) D: Minor to moderate (not significant)	None	C: Minor to moderate (not significant) O: Moderate to minor adverse (not significant) D: Minor to moderate (not significant)	A LEMP will be a requirement of the DCO.
Visual receptors – Users of the Wales Coast Path		✓		Implementation of measures set out in Table 6.20, within the areas shown on Figure 6.5.	C: Negligible O: Negligible D: Negligible	C: High O: High D: High	C: Negligible adverse (not significant) O: Negligible adverse (not significant) D: Negligible adverse (not significant)	None	C: Negligible adverse (not significant) O: Negligible adverse (not significant) D: Negligible adverse (not significant)	A LEMP will be a requirement of the DCO. .
Visual receptors – Users of the Offa's Dyke Path National Trail	✓	✓	✓	Implementation of measures set out in Table 6.20, within the areas shown on Figure 6.5.	C: Small O: Small D: Small	C: Very high O: Very high D: Very high	C: Moderate adverse (not significant) O: Moderate adverse (not significant) D: Moderate adverse (not significant)	None	C: Moderate adverse (not significant) O: moderate adverse (not significant) D: Moderate adverse (not significant)	A LEMP will be a requirement of the DCO.

**MONA OFFSHORE WIND PROJECT**

Landscape and visual resources and receptors	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
Visual receptors – Visitors to the Clwydian Range and Dee Valley NL	✓	✓	✓	Implementation of measures set out in Table 6.20, within the areas shown on Figure 6.5.	C: Small O: Small D: Small	C: High O: High D: High	C: Moderate adverse (not significant) O: Moderate adverse (not significant) D: Moderate adverse (not significant)	None	C: Moderate adverse (not significant) O: Moderate adverse (not significant) D: Moderate adverse (not significant)	A LEMP will be a requirement of the DCO.

**Cumulative effects on the fabric of landscape – elements and features together with proposed development projects**

Landmap Visual and Sensory Aspect Areas	✓	✓	✓	Implementation of measures set out in Table 6.20, within the areas shown on Figure 6.5.	C: Small to medium O: Small D: Small to medium	C: Medium O: Medium D: Medium	C: Minor to Moderate adverse (not significant) O: Minor adverse (not significant) D: Minor to moderate adverse (not significant)	None	C: Minor to Moderate adverse O: Minor adverse (not significant) D: Minor to moderate adverse (not significant)	A LEMP will be a requirement of the DCO.
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**Cumulative effects on the aesthetic aspects of landscape resources together with proposed development projects**

Nationally designated landscapes - Clwydian Range and Dee Valley NL: Aesthetic aspects	✓	✓	✓	Implementation of measures set out in Table 6.20, within the areas shown on Figure 6.5.	C: Small O: Small D: Small	C: High O: High D: High	C: Moderate adverse (not significant) O: Moderate adverse (not significant) D: Moderate adverse (not significant)	None	C: Moderate adverse (not significant) O: Moderate adverse (not significant) D: Moderate adverse (not significant)	A LEMP will be a requirement of the DCO.
Locally designated landscapes- Rhyd y Foel to Abergele and Elwy and Aled Valleys SLAs	No potential for aesthetic aspects of these medium sensitivity landscape to be significantly affected.									

**MONA OFFSHORE WIND PROJECT**

Landscape and visual resources and receptors	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
LANDMAP Visual and Sensory Aspect Areas	✓	✓	✓	Implementation of primary and secondary measures set out in Table 6.20, within the areas shown on Figure 6.5 and reinstatement of hedgerows where open-cut techniques used for cable laying	C: Medium (direct) and Small (indirect) O: Negligible D: Medium	C:Medium O:Medium D: Medium	C: Moderate adverse (Cefn Estate mosaic rolling lowland Aspect Area) to minor adverse (Land north and east of Boddelwyddan Aspect Area) (not significant) O: Minor adverse (Cefn Estate mosaic rolling lowland Aspect Area) to negligible adverse Land north and east of Boddelwyddan Aspect Area (not significant) D: Moderate adverse (Cefn Estate mosaic rolling lowland Aspect Area) to minor adverse (Land north and east of Boddelwyddan Aspect Area) (not significant)	None	C: Moderate adverse (Cefn Estate mosaic rolling lowland Aspect Area) to (minor adverse Land north and east of Boddelwyddan Aspect Area) (not significant) O: Minor adverse (Cefn Estate mosaic rolling lowland Aspect Area) to negligible adverse Land north and east of Boddelwyddan Aspect Area (not significant) D: Moderate adverse (Cefn Estate mosaic rolling lowland Aspect Area) to minor adverse (Land north and east of Boddelwyddan Aspect Area) (not significant)	A LEMP will be a requirement of the DCO.
<b>Cumulative effects on the <u>overall character</u> of landscape resources together with proposed development projects</b>										
Nationally designated landscapes - Clwydian Range and Dee Valley NL: Overall character	✓	✓	✓	Implementation of measures set out in Table 6.20, within the areas shown on Figure 6.5.	C: Negligible O: Negligible D: Negligible	C: High O: High D: High	C: Minor adverse (not significant) O: Minor adverse (not significant) D: Minor adverse (not significant)	None	C: N/A O: moderate adverse (not significant) D: Minor adverse (not significant)	A LEMP will be a requirement of the DCO.

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Landscape and visual resources and receptors	Phase <sup>a</sup>			Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
Locally designated landscapes- Rhyd y Foel to Abergele and Elwy and Aled Valleys SLAs				No potential for aesthetic aspects of these medium sensitivity landscape to be significantly affected.						
LANDMAP Visual and Sensory Aspect Areas (Figure 6.3): Tier 1 and 3	✓	✓	✓	None on the footprint of the substation itself. Within the landscape mitigation area – Implementation of primary and secondary measures set out in Table 6.20, within the areas shown on Figure 6.5 and reinstatement of hedgerows where open-cut techniques used for cable laying	C: Small O: Negligible to small D: Small	C: Medium O: Medium D: Medium	C: Minor adverse (not significant) O: Negligible to minor adverse (not significant) D: Minor adverse (not significant)	None	C: Minor adverse (not significant) O: Negligible to minor adverse (not significant) D: Minor adverse (not significant)	A LEMP will be a requirement of the DCO.

## 6.18 References

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## **MONA OFFSHORE WIND PROJECT**

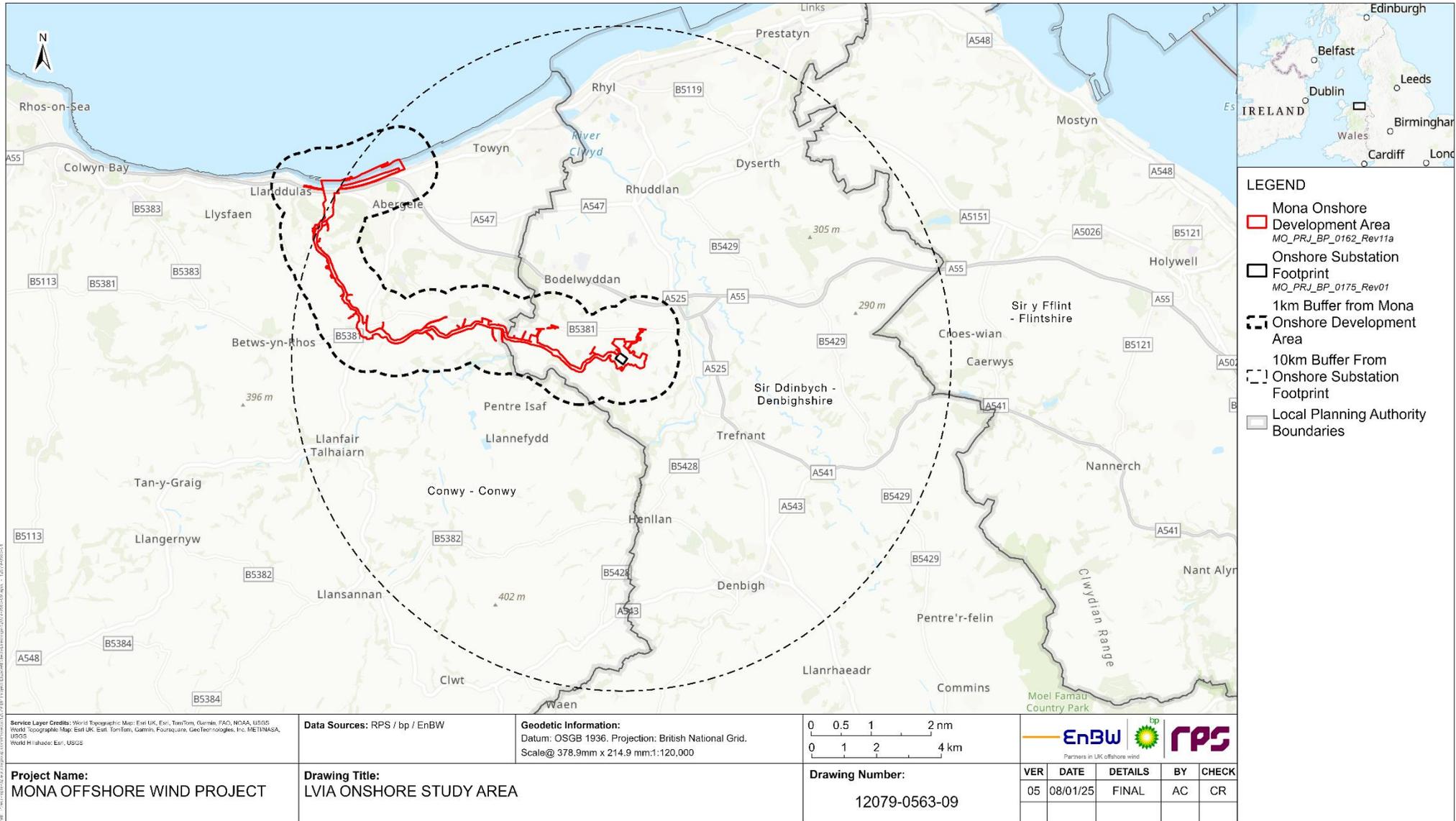
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## Appendix A: Plans

# MONA OFFSHORE WIND PROJECT



**Figure 6.1: LVIA study area – Mona onshore transmission assets**

MONA OFFSHORE WIND PROJECT

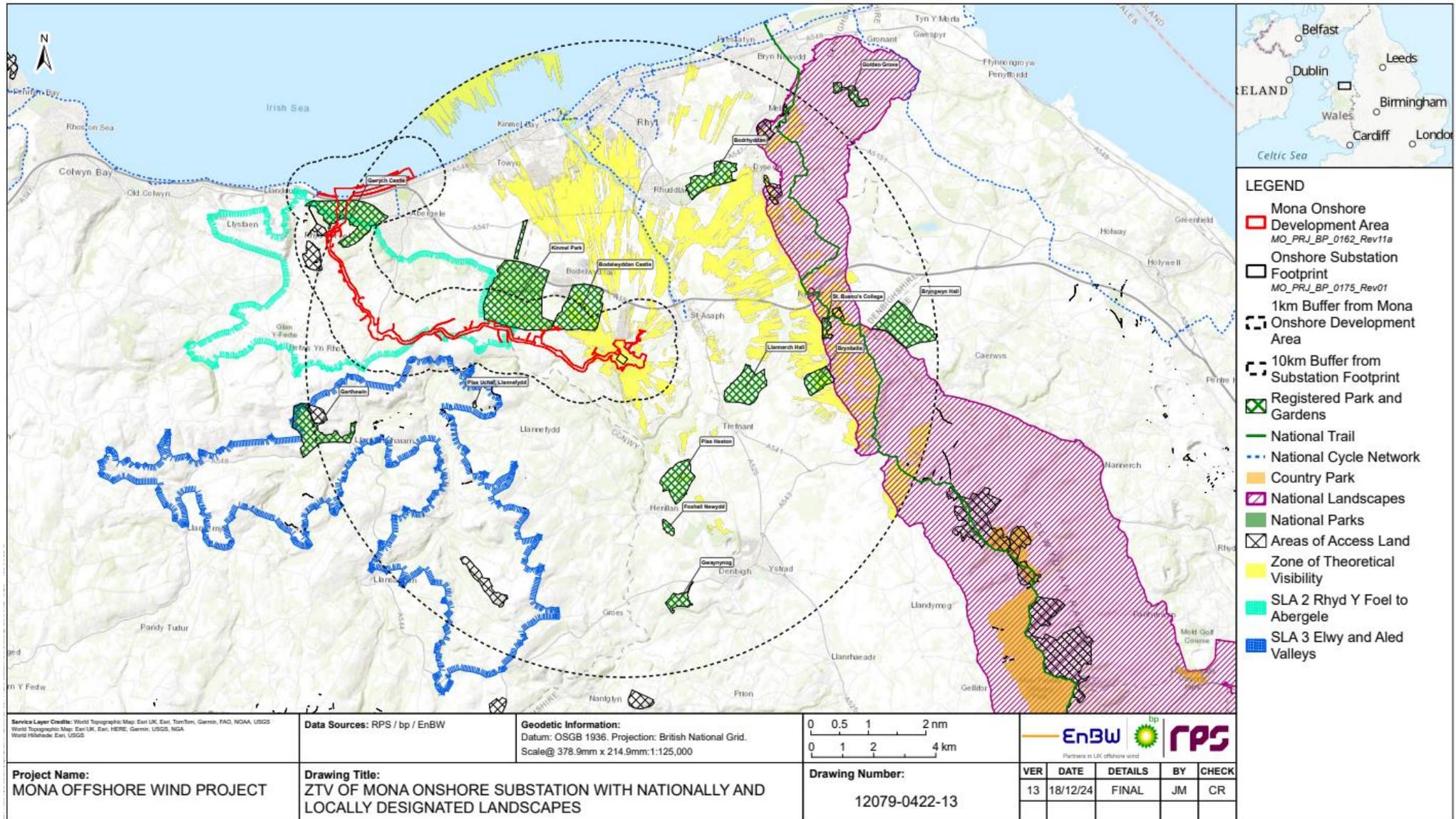


Figure 6.2: ZTV of Mona Onshore Substation with nationally and locally designated landscapes

# MONA OFFSHORE WIND PROJECT

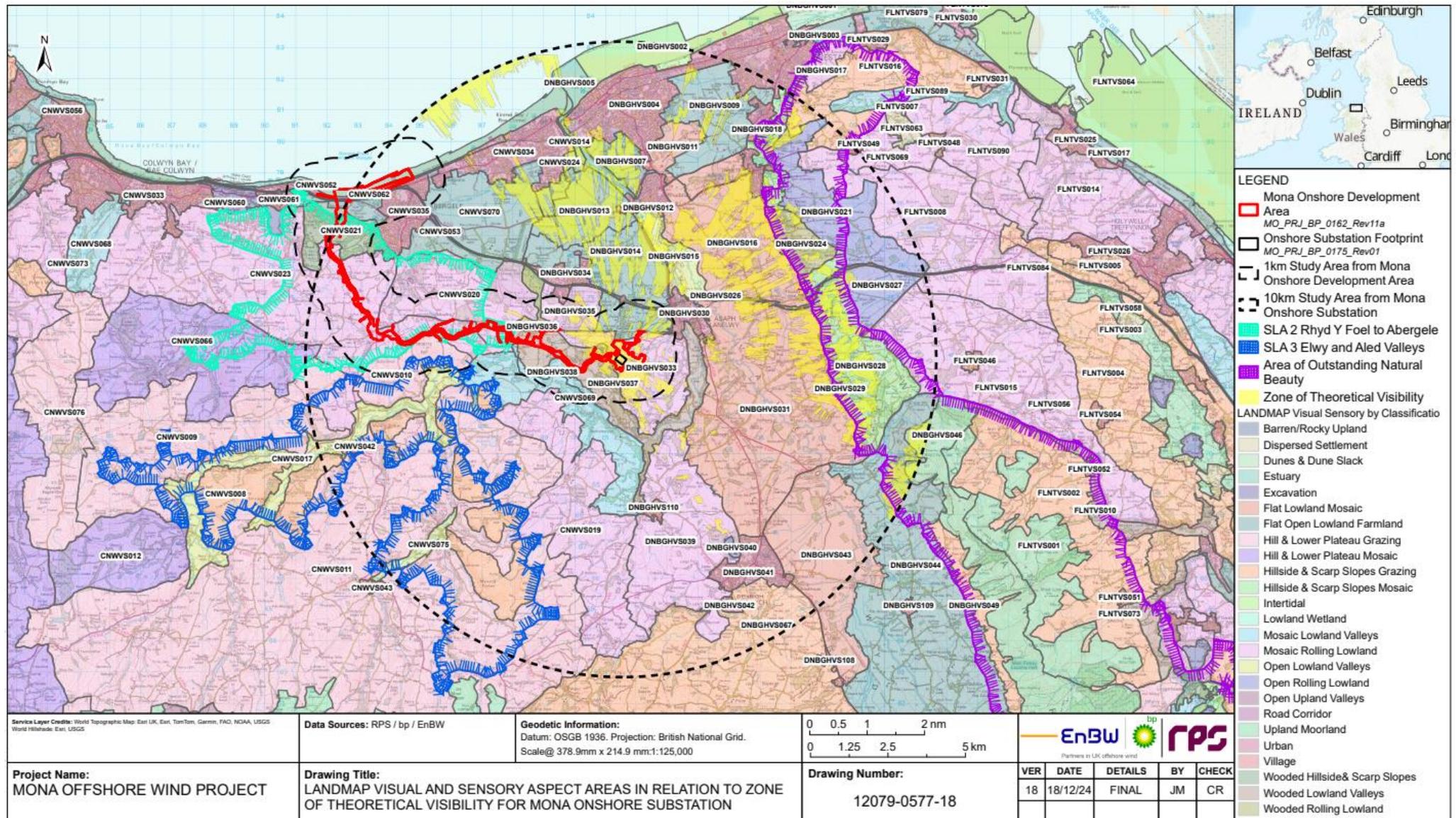


Figure 6.3: LANDMAP Visual and Sensory Aspect Areas with zone of theoretical visibility of Mona Onshore Substation

MONA OFFSHORE WIND PROJECT

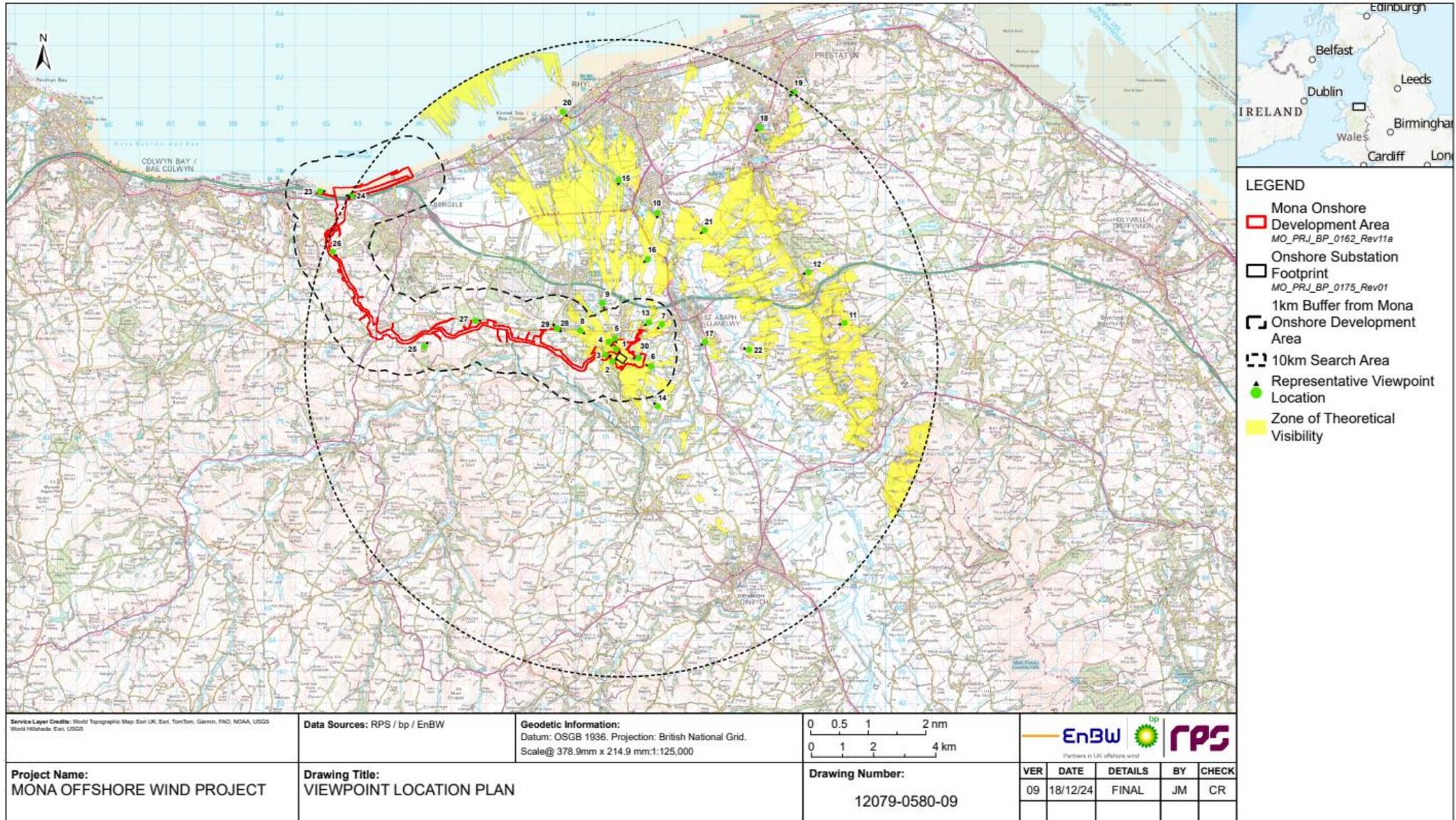


Figure 6.4: Viewpoint Location Plan with Mona Onshore Substation zone of theoretical visibility

MONA OFFSHORE WIND PROJECT

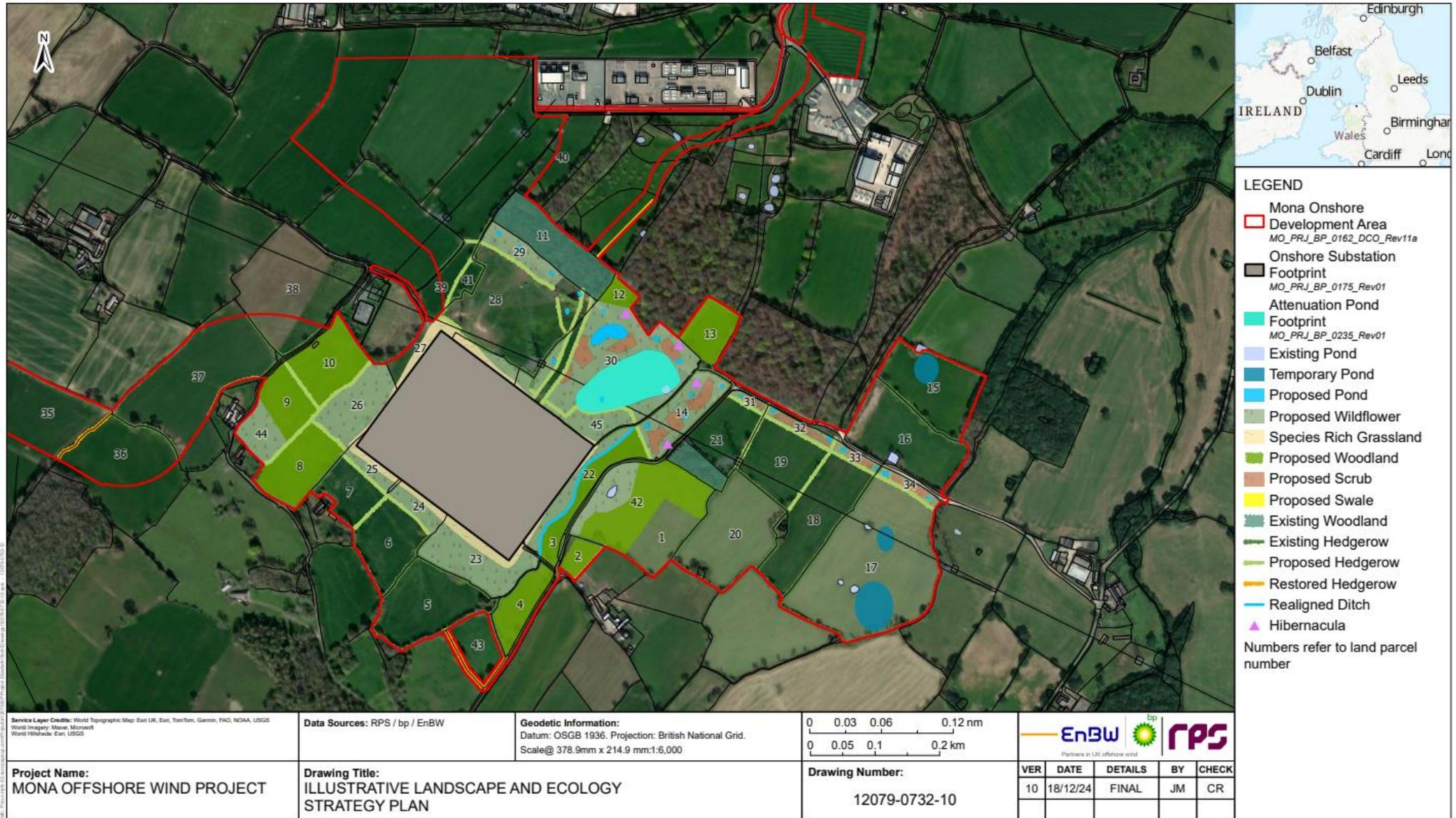


Figure 6.5: Illustrative Landscape and Ecology Strategy Plan

MONA OFFSHORE WIND PROJECT

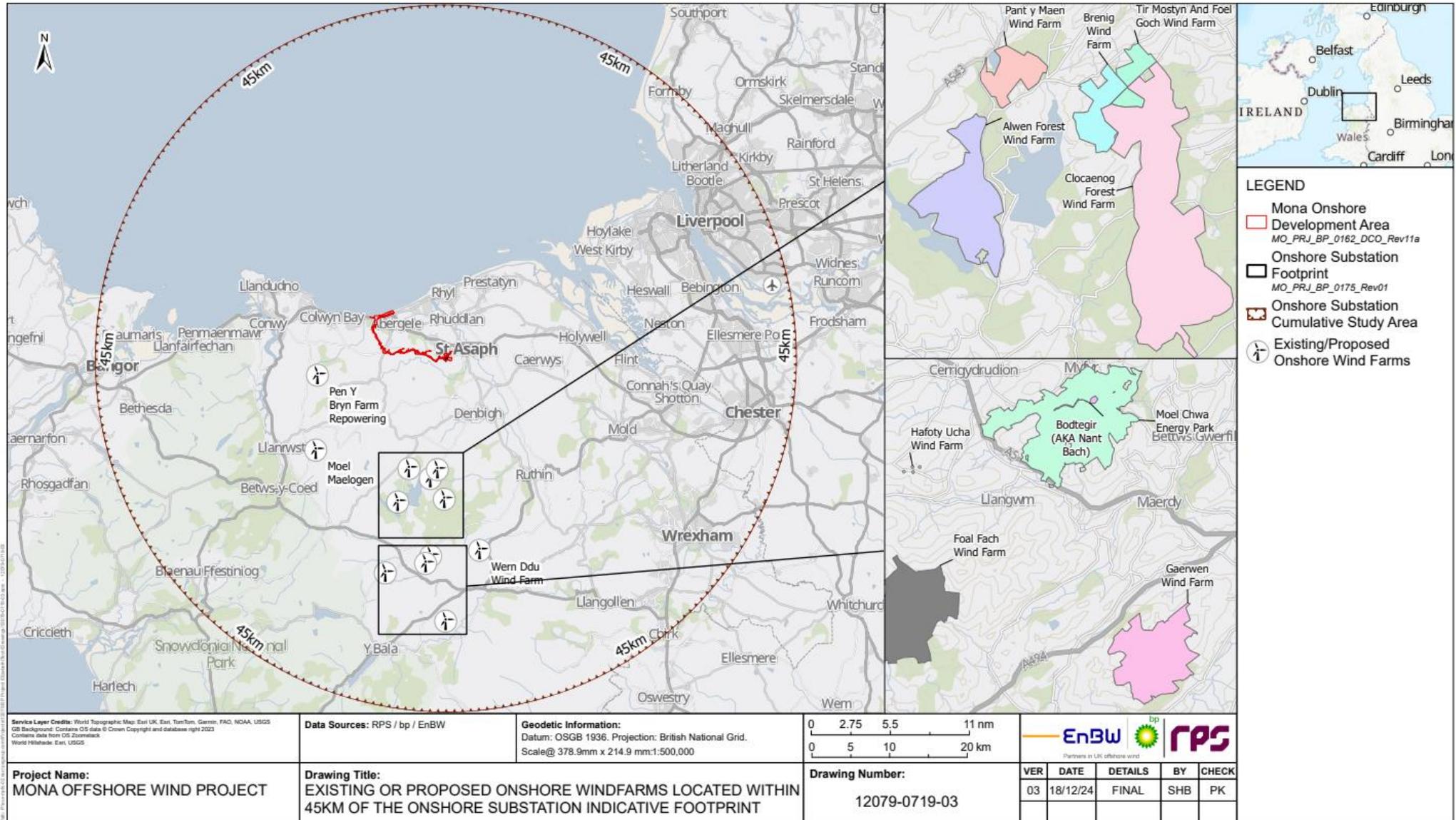


Figure 6.6: Existing or proposed onshore windfarms located within 45 km of the Mona Onshore Substation

MONA OFFSHORE WIND PROJECT

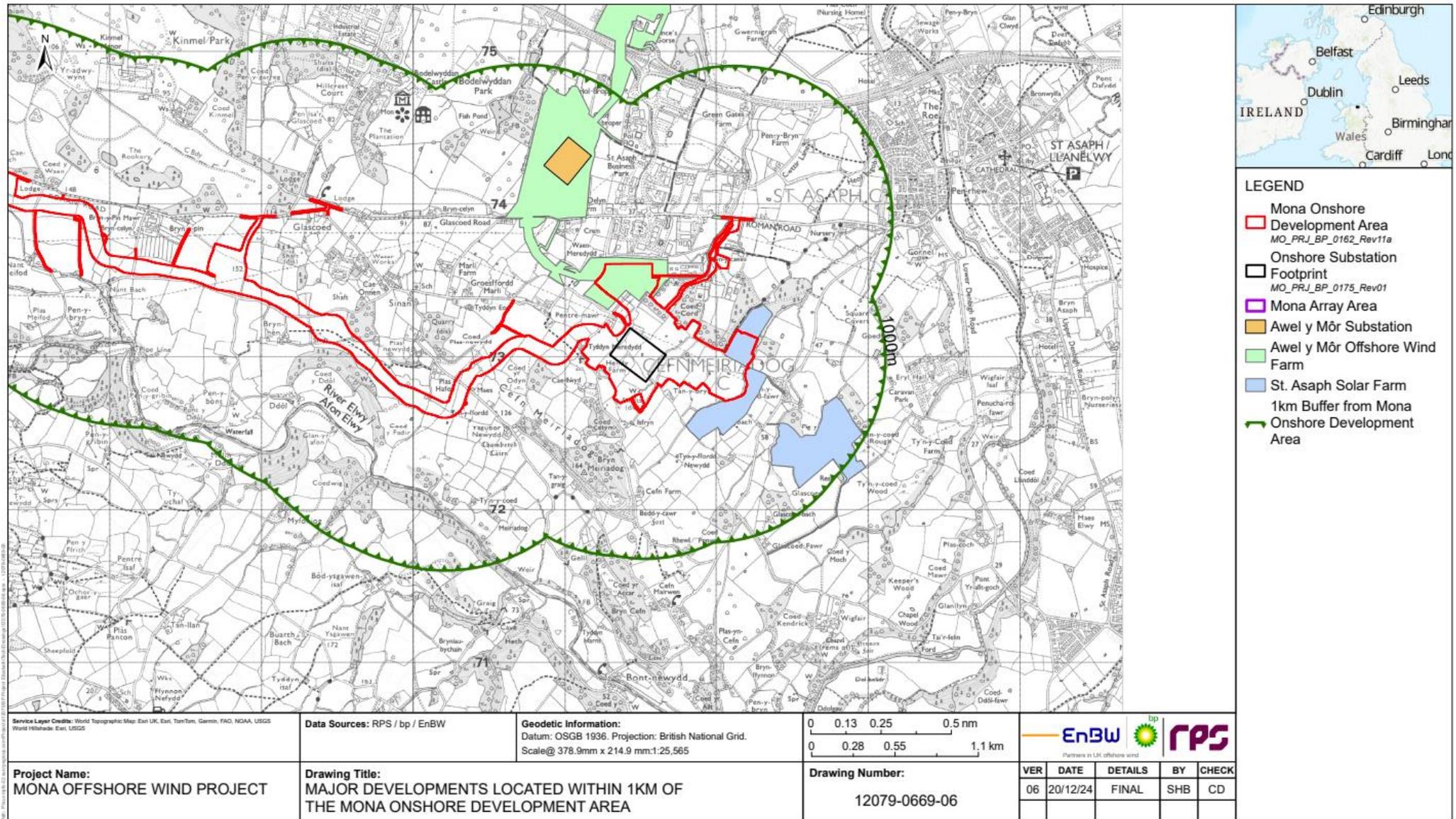
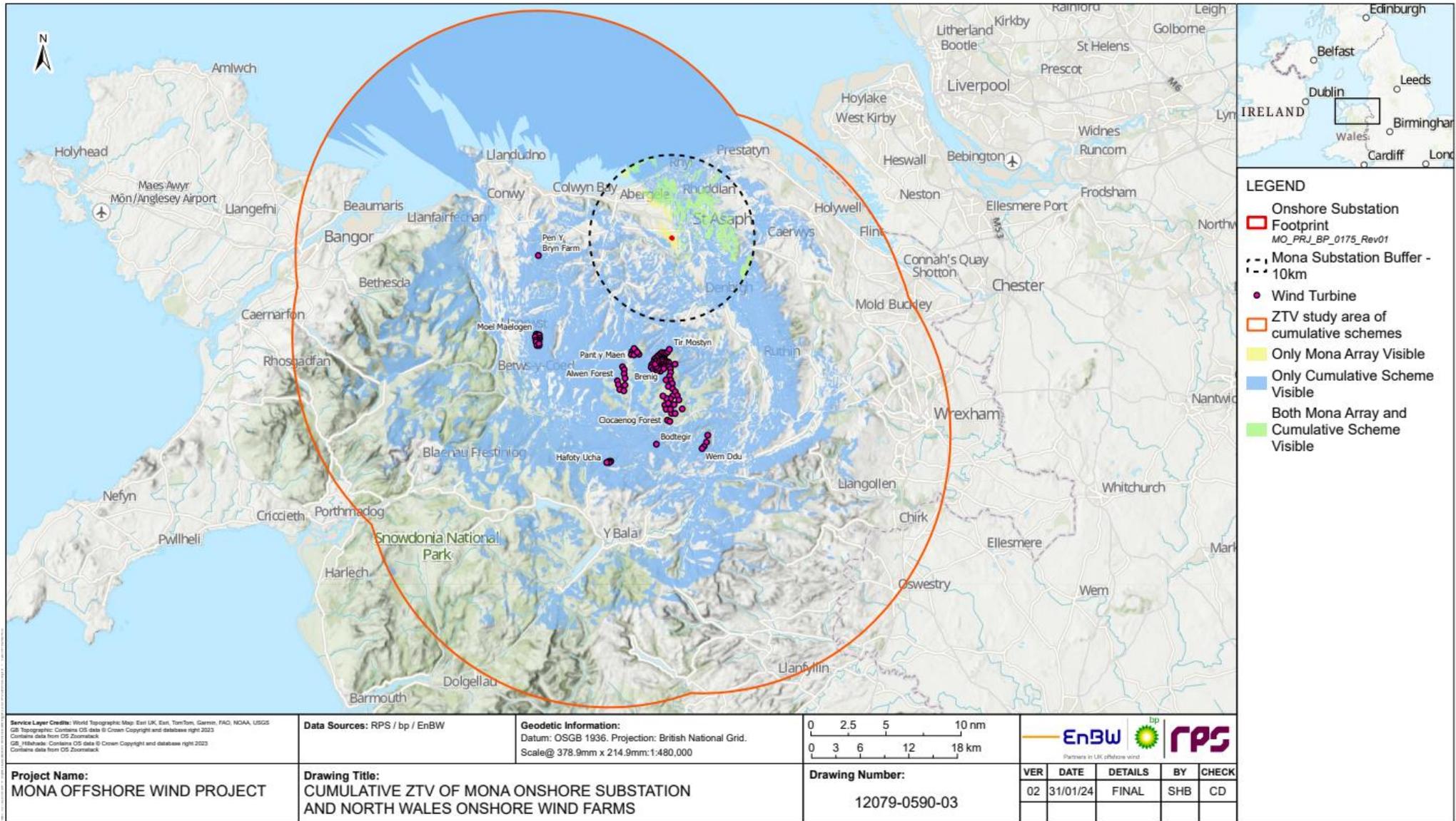


Figure 6.7: Major Developments located within 1 km of the Mona Onshore Development Area

# MONA OFFSHORE WIND PROJECT



**Figure 6.8: Cumulative ZTV of Mona Onshore Substation and North Wales onshore wind farms**

MONA OFFSHORE WIND PROJECT

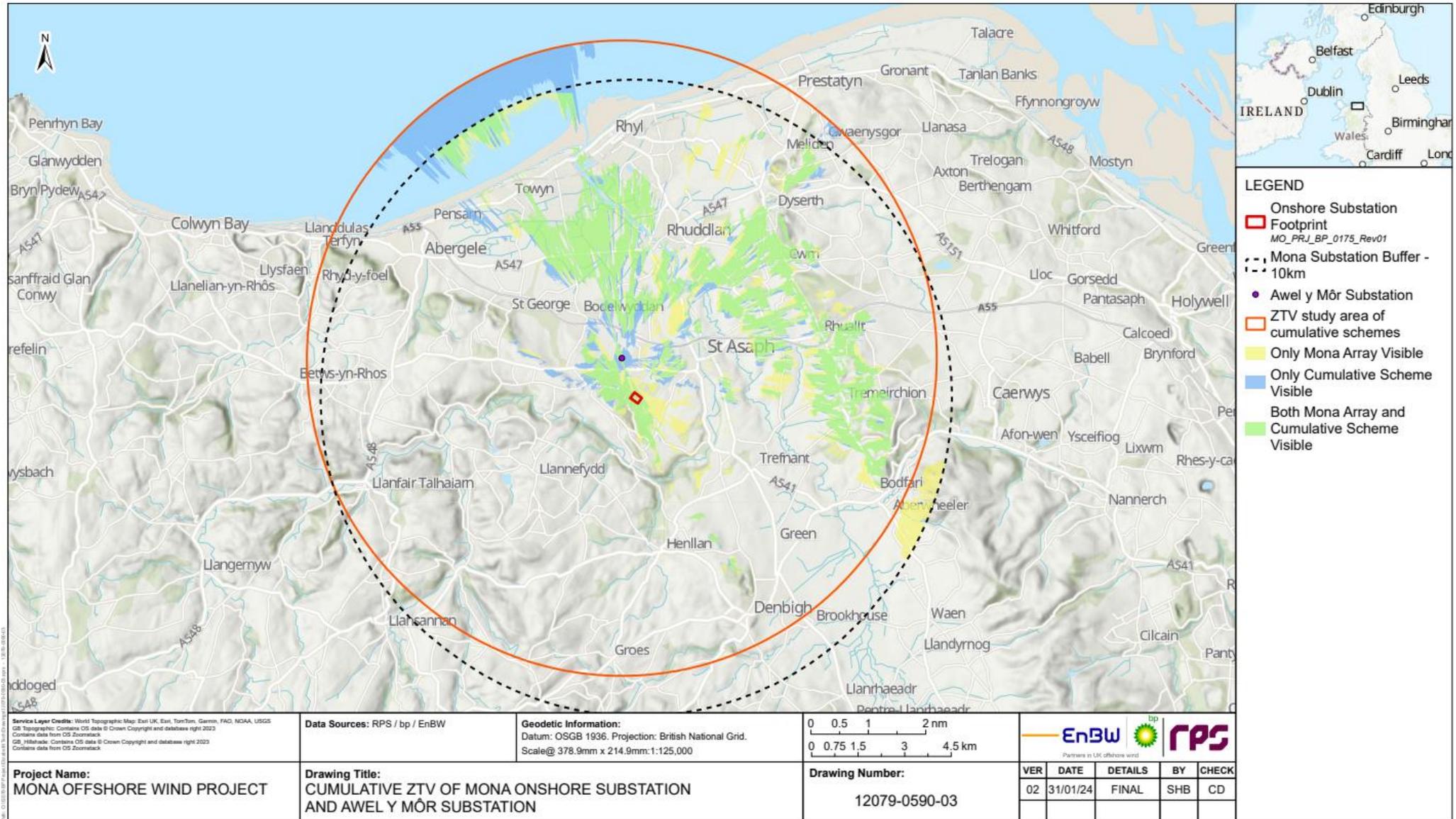


Figure 6.9: Cumulative ZTV of Mona Onshore Substation and Awel y Môr substation

MONA OFFSHORE WIND PROJECT

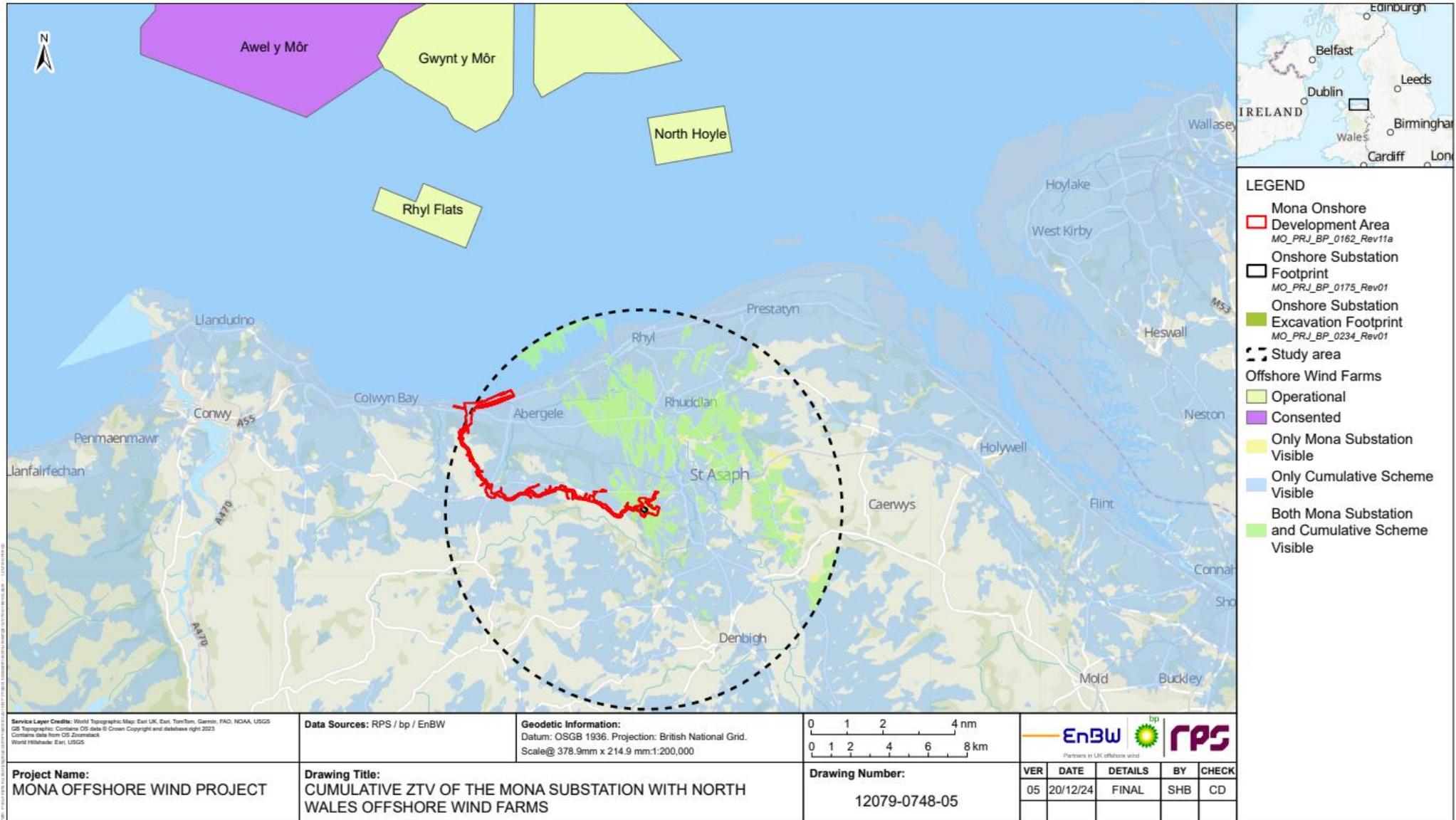


Figure 6.10: Cumulative ZTV of Mona Onshore Substation with North Wales offshore wind farms