Partners in UK offshore wind

MONA OFFSHORE WIND PROJECT

Preliminary Environmental Information Report

Volume 7, chapter 20: Land use and recreation

Image of an offshore wind farm

April 2023
FINAL

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Glossary

Term	Meaning
Agricultural Land Classification	Agricultural Land Classification (ALC) is a grading system used to assess and compare the quality of agricultural land in England and Wales. ALC is graded from 1 to 5. Grade 1 to 3a are categorised as Best and Most Versatile Land (BMV).
Farm Holding	Land and buildings used for horticulture, livestock, grazing and various other uses, which are commercial in nature.
Recreational resources	Recreational facilities, such as areas of public access and public rights of way.
Mona Onshore Substation Options	A collective term used to describe the two alternative locations for the Mona Onshore Substations (Option 2 and Option 7) within the Mona Proposed Onshore Development Area.
National Cycle Network	The National Cycle Network is a UK-wide network of signed paths and routes for walking, cycling, wheeling and exploring outdoors.
Active Travel Areas/Routes	Areas or walking/cycling routes identified in accordance with Active Travel (Wales) Act.

Units

Unit	Description
%	Percentage
km^2	Square kilometres
ha	Hectare
m	Metre
cm	Centimetre
mm	Millimetre

Acronyms

Acronym	Description
ALC	Agricultural Land Classification
Defra	Department for Environment, Farming and Rural Affairs
DMRB	Design Manual for Roads and Bridges
DCO	Development Consent Order
EIA	Environmental Impact Assessment
MAFF	Ministry of Agriculture Fisheries and Food
MAGIC	Multi-agency Geographic Information for the Countryside
MLWS	Mean Low Water Springs
NCR	National Cycle Route
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
OS	Ordnance Survey
PRoW	Public Right of Way
SEED	Sustainability and Environment Evidence Division
TAN	Technical Advisory Note
NGET	National Grid Electricity Transmission

20 Land use and recreation

20.1 Introduction

20.1.1 Overview

20.1.1.1 This chapter of the Preliminary Environmental Information Report (PEIR) presents the assessment of the potential impact of the Mona Offshore Wind Project on land use and recreation. 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.

20.1.1.2 The assessment presented is informed by the following technical chapters:

- Volume 3, chapter 22: Noise and vibration of the PEIR
- Volume 4, chapter 26: Seascape, landscape and visual resources of the PEIR
- Volume 4, chapter 29: Socio economics of the PEIR.

20.1.2 Purpose of chapter

20.1.2.1 The primary purpose of the PEIR is outlined in volume 1, chapter 1: Introduction of the PEIR. In summary, the primary purpose of an Environmental Statement is to support the Development Consent Order (DCO) application for Mona Offshore Wind Project under the Planning Act 2008 (the 2008 Act). The PEIR constitutes the Preliminary Environmental Information for Mona Offshore Wind Project and sets out the findings of the Environmental Impact Assessment (EIA) to date to support the pre-application consultation activities required under the 2008 Act. The EIA will be finalised following completion of pre-application consultation and the Environmental Statement will accompany the application to the Secretary of State for Development Consent.

20.1.2.2 The PEIR forms the basis for statutory consultation which will last for 47 days and conclude on 04 June 2023 as outlined in volume 1, chapter 2: Policy and legislation of the PEIR. At this point, comments received on the PEIR will be reviewed and incorporated (where appropriate) into the Environmental Statement, which will be submitted in support of the application for Development Consent scheduled for quarter one of 2023.

20.1.2.3 In particular, this PEIR chapter:

- Presents the existing environmental baseline established from desk studies, site-specific surveys and consultation
- Identifies any assumptions and limitations encountered in compiling the environmental information
- Presents the potential environmental effects on land use and recreation arising from the Mona Offshore Wind Project, based on the information gathered and the analysis and assessments undertaken
- Highlights any necessary monitoring and/or mitigation measures which could prevent, minimise, reduce or offset the possible environmental effects of the Mona Offshore Wind Project on land use and recreation.

20.1.3 Study areas

Land use and recreation study area

20.1.3.1 The land use and recreation study area focuses on areas landward of MLWS and is described below:

- The area of land to be temporarily or permanently occupied during construction, operations and maintenance, and decommissioning of the Mona Offshore Wind Project.
- The following aspects are considered within the land use and recreation study area:
  - Soil types and patterns
  - The quality of agricultural land within the land use and recreation study area, in accordance with the Ministry of Agriculture, Fisheries and Food (MAFF) ALC Guidelines (MAFF, 1988), including ‘best and most versatile’ Grade 1, 2 and 3a ALC land
  - Farm holdings and/or enterprises
  - Recreational resources (e.g. recreational facilities, areas of public access and Public Rights of Way)
  - Users of recreational resources, including pedestrians, cyclists, equestrians, and other recreational users.

20.1.3.2 This study area has been selected as it represents the area in which the land use and recreation impacts are considered likely to occur. The land use and recreation study area considers the farm holdings affected by the Mona Offshore Wind Project, which could include a wider area beyond the physical boundary of the development works themselves. Therefore, the farm holdings study area is based on the ownership boundaries of those farms with land that falls within the Mona Proposed Onshore Development Area.

20.1.3.3 The location and geographic extent of the land use and recreation study is presented in Figure 20.1 of this chapter below.

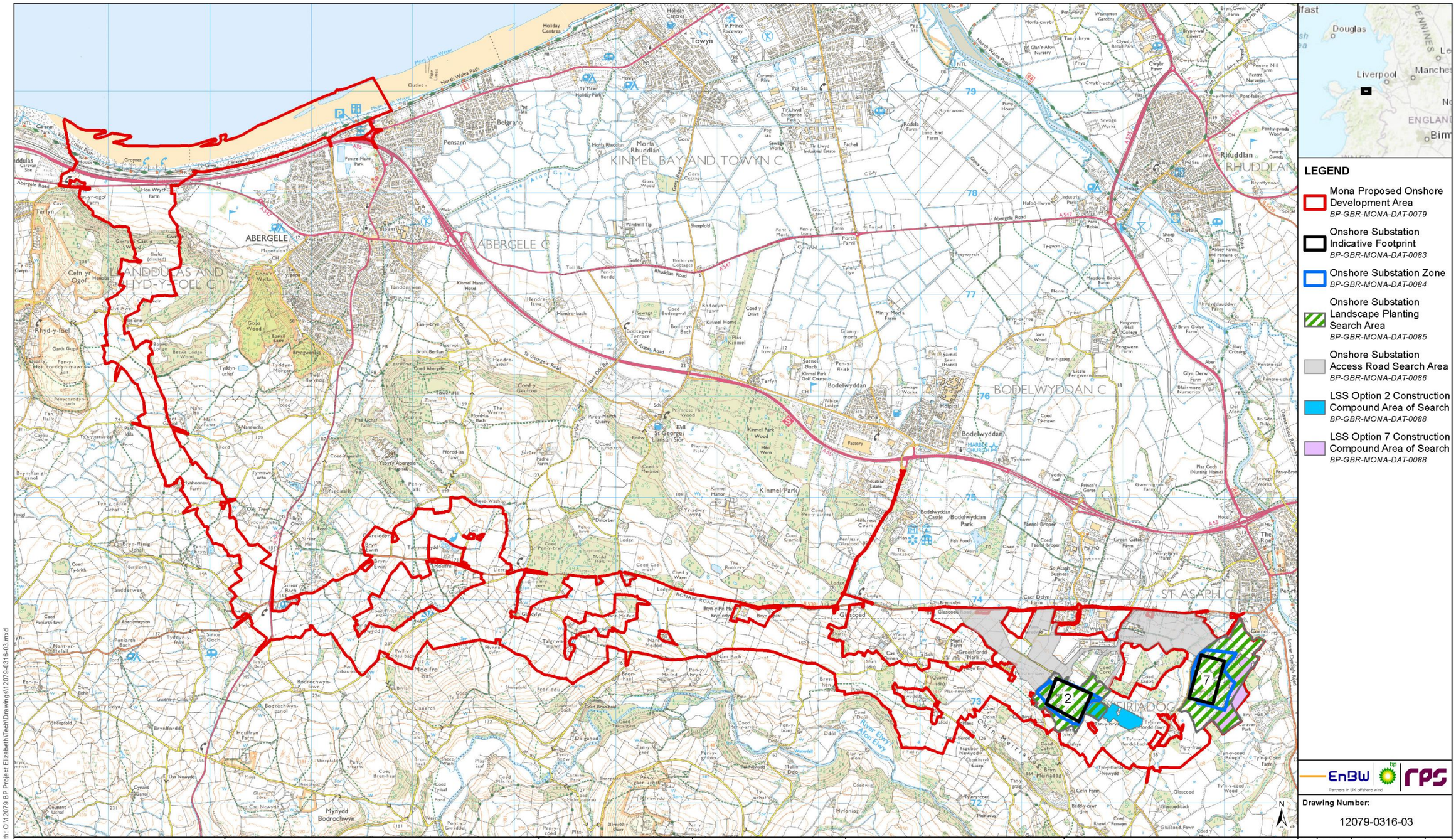

Figure 20.1: Land use and recreation study area.

20.2 Policy context

20.2.1.1 The policy context for the Mona Offshore Wind Project is set out in volume 1, chapter 2: Policy and legislation of the PEIR. This section includes specific policy that is relevant to the land use and recreation assessment.

20.2.2 National Policy Statements

20.2.2.1 Planning policy on renewable energy infrastructure is presented in volume 1, chapter 2: Policy and legislation of the PEIR. Planning policy on offshore renewable energy Nationally Significant Infrastructure Projects (NSIPs), specifically in relation to land use and recreation, is contained in the Overarching National Policy Statement (NPS) for Energy (EN-1; DECC, 2011a), the NPS for Renewable Energy Infrastructure (EN-3, DECC, 2011b)

20.2.2.2 NPS EN-1 and NPS EN-3 include guidance on what matters are to be considered in the assessment. These are summarised in Table 20.1 below. NPS EN-1 and 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 20.2 below.

20.2.2.3 Table 20.1 refers to the current NPSs, specifically NPS EN-1 (DECC, 2011a) and NPS EN-3 (DECC, 2011b) If the relevant NPSs are updated prior to the application for Development Consent, the revised NPSs will be fully considered in relation to land use and recreation within the Environmental Statement.

Table 20.1: Summary of the NPS EN-1 and NPS EN-3 provisions relevant to Land Use and Recreation.

Summary of NPS EN-3 and EN-1 provision	How and where considered in the PEIR
The Environmental Statement should identify existing and proposed land uses near the project and assess the effects of the development (paragraph 5.10.5 of NPS EN-1).	The baseline environment has been identified for land use and likely effects assessed within this chapter of the PEIR (see section 20.4).
Pre-application discussions between the applicant and the Local Authorities should identify any concerns regarding land use, having regard to the development plan and other relevant applications (paragraph 5.10.7 of NPS EN-1).	Consultation has taken place during the development of the Mona Offshore Wind Project between the Applicant and Local Authorities. Consultation has taken place with the Local Authorities to identify relevant proposed developments for cumulative assessment.
Applicants should seek to minimise effects on 'best and most versatile' agricultural land except where this would be inconsistent with other sustainability considerations. Applicants should preferably use land in areas of poorer quality and should also identify any effects and seek to minimise impacts on soil quality (paragraph 5.10.8 of NPS EN-1).	This chapter of the PEIR considers the effects on agricultural land and soils, including effects on best and most versatile land (see section 20.8). Land take will be reduced further as a result of refining the cable corridor which will be reported in the Environmental Statement. Measures proposed to be adopted as part of the project to minimise impacts on soil quality are set out in section 20.7.
Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place (paragraph 5.10.9 of NPS EN-1).	This matter is addressed in volume 3, chapter 16: Geology, hydrogeology and ground conditions of the PEIR.
Paragraph 5.10.14 of NPS EN-1 states that consent should not be granted for development on existing open space, sports and recreational buildings and land unless they are surplus to requirements and, the Secretary of State, when deciding if the benefits outweigh the potential loss of facilities, is to take into account any positive proposals made by the applicant to provide new, improved or compensatory land or facilities.	An assessment of effects on recreational resources is provided in this chapter of the PEIR (see section 20.8) and includes the identification of any such resources that may be affected by the Mona Offshore Wind Project.
Applicants should include appropriate mitigation measures to address adverse effects on coastal access, National Trails and other Public Rights of Way (PRoW) (paragraph 5.10.24 of NPS EN-1).	An assessment of effects on coastal access and PRoW is provided in this chapter of the PEIR, including National Trails and other promoted routes (see section 20.8).

Table 20.2: Summary of NPS EN-1 and NPS EN-3 policy on decision making relevant to Land Use and Recreation.

Summary of NPS EN-1 and EN-3 provision	How and where considered in the PEIR
The examining authority should ensure that developments are not located on the best and most versatile agricultural land without justification. It should give little weight to the loss of poorer quality agricultural land except in areas where particular agricultural practices contribute to the quality and character of the environment or economy (NPS EN-1, 5.10.15).	The impacts on agricultural land quality arising from the Mona Offshore Wind Project are set out in section 20.8 below.
The examining authority should not grant consent for a development on existing open space, sports/recreational buildings or land unless an assessment to show the open space/land to be surplus to requirements has been undertaken or the benefits of the project outweigh the potential loss of such facilities, taking into account any positive proposals (e.g. compensatory measures made by the Applicant) (NPS EN-1, 5.10.14).	Effects arising from construction activities associated with the Mona Onshore Cable Corridor and Mona Onshore 400kV Corridor on PRoW would be temporary, with land and routes fully restored following construction. The impacts on all recreational resources arising from the location of the Mona Onshore Substation are set out in section 20.8 below.
In considering the impact on maintaining coastal recreation sites and features, the Secretary of State should expect applicants to have taken advantage of opportunities to maintain and enhance access to the coast (paragraph 5.10.16 of NPS EN-1).	An assessment of effects of the Mona Offshore Wind Project on coastal recreation is set out in section 20.8 below.

20.2.3 Planning Policy Wales – Edition 11

20.2.3.1 The assessment of potential changes to land use and recreation has also been made with consideration to the specific policies set out in the Planning Policy Wales – Edition 11 (Welsh Government, 2021a). Key provisions are set out in Table 20.3 along with details as to how these have been addressed within the assessment.

Table 20.3: Planning Policy Wales – Edition 11 policies of relevance to land use and recreation.

Policy	Key provisions	How and where considered in the PEIR
3. Strategic and Spatial Choices - Definition of Previously Developed Land	Agricultural land of grades 1, 2 and 3a of the Agricultural Land Classification system (ALC) is the best and most versatile and should be conserved as a finite resource for the future (paragraph 3.58 of Planning Policy Wales – Edition 11).	Baseline information relating to land use and recreation receptors is provided in section 20.4 and the assessment of effects on these receptors is provided in section 20.8 of this chapter. Further information with regard to ALC and soils within the land use and recreation study area is provided in volume 7, annex 20.1 of the PEIR.
	When considering the search sequence and in development plan policies and development management decisions considerable weight should be given to protecting such land from development, because of its special importance. Land in grades 1, 2 and 3a should only be developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. If land in grades 1, 2 or 3a does need to be developed, and there is a choice between sites of different grades, development should be directed to land of the lowest grade (paragraph 3.59 of Planning Policy Wales – Edition 11).	
6. Distinctive & Natural Places – Biodiversity and Ecological Networks	Development plan strategies, policies and development proposals must consider the need to: • Safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat (paragraph 6.4.3 of Planning Policy Wales – Edition 11).	

20.2.4 Technical Advice Note 6 Planning for Sustainable Rural Communities

20.2.4.1 The assessment of potential changes to land use and recreation has also been made with consideration to the specific policies set out in the Technical Advice Note 6 Planning for Sustainable Rural Communities (Welsh Government, 2010). Key provisions are set out in Table 20.4 along with details as to how these have been addressed within the assessment.

20.2.4.2 This Technical Advice Note should be read in conjunction with Planning Policy Wales – Edition 11 (Welsh Government, 2021a) and provides practical guidance on the role of the planning system in supporting the delivery of sustainable rural communities.

Table 20.4: Technical Advice Note 6 Planning for Sustainable Rural Communities policies of relevance to land use and recreation.

Policy	Key provisions	How and where considered in the PEIR
6. Sustainable agriculture – 6.2 Development involving agricultural land	When preparing development plans and considering planning applications, planning authorities should consider the quality of agricultural land and other agricultural factors and seek to minimise any adverse effects on the environment (paragraph 6.2.1 of Technical Advice Note 6).	Baseline information relating to land use and recreation receptors is provided in section 20.4 and the assessment of effects on these receptors is provided in section 20.8 of this chapter. Further information with regard to ALC land within the land use and recreation study is provided in volume 7, annex 20.1 of the PEIR.
	Planning authorities should bear in mind that, once land is built on, the restoration of semi-natural and natural habitats and landscape features is rarely possible and usually expensive, and archaeological and historic features cannot be replaced. Also, once agricultural land is developed, even for 'soft' uses such as golf courses, its return to agriculture as best and most versatile agricultural land is seldom practicable (paragraph 6.2.2 of Technical Advice Note 6).	
	Agricultural land is classified by grades according to the extent to which its physical or chemical characteristics impose long term limitations on agricultural use for food production. There are 5 grades of land numbered 1 to 5, with grade 3 divided into two sub-grades. The best and most versatile land falls into grades 1, 2 and sub-grade 3a and is the most flexible, productive and efficient in response to inputs (paragraph 6.2.3 of Technical Advice Note 6).	
	The nature of other development and its proximity to farms can influence the type of farming and the extent to which inherent land quality can be exploited. Certain locations may have agricultural advantages such as accessibility to markets, processing plant and certain industries associated with agriculture. Farms with development close to them tend to suffer from trespass and other forms of disturbance which may affect the efficiency and upkeep of holdings. It may be possible to reduce	Baseline information relating to land use and recreation receptors is provided in section 20.4 and the assessment of effects on these receptors is provided in section 20.8 of this chapter.

Policy	Key provisions	How and where considered in the PEIR
	any detrimental effects of development by locating compatible uses adjacent to farm land, by landscaping or by detailed provision of amenity space and green corridors in the layout of residential development. Technical Advice Note 6: Planning for Sustainable Rural Communities 32 (paragraph 6.2.5 of Technical Advice Note 6).	
	Farms vary considerably in size, type of farm business and layout. The loss of part of a holding can have important implications for the remainder. The effect of severance and fragmentation upon the farm and its structure may be relevant (paragraph 6.2.6 of Technical Advice Note 6)	
Annex B	B2. There may be proposals for development for non-agricultural purposes requiring significant amounts of the best and most versatile agricultural land. In such cases, DRA has the statutory right to be consulted, so that planning authorities are made fully aware of the agricultural implications. Article 10(1), paragraph (w) of the Table to the Town and Country Planning (General Development Procedure) Order 1995 (GDPO) (S.I .No 1995/419), requires planning authorities to consult WAG before granting any planning permission which is not in accordance with the development plan, and would involve the loss of 20 hectares or more of grades 1, 2 or 3a agricultural land or a loss which is less than 20 hectares but is likely to lead to further losses amounting cumulatively to 20 hectares or more. If the planning authority is uncertain whether the land involved is grades 1, 2 or 3a they may seek advice from Sustainability and Environment Evidence Division (SEED) on its classification.	This is considered in the assessment of the significance of potential effects on best and most versatile agricultural land in Section 20.8 of this chapter.

Future Wales - The National Plan 2040

20.2.4.3 The assessment of potential changes to land use and recreation has also been made with consideration to the specific policies set out in the Future Wales - The National Plan 2040 (Welsh Government, 2021b). Key provisions are set out in Table 20.5 along with details as to how these have been addressed within the assessment.

Table 20.5: Future Wales - The National Plan 2040 policies of relevance to land use and recreation.

Policy	Key provisions	How and where considered in the PEIR
Policy 9 - Resilient Ecological Networks and Green Infrastructure	To ensure the enhancement of biodiversity, the resilience of ecosystems and the provision of green infrastructure, the Welsh Government will work with key partners to: • Identify areas which should be safeguarded and created as ecological networks for their importance for adaptation to climate change, for habitat protection, restoration, or creation, to protect species, or which provide key ecosystems services, to ensure they are not unduly compromised by future development. • Identify opportunities where existing and potential green infrastructure could be maximised as part of placemaking, requiring the use of nature-based solutions as a key mechanism for securing sustainable growth, ecological connectivity, social equality, and well-being.	Baseline information relating to land use and recreation receptors is provided in section 20.4 and the assessment of effects on these receptors is provided in section 20.8 of this chapter.
Policy 12 – Regional Connectivity	The Welsh Government will work with Transport for Wales, local authorities, operators, and partners to deliver the following measures to improve regional connectivity [Inter alia]: • Active Travel – Prioritising walking and cycling for all local travel. We will support the implementation of the Active Travel Act to create comprehensive networks of local walking and cycling routes that connect places that people need to get to for everyday purposes. • Active travel must be an essential and integral component of all new developments, large and small. Planning authorities must integrate site allocations, new development, and infrastructure with active travel networks and, where appropriate, ensure new development contributes towards their expansion and improvement.	Baseline information relating to land use and recreation receptors is provided in section 20.4 and the assessment of effects on these receptors is provided in section 20.8 of this chapter. Further information with regard to recreational resources located within the land use and recreation study is provided in volume 7, annex 20.3 of the PEIR. There are no Active Travel Areas or Active Travel Routes within the land use and recreation study area.

Technical Advice Note 16: Sport, Recreation and Open Space

20.2.4.4 The assessment of potential changes to land use and recreation has also been made with consideration to the specific policies set out in the Technical Advice Note 16: Sport, Recreation and Open Space (Welsh Government, 2009). Key provisions are set out in Table 20.6 along with details as to how these have been addressed within the assessment.

20.2.4.5 Technical Advice Note 16 advises on the role of the planning system in making provision for sport and recreational facilities and informal open spaces, as well as protecting existing facilities and open spaces in urban and rural areas in Wales.

Table 20.6: Technical Advice Note 16 policies of relevance to land use and recreation.

Policy	Key provisions	How and where considered in the PEIR
3. Development Plans – Protecting and Enhancing Existing Sport and Recreation Facilities and Open Spaces	Open space, particularly that with a significant amenity, nature conservation or recreational value should be protected (paragraph 3.12, Technical Advice Note 16).	Baseline information relating to land use and recreation receptors is provided in section 20.4 and the assessment of effects on these receptors is provided in section 20.8 of this chapter. Further information with regard to recreational resources located within the land use and recreation study area is provided in volume 7, annex 20.3 of the PEIR.
3. Development Plans – Accessibility and Rights of Way	PRoW should be protected, and information about them, shown on Definitive Maps and statements, should be considered when assessing applications for planning permission (paragraph 3.41, Technical Advice Note 16).	Baseline information relating to land use and recreation receptors is provided in section 20.4 and the assessment of effects on these receptors is provided in section 20.8 of this chapter. Further information with regard to recreational resources located within the land use and recreation study area is provided in volume 7, annex 20.3 of the PEIR.

Well-being Future Generations Act 2015

20.2.4.6 The Well-being Future Generations Act 2015 requires public bodies to do things in pursuit of the economic, social, environmental and cultural well-being of Wales. The seven well-being goals set out in in Well-being Future Generations Act 2015 are:

1. A prosperous Wales
2. A resilient Wales
3. A healthier Wales
4. A more equal Wales
5. A Wales of cohesive communities
6. A Wales of vibrant culture and thriving Welsh Language
7. A globally responsible Wales.

The Active Travel (Wales) Act 2013

20.2.4.7 The Active Travel (Wales) Act 2013 aims to improve infrastructure and increase levels of walking and cycling and places duties on local authorities and the Welsh Government to map active travel infrastructure including active travel routes that have generally achieved the statutory design guidance.

20.2.4.8 However, there are no Active Travel Areas or Active Travel Routes located within the land use and recreation study area.

20.2.5 Local planning policies

20.2.5.1 The assessment of potential changes to land use and recreation has also been made with consideration to the specific policies set out in Adopted Local Development Plans of Conwy County Borough Council (adopted in October 2013) and Denbighshire County Council (adopted in June 2013). Replacement Local Development Plans are currently being drafted and relevant policies will be considered upon publication. Key provisions are set out in Table 20.7 along with details as to how these have been addressed within the assessment.

Table 20.7: Local Planning Policy of relevance to land use and recreation.

Policy	Key provisions	How and where considered in the PEIR
Conwy County Borough Council: Adopted Local Development Plan (October 2013)		
Policy DP/4 – Development criteria	Planning permission will not be granted where the proposed development would have an unacceptable adverse impact on the best and most versatile agricultural land.	Baseline information relating to land use and recreation receptors is provided in section 20.4 and the assessment of effects on these receptors is provided in section 20.8 of this chapter.
Strategic Policy NTE/1 – The Natural Environment	Seeking to minimise the loss of Grade 2 and 3a agricultural land to new development, in particular, in the east of the Urban Development Strategy Area, in line with Policy DP/6.	
Policy CFS/12 – Safeguarding existing open space	Existing recreation, public open space, allotments and amenity green space will be protected and where possible enhanced.	
Policy PSE 1 – North Wales Coast Strategic Regeneration Area	In the North Wales Coast Strategic Regeneration Area the Council will support proposals which [inter alia]: enable the retention, enhancement and development of tourism related facilities.	
Policy PSE 13 - Coastal tourism protection zones	Within the coastal tourism protection zones shown on the proposals maps proposals which would result in the loss of tourism facilities will not be supported.	
Denbighshire County Council: Adopted Local Development Plan (June 2013)		
Policy VOE 1 – Key Areas of importance	International obligations and national policy provide protection to areas that are designated because of their geomorphological features, rare species and habitats, archaeological historic importance, agricultural value, or amenity benefits to local communities.	Baseline information relating to land use and recreation receptors is provided in section 20.4 and the assessment of effects on these receptors is provided in section 20.8 of this chapter.
Policy BSC 11 – Recreation and open space	Existing recreation, public open space, allotments and amenity green space will be protected and where possible enhanced.	
Policy PSE 1 – North Wales Coast Strategic Regeneration Area	In the North Wales Coast Strategic Regeneration Area the Council will support proposals which [inter alia]: enable the retention, enhancement, and development of tourism related facilities.	
Policy PSE 13 - Coastal tourism protection zones	Within the coastal tourism protection zones shown on the proposals maps proposals which would result in the loss of tourism facilities will not be supported.	

20.3 Consultation

20.3.1.1 A summary of the key issues raised during consultation activities undertaken to date specific to land use and recreation is presented in Table 20.8 below, together with how these issues have been considered in the production of this PEIR chapter.

Table 20.8: Summary of key consultation issues raised during consultation activities undertaken for the Mona Offshore Wind Project relevant to land use and recreation.

Date	Consultee and type of response	Issues raised	Response to issue raised and/or were considered in this chapter
June 2022	The Planning Inspectorate – Scoping Opinion	Disruption and reduced access to agricultural land during the operations and maintenance phase of the onshore transmission assets. The Applicant proposes to scope out the impact of disruption and reduced access to agricultural land during operation on the basis that any permanent effects on agricultural land would occur during the construction phase and impacts during the operations and maintenance phase would be limited to maintenance and repair activities which would be small in magnitude and infrequent. The Planning Inspectorate agrees this matter can be scoped out on this basis.	This approach has been adopted within the land use assessment in section 20.8 of this chapter.
June 2022	The Planning Inspectorate – Scoping Opinion	Disruption and reduced access to recreation resources during the operations and maintenance of the onshore transmission assets. The Applicant proposes to scope out impacts arising during the operations and maintenance phase on the basis that impacts will be limited to maintenance and repair activities which would be small in magnitude, short term and infrequent and so potential effects are unlikely to be significant. The Planning Inspectorate agrees this matter can be scoped out on this basis.	This approach has been adopted within the recreation assessment in section 20.8 of this chapter.
May 2022	Denbighshire County Council – Scoping Response	The coastal areas of Denbighshire will be impacted by the construction of a series of major infrastructure schemes (coastal defence schemes and Awel Y Môr Offshore Windfarm) and further offshore windfarm development will result in prolonged disruption from construction activities, which has the potential to significantly impact on recreational use of the beaches and the Wales Coastal path, public amenity, tourism and the local economy.	Effects on the Wales Coast Path and recreational usage of the beach are considered in section 20.8 of this chapter.
May 2022	Denbighshire County Council – Scoping Response	Best and Most Versatile (BMV) agricultural land: PPW 11 Section 3.58 and 3.59 obliges weight to be given to protecting land of grades 1, 2, and 3a quality in the Agricultural land Classification (ALC). PPW 11 notes this land is considered to be the best and most versatile and justifies conservation as a finite resource for the future. It indicates that land of this quality should only be developed if there is an overriding need for the development, and either previously developed land or land of a lower grade is available, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. Whilst the location of onshore cable route and substation has not yet been defined, it should be noted that much of the land around the Bodelwyddan National Grid substation is shown to be BMV agricultural land on the Welsh Government Agricultural Land Classification predictive mapping. As the area of search for the onshore works has not been defined, owing to the likely scale of the substation and required land take, the scheme therefore has the potential to have significant effects on agricultural land quality, and therefore impact on BMV agricultural land should be scoped in.	Effects on the best and most versatile agricultural land are assessed in section 20.8 of this chapter.

20.4 Baseline environment

20.4.1 Methodology to inform baseline

Desktop study

20.4.1.1 Information on land use and recreation within the land use and recreation study area was collected through a detailed desktop review of existing studies and datasets. These are summarised at Table 20.9 below.

20.4.1.2 The desktop study of available published information to identify existing baseline conditions in relation to agricultural land use and soils has focused on the identification of:

- Soil types and patterns of soils through the land quality and soils study area
- The quality of the agricultural land determined by the application of the Ministry of Agriculture Fisheries and Food (MAFF) ALC system (MAFF, 1988)
- The nature and pattern of farm holdings across the land use and recreation study area.

20.4.1.3 The desktop study of available published information to identify existing baseline conditions in relation to recreational resources has focused on the identification of:

- Land used by the community (e.g. public open space; common land)
- Recreational facilities (e.g. the coast; camping and caravanning sites; visitor attractions)
- PRoW and other linear recreational routes.

Table 20.9: Summary of key desktop reports.

Title	Source	Year	Author
Meteorological Office Climatological Data for ALC	Meteorological Office	1990	Meteorological Office
Soil Survey of England and Wales, National Soil Map Sheet 2 (Wales) 1:250,000 and accompanying Regional Bulletin	Soil Survey of England and Wales	1984	Soil Survey of England and Wales
The Soils and Land Use of The District around Rhyl and Denbigh (Sheets 95 and 107, 1:63,360 and accompanying Memoir)	Soil Survey of Great Britain	1984	Soil Survey of Great Britain
Welsh Government Predictive ALC viewer (version 2 with soil series information where available)	Welsh Government website	2022	Welsh Government
Welsh Government Agricultural Statistics	Welsh Government website	2022	Welsh Government
Denbighshire PRoW Mapping	Denbighshire County Council website	2022	Denbighshire County Council
Conwy County Borough Council PRoW Mapping	Conwy County Borough Council website	2022	Conwy County Borough Council
MAGIC	Multi-agency Geographic Information for the Countryside (MAGIC)	2022	Defra
National Cycle Network	Sustrans	2022	Sustrans
Active travel routes	Lle A Geo-Portal for Wales	2022	Welsh Government
Ordnance Survey mapping	Ordnance Survey website	2022	Ordnance Survey

20.4.2 Identification of designated sites

20.4.2.1 All designated sites within the land use and recreation study area and qualifying interest features that could be affected by the construction, operations and maintenance, and decommissioning phases of the Mona Offshore Wind Project were identified using the three-step process described below:

- Step 1: All designated sites of international, national and local importance within the land use and recreation study area were identified using a number of sources, including MAGIC and Data Map Wales
- Step 2: Information was compiled on the relevant features for each of these sites as follows
- Step 3: Using the above information and expert judgement, sites were included for further consideration sites and associated features were located within the land use and recreation study area.

20.4.3 Site-specific surveys

20.4.3.1 In order to inform the PEIR, site-specific surveys were undertaken. A summary of the surveys undertaken to inform the land use and recreation impact assessment is outlined in Table 20.10 below.

Table 20.10: Summary of site-specific survey data.

Title	Extent of survey	Overview of survey	Survey contractor	Date	Reference to further information
Walkover survey	PRoWs within the land use and recreation study area, including footpaths and National Cycle Network Routes; other recreational resources (e.g. caravan and holiday parks)	Walkover of the PRoWs likely to lie within the land use and recreation study area to establish the nature and condition of these recreational resources. The surveyors identified issues that may arise at crossing points, particularly in relation to the temporary stopping up and/or diversion of routes during construction and the identification of locations at which it is essential to keep routes open through traffic management measures. Walkover surveys also included a visit to recreational resources potentially affected within the land use and recreation study area.	RPS	2022	volume 7, annex 20.3: Recreational resources plans of the PEIR

20.4.4 Land use

Soils and agricultural land classification

20.4.4.1 The desk top information relevant to soils and agricultural land classification is provided in volume 7, annex 20.1: Published agricultural land classification and desk top soils data. The distribution of agricultural land quality, which includes the areas of best and most versatile Grades 1, 2 and Subgrade 3a land, within the land use and recreation study area, based on the Welsh Government predictive ALC viewer is summarised in Table 20.11.

Table 20.11: ALC Grade land within the land use and recreation study area.

ALC Grade (Predictive Viewer)	Area of agricultural land within the land use and recreation study area (ha)	%
1	0.1	<1 (0)
2	58.6	7
3a	443.5	50
3b	353.1	40
4	31.5	3
5	1.5	<1 (0)
Total	**888.3**	**100**

20.4.4.2 The areas and percentages of ALC grades located within the Mona Onshore Substation zones for Option 2 and 7, based on the Welsh Government predictive ALC viewer are summarised in Table 20.12 below.

Table 20.12: ALC Grade land within the Mona Onshore Substations zones (Option 2 and 7).

ALC Grade (Predictive Viewer)	Area of land within Mona Onshore Substation zone for Option 2 (ha)	%	Area of land within Mona Onshore Substation zone for Option 7 (ha)	%
3a	3.6	25	5.0	36
3b	10.8	75	13.9	73
Total	**14.3**	**100**	**19.0**	**100**

20.4.4.3 For the purposes of the assessment, it has been assumed that the maximum area of best and most versatile Subgrade 3a land identified within the Mona Onshore Substation zones for Option 2 and 7 would be affected by the Mona Onshore Substation footprint.

Farm holdings

20.4.4.4 Welsh Government Agricultural Statistical data for 2016 (Welsh Government, 2016) provides data for regions of Wales. The land use and recreation study area for the Mona Offshore Wind Project falls within the North East Wales region. The type of agricultural land within this region compared to other regions in Wales is summarised in Table 20.13.

Table 20.13: Types of agricultural land within the land use and recreation study area.

	North West Wales (ha)	%	North East Wales (ha)	%	Wales (ha)	%
Crops and Grass						
Arable land	28,300	9.5	42,500	16	247,100	13
Permanent Grass	150,000	50	147,600	56.5	1,065,600	57
Rough Grazing						
Sole Rights	82,600	28	39,500	15	260,200	14
Common	21,200	7	21,800	8.5	180,300	10
Other land	15,700	5.5	10,800	4	104,200	6
Total	**297,700**	**100**	**262,100**	**100**	**1,857,400**	**100**

20.4.4.5 Figure 20.2 below has been extracted from the Welsh Government Agricultural Statistics Survey (Welsh Government, 2016) and identifies the distribution of agricultural land use within all the regions in Wales.

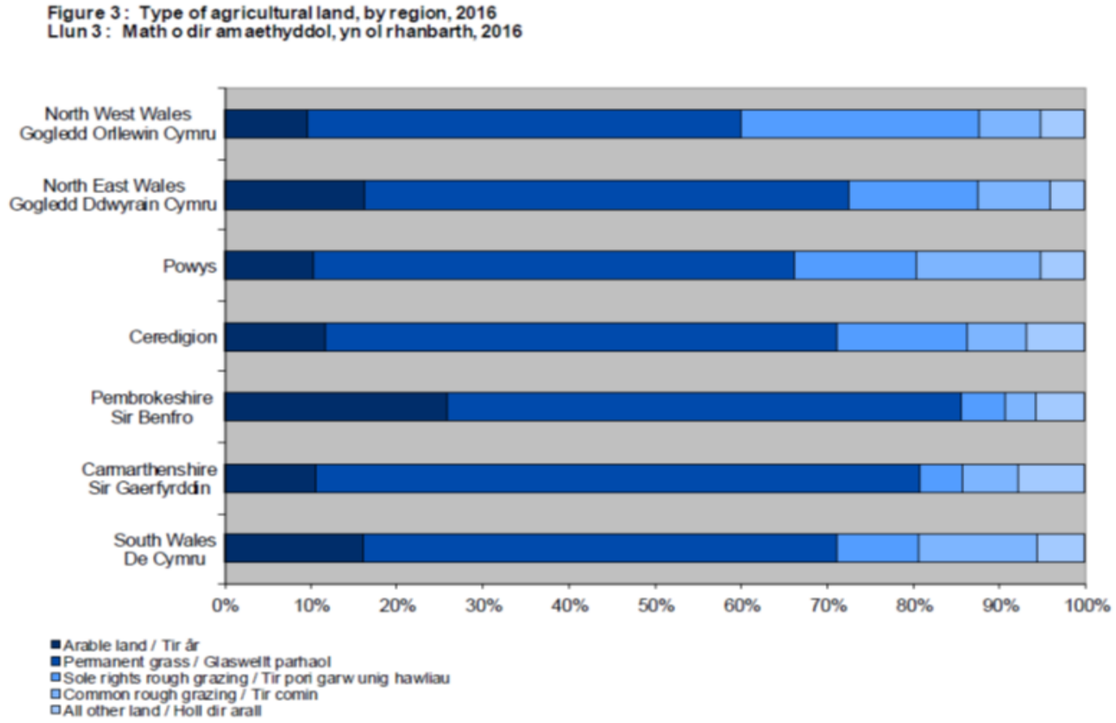

Figure 20.2: Welsh Government Agricultural Statistics 2016.

20.4.4.6 Table 20.8 and the illustration above show that the agricultural land use within Wales as a whole is dominated by permanent grass, but that the northeast region, in which the land use and recreation study area is located, comprises a relatively high proportion of arable land and a smaller area compared to other Welsh regions including the neighbouring northwest region. Permanent grass is the dominant agricultural land use throughout all regions of Wales.

20.4.4.7 Figure 20.3, Figure 20.4, Figure 20.5 and Figure 20.6 below present the distribution of landholdings within the land use and recreation study area.

20.4.4.8 This Figure shows that there are 84 landholdings within the land use and recreation study area, with a single large landholding affected by the Mona Onshore Substation Options. The land use and recreation study area is dominated by grassland with smaller areas of arable land supporting livestock and mixed-use farming enterprises.

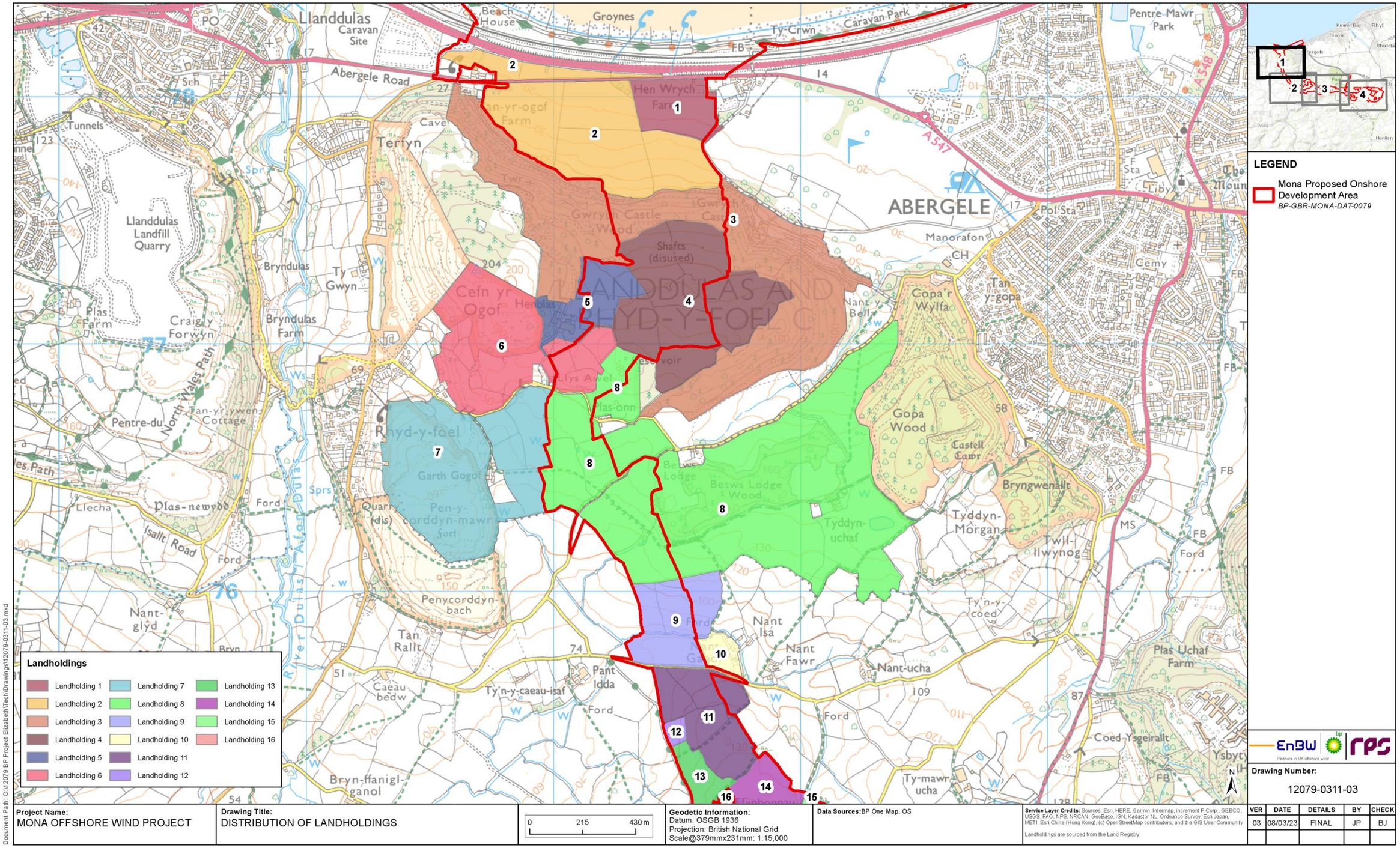

Figure 20.3: Distribution of land holdings within the land use and recreation study area.

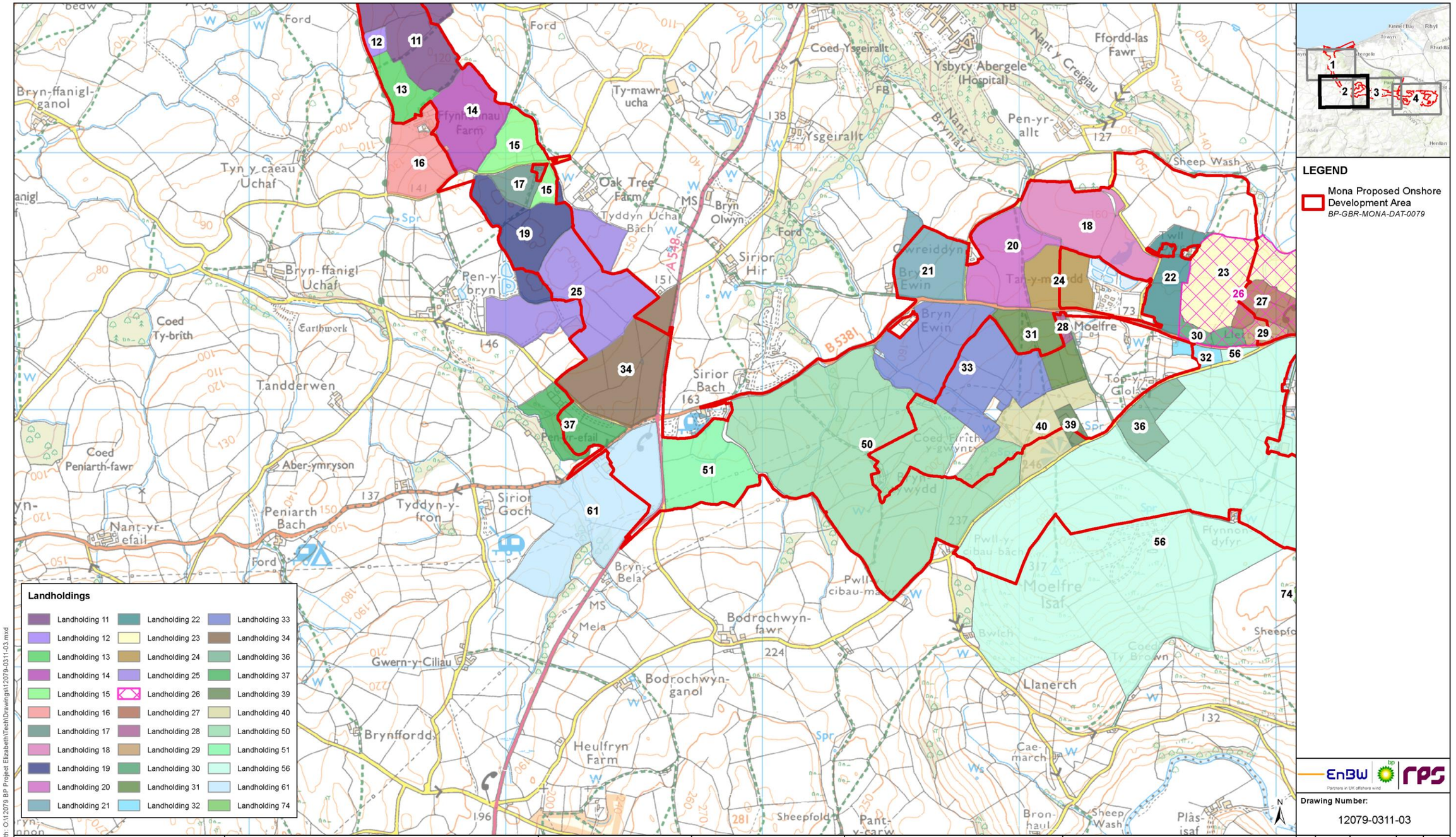

Figure 20.4: Distribution of land holdings within the land use and recreation study area.

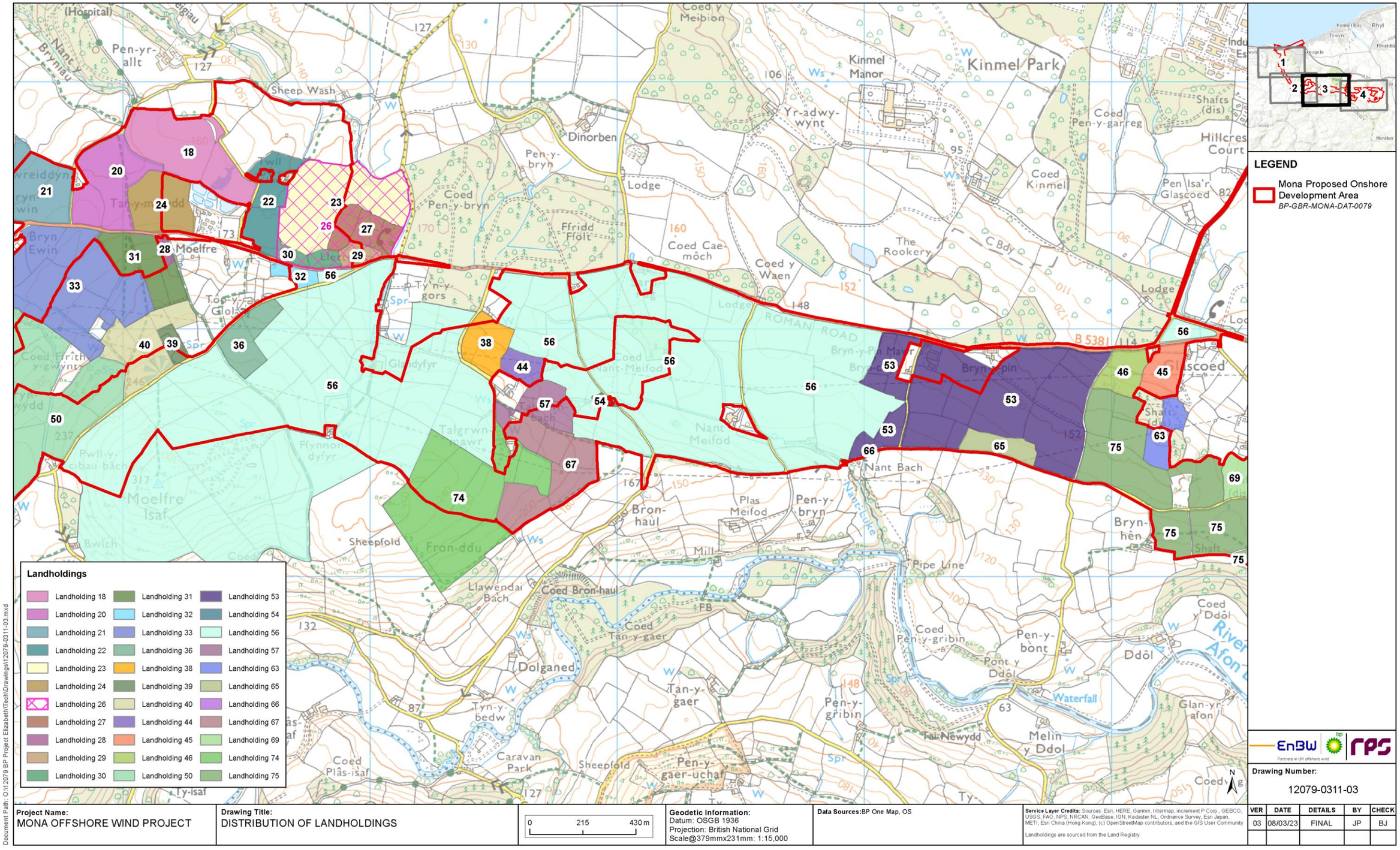

Figure 20.5: Distribution of land holdings within the land use and recreation study area.

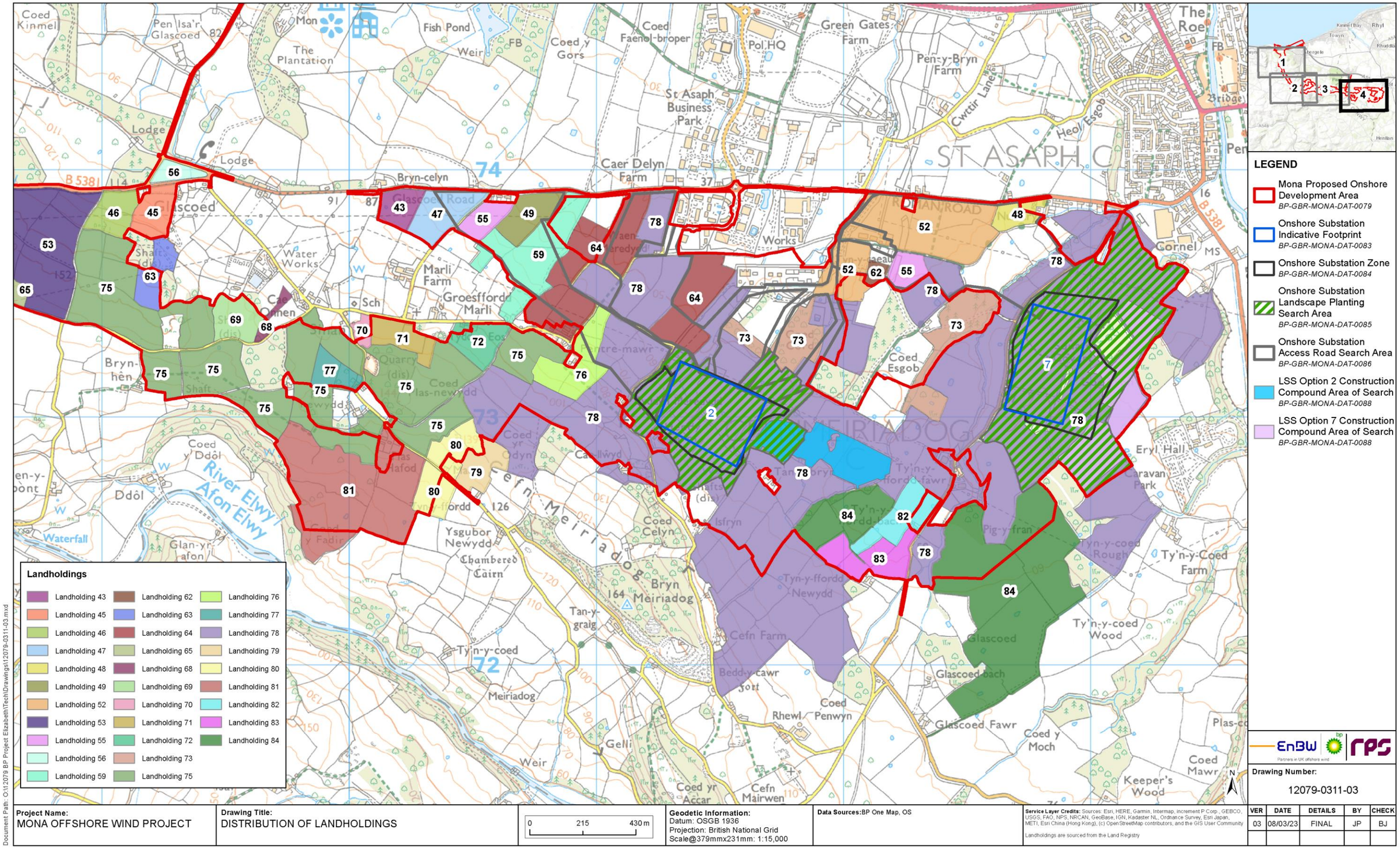

Figure 20.6: Distribution of land holdings within the land use and recreation study area.

Recreational Resources

20.4.4.9 The land use and recreation study area runs south from the coast to the west of Abergele and to the east of Terfyn. The coastal area comprises beach access at the western and eastern edges of the land use and recreation study area, which can also be accessed from the Castle Cove holiday park and Beach caravan park. The section of coast between the two comprises a limited strip of coastal defences, the nature of which is illustrated in the Figure 20.7 below.

20.4.4.10 The location of the recreational resources within the land use and recreation study area, including recreational facilities, areas of public access and PRoW are shown in volume 7, annex 20.3: Recreational Resources Plans of the PEIR.

Figure 20.7: Photograph of the coastal defences located within the land use and recreation study area.

20.4.4.11 The land use and recreation study area runs south of the beach, the A55, the A547 Abergele Road, the railway line and the Wales Coast Path. This accessible stretch of the Wales Coast Path runs for nearly 17km between Colwyn Bay and Rhyl and is used by walkers, joggers, dog walkers and people visiting the area. It also doubles up as National Cycle Route 5 in this location. Figure 20.8 shows the nature of the combined Coastal Path and National Cycle Route 5 in this location.

Figure 20.8: Photograph of the combined Coastal Path and National Cycle Route 5 within the land use and recreation study area.

20.4.4.12 The land use and recreation study area does not cross any areas of registered common land (including urban common), any areas of Access Land designated under

the Countryside and Rights of Way Act 2000, any areas of public open space or any Active Travel Areas.

20.4.4.13 The land use and recreation study area crosses land comprising part of the Gwrych Castle Estate, which is a registered park and garden, including Gwrych Castle Wood. The Grade 1 listed Gwrych Castle lies to the east within the land use and recreation study area. The castle is open to the public seven days a week and in 2020 and 2021 was host to the television programme 'I'm a Celebrity – Get Me Out of Here'.

20.4.4.14 The following recreational resources also lie within or immediately adjacent to the land use and recreation study area:

- Castle Cove Holiday Park located within the eastern boundary of the land use and recreation study area
- The Beach Caravan Park located within the western boundary of the land use and recreation study area with car parking area for coastal access
- Abergele golf club
- A holiday/camping park south of the B5381 at Sirior Bach
- The Tan-y-Mynydd Trout Fishery north of the B5381 at Moelfre, which comprises five pools excavated in 1971. Privately owned Lakeside Cottages are also on the site but predominantly south of the land use and recreation study area.

20.4.4.15 There are no recreational resources within the areas identified for the Mona Onshore Substation Options. Any effects on the amenity of recreational resources arising from these Mona Onshore Substation Options will be assessed in volume 4, chapter 26: Seascape, landscape and visual resources and volume 3, chapter 22: Noise and vibration of the PEIR.

20.4.4.16 There are no other outdoor recreational facilities within the land use and recreation study area except for the PRoW listed in Table 20.14 below and shown in volume 7, annex 20.3: Recreational Resources Plans of the PEIR.

Table 20.14: PRoW located within the land use and recreation study area.

Reference	Name
16/14	Llanddulas & Rhyd y Foel Footpath 14
01/12	Abergele Footpath 12
04/41	Betws yn Rhos Footpath 41
04/43	Betws yn Rhos Footpath 43
04/44	Betws yn Rhos Footpath 44
04/48	Betws yn Rhos Footpath 48
19/12	Llanfair TH Footpath 12
19/13	Llanfair TH Footpath 13
19/14	Llanfair TH Footpath 14
19/15	Llanfair TH Footpath 15
19/18	Llanfair TH Footpath 18
19/19	Llanfair TH Bridleway 19
19/26	Llanfair TH Footpath 26
19/27	Llanfair TH Bridleway 27
99	DE/105/99 Footpath
5	DE/105/5 Footpath
6	DE/105/6 Footpath
7	DE/105/7 Footpath
17	DE 208/1h7 Footpath
32	DE 208/32 Bridleway
3	DE/105/3 Bridleway

20.4.5 Designated sites

20.4.5.1 There are no designated sites which specifically relate to the assessment of land use and recreation.

20.4.6 Future baseline scenario

20.4.6.1 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires that "*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*" is included within the Environmental Statement. In the event that the 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.

20.4.6.2 No significant changes to the baseline are anticipated in relation to land use and recreation. New recreational resources may be developed in the future, but it is not possible to anticipate what the nature and location of these resources is likely to be.

20.4.6.3 It is possible that land within the land use and recreation study area may be allocated for future development. The potential cumulative impacts between the Mona Offshore Wind Project and other proposed developments located within the land use and recreation study are described in section 20.10 of this chapter below.

20.4.7 Data limitations

20.4.7.1 Representative soil sampling within the land use and recreation study area and areas of permanent land take (i.e. Mona Onshore Substation Options) will be undertaken in 2023 to enable the quality of agricultural land permanently affected to be assessed in greater detail. The results of the representative soil sampling will be reported in the Environmental Statement and will be used to inform the development of an appropriate Outline Soil Management Strategy for the Mona Offshore Wind Project.

20.4.7.2 For the purposes of the PEIR, the overall pattern of soils and land quality has been established using published data and this provides a suitable data set for the assessment.

20.4.7.3 No data limitations have been identified in the preparation of this PEIR chapter with regard to recreation.

20.5 Impact assessment methodology

20.5.1 Overview

20.5.1.1 The land use and recreation impact assessment has followed the methodology set out in volume 1, chapter 5: EIA methodology of the PEIR. Specific to the land use and recreation impact assessment, the following guidance documents have also been considered:

- Design Manual for Roads and Bridges (DMRB) LA 109 Geology and Soils (Highways England *et al*, 2020a)
- DMRB LA 112 Population and Human Health (Highways England *et al*, 2020b).

20.5.2 Impact assessment criteria

20.5.2.1 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. The terms used to define magnitude and sensitivity are based on those which are described in further detail in volume 1, chapter 5: EIA methodology of the PEIR.

20.5.2.2 The criteria for defining magnitude in this chapter have been taken from DMRB LA 109 Geology and Soils (Highways England *et al*, 2020a) and DMRB LA 112 Population and Human Health (Highways England *et al*, 2020b) and are outlined in Table 20.15 and Table 20.16 below.

20.5.2.3 With respect to the duration of temporary impacts, the following definitions have been considered for the purposes of the assessment:

- Short term: up to one year in duration
- Medium term: one to five years in duration
- Long term: over five years in duration.

Table 20.15: Impact magnitude criteria agricultural land use.

Magnitude	Definition used for agricultural land use
High	**Soils:** • Physical removal or permanent sealing of more than 20 hectares of agricultural land. **Agricultural land holdings:** • Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements (e.g. direct acquisition and demolition of buildings and direct development of land to accommodate highway assets) • Introduction (adverse) or removal (beneficial) of complete severance with no/full accessibility provision.
Medium	**Soils:** • Physical removal or permanent sealing on 1 to 20 hectares of agricultural land • Permanent loss/reduction of one or more soil function(s) and restriction to current or approved future use. **Agricultural land holdings:** • Partial loss of/damage to key characteristics, features or elements (e.g. partial removal or substantial amendment to access or acquisition of land compromising the viability of agricultural holdings) • Introduction (adverse) or removal (beneficial) of severe severance with limited/moderate accessibility provision.
Low	**Soils:** • Temporary loss/reduction of one or more soil function(s) and restriction to current or approved future use. **Agricultural land holdings:** • A discernible change in attributes, quality or vulnerability, or alteration to one (maybe more) key characteristics, features or elements (e.g. amendment to access or acquisition of land resulting in changes to the operating conditions that do not compromise overall viability of agricultural holdings) • Introduction (adverse) or removal (beneficial) of severance with adequate accessibility provision.
Negligible	**Soils:** • No discernible loss/reduction in soil function(s) that restrict current or approved future use. **Agricultural land holdings:** • Very minor loss or detrimental alteration to one or more characteristics, features or elements (e.g. acquisition of non-operational land or buildings not directly affecting the viability of agricultural holdings) • Very minor introduction (adverse) or removal (beneficial) of severance with ample accessibility provision.
No change	**Soils:** • No loss/reduction of soil function(s) that restrict current or approved future use. **Agricultural land holdings:** • No loss or alteration of characteristics, features, or elements or accessibility; no observable impact in either direction.

Table 20.16: Impact magnitude criteria for recreation.

Magnitude	Definition used for recreation
High	**Community land and assets:** • Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements (e.g. direct acquisition and demolition of buildings and direct development of land to accommodate highway assets) • Introduction (adverse) or removal (beneficial) of complete severance with no/full accessibility provision. **Walkers, cyclists, horse riders:** • >500m increase (adverse) or decrease (beneficial) in journey length.

Magnitude	Definition used for recreation
Medium	**Community land and assets:** • Partial loss of/damage to key characteristics, features or elements (e.g. partial removal or substantial amendment to access or acquisition of land compromising the viability of community assets) • Introduction (adverse) or removal (beneficial) of severe severance with limited/moderate accessibility provision. **Walkers, cyclists, horse riders:** • >250m-500m increase (adverse) or decrease (beneficial) in journey length.
Low	**Community land and assets:** • A discernible change in attributes, quality or vulnerability, or alteration to one (maybe more) key characteristics, features or elements (e.g. amendment to access or acquisition of land resulting in changes to the operating conditions that do not compromise overall viability of community assets) • Introduction (adverse) or removal (beneficial) of severance with adequate accessibility provision. **Walkers, cyclists, horse riders:** • >50m-250m increase (adverse) or decrease (beneficial) in journey length.
Negligible	**Community land and assets:** • Very minor loss or detrimental alteration to one or more characteristics, features or elements (e.g. acquisition of non-operational land or buildings not directly affecting the viability of community assets) • Very minor introduction (adverse) or removal (beneficial) of severance with ample accessibility provision. **Walkers, cyclists, horse riders:** • <50m increase (adverse) or decrease (beneficial) in journey length.
No change	**Community land & assets and walkers, cyclists, horse riders:** • No loss or alteration of characteristics, features, elements or accessibility; no observable impact in either direction.

20.5.2.4 The criteria for defining sensitivity/value for agricultural land use and recreational receptors are outlined in Table 20.17 and Table 20.18.

Table 20.17: Sensitivity criteria for agricultural land use receptors.

Sensitivity	Definition used for agricultural land use receptors
Very high	**Agricultural land:** • Grade 1 and 2 agricultural land. **Agricultural land holdings:** • Areas of land in which the enterprise is wholly reliant on the spatial relationship of land to key agricultural infrastructure • Access between land and key agricultural infrastructure is required on a frequent basis (daily).
High	**Agricultural land:** • Grade 3a agricultural land. **Agricultural land holdings:** • Areas of land in which the enterprise is dependent on the spatial relationship of land to key agricultural infrastructure • Access between land and key agricultural infrastructure is required on a frequent basis (weekly).
Medium	**Agricultural land:** • Grade 3b agricultural land. **Agricultural land holdings:** • Areas of land in which the enterprise is partially dependent on the spatial relationship of land to key agricultural infrastructure • Access between land and key agricultural infrastructure is required on a reasonably frequent basis (monthly).
Low	**Agricultural land:** • Grades 4 or 5 agricultural land. **Agricultural land holdings:** • Areas of land which the enterprise is not dependent on the spatial relationship of land to key agricultural infrastructure • Access between land and key agricultural infrastructure is required on an infrequent basis (monthly or less frequent).
Negligible	**Agricultural land:** • Previously developed land with little potential to return to agriculture. **Agricultural land holdings:** • Areas of land which are infrequently used on a non-commercial basis.

Table 20.18: Sensitivity criteria for recreational receptors.

Sensitivity	Definition used for recreational receptors
Very high	**Community land and assets where there is a combination of the following:** • Complete severance between communities and their land/assets, with little/no accessibility provision • Alternatives are only available outside the local planning authority area • The level of use is very frequent (daily) • The land and assets are used by the majority (≤50%) of the community. **Walkers, cyclists, horse riders:** • National trails and routes likely to be used for both commuting and recreation that record frequent (daily) use. Such routes connect communities with employment land uses and other services with a direct and convenient route. Little/no potential for substitution • Routes regularly used by vulnerable travellers such as the elderly, school children and people with disabilities, who could be disproportionately affected by small changes in the baseline due to potentially different needs • Rights of way crossing roads at grade with >16,000 vehicles per day.

Sensitivity	Definition used for recreational receptors
High	**Community land and assets where there is a combination of the following:** • There is substantial severance between communities and their land/assets, with limited accessibility provision • Alternative facilities are only available in the wider local planning authority area • The level of use is frequent (weekly) • The land and assets are used by the majority (≤50%) of the community. **Walkers, cyclists, horse riders:** • Regional trails and routes likely to be used for recreation and to a lesser extent commuting, that record frequent (daily) use. Limited potential for substitution • Rights of way crossing roads at grade with >8,000 – 16,000 vehicles per day.
Medium	**Community land and assets where there is a combination of the following:** • There is severance between communities and their land/assets, but with existing accessibility provision • Limited alternative facilities are available at a local level within adjacent communities • The level of use is reasonably frequent (monthly) • The land and assets are used by the majority (≤50%) of the community. **Walkers, cyclists, horse riders:** • PRoW and other routes close to communities which are used for recreational purposes, but for which alternative routes can be taken. These routes are likely to link to a wider network of routes to provide Options for longer recreational journeys • Rights of way crossing roads at grade with >4,000 – 8,000 vehicles per day.
Low	**Community land and assets where there is a combination of the following:** • Limited existing severance between communities and their land/assets, with existing full Disability Discrimination Act compliant accessibility provision • Alternative facilities are available at a local level within the wider community • The level of use is infrequent (monthly or less frequent) • The land and assets are used by the minority ≤ 50%) of the community. **Walkers, cyclists, horse riders:** • Routes which have fallen into disuse through past severance or which are scarcely used because they do not currently offer a meaningful route for utility/recreational purposes • Rights of way crossing roads at grade with <4,000 vehicles per day.
Negligible	**Community land and assets where there is a combination of the following:** • No or limited severance or accessibility issues • Alternative facilities are available within the same community • The level of use is very infrequent (a few occasions yearly) • The land and assets are used by the minority (≤50%) of the community. **Walkers, cyclists, horse riders:** • N/A.

20.5.2.5 The significance of the effect upon land use and recreation 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 20.19. Where a range of significance of effect is presented in Table 20.19, the final assessment for each effect is based upon expert judgement.

20.5.2.6 For the purposes of this assessment, any effects with a significance level of minor or less have been concluded to be not significant in terms of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

Table 20.19: Matrix used for the assessment of the significance of the effect.

Sensitivity of receptor	Magnitude of Impact				
	No Change	Negligible	Low	Medium	High
Negligible	No change	Negligible	Negligible or Minor	Negligible or Minor	Minor
Low	No change	Negligible or Minor	Negligible or Minor	Minor	Minor or Moderate
Medium	No change	Negligible or Minor	Minor	Moderate	Moderate or Major
High	No change	Minor	Minor or Moderate	Moderate or Major	Major
Very High	No change	Minor	Moderate or Major	Major	Major

20.5.2.7 The definitions for significance of effect levels (as adapted from Highways England *et al.*, 2019) are described as follows:

- Major: These beneficial or adverse effects are considered to be very important considerations and are likely to be material in the decision-making process. These effects are generally, but not exclusively, associated with sites or features of international, national or regional importance that are likely to suffer a most damaging impact and loss of resource integrity. However, a major change in a site or feature of local importance may also enter this category. Effects upon human receptors may also be attributed this level of significance
- Moderate: These beneficial or adverse effects have the potential to be important and may influence the key decision-making process. The cumulative effects of such factors may influence decision-making if they lead to a increase in the overall adverse or beneficial effect on a particular resource or receptor
- Minor: These beneficial or adverse effects are generally, but not exclusively, raised as local factors. They are unlikely to be critical in the decision-making process but are important in enhancing the subsequent design of the project
- Negligible: No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error
- No change: No loss or alteration of characteristics, features or elements; no observable impact in either direction.

20.6 Key parameters for assessment

20.6.1 Maximum Design Scenario

20.6.1.1 The maximum design scenarios (MDSs) identified in Table 20.20 have been selected as those having the potential to result in the greatest effect on an identified receptor or receptor group. These MDSs have been selected from the Project Design Envelope provided in volume 1, chapter 3: Project description of the PEIR. 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), to that assessed here be taken forward in the final design scheme.

Table 20.20: Maximum design scenario considered for the assessment of potential impacts on land use and recreation.

[a] C=construction, O=operational and maintenance, D=decommissioning

Potential impact	Phase[a]			Maximum Design Scenario	Justification
	C	O	D		
The temporary loss of best and most versatile land	✓	x	x	**Construction phase** <u>Open cut trenching along the Onshore Cable Corridor:</u> • The maximum duration of the construction phase for the Onshore Cable Corridor is 33 months. • The area of the permanent Onshore Cable Corridor is up to 540,000m^2 based on a corridor measuring 30m wide and 18km in length. The temporary working corridor requires an additional 70m wide corridor (making the total width of the Onshore Cable Corridor (temporary and permanent requirements) 100m wide representing an area of up to 1,800,000m^2. • There are up to four cable trenches within the permanent Onshore Cable Corridor, each trench measures up to 2.5m wide at the top, 1.5m at the base and the depth is 1.8m. • The maximum number of joint bays along the Onshore Cable Corridor is 96 (based on a minimum distance of 750m between each joint bay on up to four trenches). • The area of each joint bay is up to 200m^2 and each joint bay is 2m deep; the volume of material excavated per joint bay is 400m^3 (a total of up to 38,400m^3 of material excavated for the joint bays). • The maximum number of link boxes along the Onshore Cable Corridor is 96 (based on a distance of 750m between each link box on up to four trenches). • The area of each link box is up to 6m^2 and each link box is up to 1m deep; the volume of material excavated per link box is 6m^3 (a total of up to 576m^3 of material excavated for the link boxes). • There is one haul road within the Onshore Cable Corridor along the length of the corridor; it is 6m wide excluding passing places. It will be constructed using imported engineered granular fill with geotextile style layers with a nominal thickness of 400mm and a maximum thickness of up to 1000mm. <u>Open cut trenching along the 400kV Grid Connection Cable Corridor:</u> • The maximum duration of the construction phase for the 400kV Grid Connection Cable Corridor is 33 months. • The area of the permanent 400kV Grid Connection Cable Corridor is up to 48,000m^2 based on a corridor measuring 16m wide and 3km in length. The temporary working corridor requires an additional 44m wide corridor (making the total width of the route to grid connection (temporary and permanent requirements) 60m wide representing an area of up to 180,000m^2. • There are up to two cable trenches within the permanent 400kV Grid Connection Cable Corridor, each trench measures up to 2.5m wide at the top, 1.5m at the base and the depth is 1.8m. • The maximum number of joint bays along the 400kV Grid Connection Cable Corridor is 10 (based on a minimum distance of 500m between each joint bay on up to two trenches). • The area of each joint bay is up to 200m^2 and each joint bay is up to 2m deep; the volume of material excavated per joint bay is 400m^3 (a total of up to 4,000m^3 of material excavated for the joint bays). • The maximum number of link boxes along the 400kV Grid Connection Cable Corridor is 10 (based on a distance of 500m between each link box on up to two trenches). • The area of each link box is up to 6m^2 and each link box is 1m deep; the volume of material excavated per link box is 6m^3 (a total of up to 60m^3 of material excavated for the link boxes). • There is one haul road within the 400kV Grid Connection Cable Corridor along the length of the corridor; it is 6m wide excluding passing places. It will be constructed using imported engineered granular fill with geotextile style layers with a nominal thickness of 400mm and a maximum thickness of up to 1000mm. <u>Trenchless techniques</u> • The maximum number of HDD locations along the Onshore Cable Corridor and 400kV Grid Connection Cable Corridor is 60. Primary HDD operations will require a compound, these will measure up to 150m x 100m. Secondary HDDs will require a smaller compound (measuring up to 30m x 20m) and will be located within the 100m temporary construction corridor.	The MDS considers the greatest area and longest duration of temporary loss of best and most versatile land during the construction phase.
The permanent loss of best and most versatile land	✓	✓	✓		The MDS considers the greatest area and longest duration of permanent loss of best and most versatile land during the construction, operations and maintenance and decommissioning phase.
The temporary disruption caused to the operation of farm holdings	✓	x	x		The MDS considers the greatest area and longest duration of temporary disruption to the operation of farm holdings during the construction phase.
The permanent disruption caused to the operation of farm holdings	✓	✓	✓		The MDS considers the greatest area and longest duration of temporary disruption to the operation of farm holdings during the during the construction, operations and maintenance and decommissioning phase.
The temporary impact on the recreational use of Coastal Areas	✓	x	x		The MDS considers the greatest area and longest duration of temporary disruption to recreational resources during the construction phase.
The temporary impact on the recreational use of recreational resources	✓	x	x		
The temporary impact on the recreational use of the Wales Coast Path and NCR 5	✓	x	x		

Potential impact	Phase[a] C	O	D	Maximum Design Scenario	Justification
				Construction compounds • Up to two primary construction compounds (each measuring 150m x 150m) and up to 10 secondary construction compounds (each measuring 150m x 100m) will be located along the Onshore Cable Corridor. The compounds will be located within the Mona Proposed Onshore Development Area. Topsoil will be removed, and crushed stone or other suitable material will be used across the entire area to create hardstanding. Onshore Substation • The maximum duration of the construction phase for the Onshore Substation is 33 months. • The maximum footprint of the Onshore Substation will measure up to 125,000m^2: this area will include the substation buildings and the earthworks to create the platform. The Onshore Substation will comprise up to four buildings. The maximum dimensions of the main building are 20m high, 40m wide and 90m long • A construction compound will be required to support the construction of the substation extending up to 250,000m^2. • Access to the substation will be via a new permanent access road measuring up to 8m wide and 1.2km in length. • The maximum search area for landscape planting around the Onshore Substation is 469,732m^2. This area includes the footprint of the Onshore Substation, landscape planting and the attenuation pond. **Operation and maintenance phase** • The expected lifetime of the Mona Offshore Wind Project is 35 years. **Decommissioning phase** • The onshore cable and 400kV grid connection cable and joint bays would remain in situ but the link boxes would be removed. The onshore substation and associated access road would be removed.	

20.6.2 Impacts scoped out of the assessment

20.6.2.1 On the basis of the baseline environment and the description of development outlined in volume 1, chapter 3: Project description of the PEIR, a number of impacts are proposed to be scoped out of the assessment for land use and recreation. These impacts are outlined, together with a justification for scoping them out, in Table 20.21.

Table 20.21: Impacts scoped out of the assessment for land use and recreation.

Potential impact	Justification
Disruption and reduced access to agricultural land during the operations and maintenance phase of the onshore transmission assets	The Planning Inspectorate Scoping Opinion June 2022. States "*The Applicant proposes to scope out the impact of disruption and reduced access to agricultural land during operation on the basis that any permanent effects on agricultural land would occur during the construction phase and impacts during the operational phase would be limited to maintenance and repair activities which would be small in magnitude and infrequent. The Inspectorate agrees this matter can be scoped out on this basis*".
Disruption and reduced access to recreation resources during the operations and maintenance phase of the onshore transmission assets.	The Planning Inspectorate Scoping Opinion June 2022 states: "*The Applicant proposes to scope out impacts arising during the operational phase on the basis that impacts will be limited to maintenance and repair activities which would be small in magnitude, short term and infrequent and so potential effects are unlikely to be significant. The Inspectorate agrees this matter can be scoped out on this basis*."

20.7 Measures adopted as part of the Mona Offshore Wind Project

20.7.1.1 For the purposes of the EIA process, the term 'measures adopted as part of the project' is used to include the following measures (adapted from IEMA, 2016):

- Measures included as part of the project design. These include modifications to the location or design of the Mona Offshore Wind Project which are integrated into the application for consent. These measures are secured through the consent itself through the description of the development and the parameters secured in the DCO and/or marine licences (referred to as primary mitigation in IEMA, 2016).
- Measures required to meet legislative requirements, or actions that are generally standard practice used to manage commonly occurring environmental effects and are secured through the DCO requirements and/or the conditions of the marine licences (referred to as tertiary mitigation in IEMA, 2016).

20.7.1.2 A number of measures (tertiary) have been adopted as part of the Mona Offshore Wind Project to reduce the potential for impacts on land use and recreation. These are outlined in Table 20.22 below. 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 therefore been considered in the assessment presented in section 20.8 below (i.e. the determination of magnitude and therefore significance assumes implementation of these measures).

20.7.1.3 No primary measures have been identified with respect to land use and recreation. Therefore, all the measures adopted as part of the Mona Offshore Wind Project identified below are considered tertiary measures.

Table 20.22: 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
Tertiary measures: Measures required to meet legislative requirements, or adopted standard industry practice		
Soils and Agricultural Land Quality		
Characterise and manage soil materials during construction in accordance with the Outline Soil Management Plan	To ensure that the individual soil types and soil profiles are stripped, stored and restored.	Identification of soil types through survey work to inform the development of the Outline Soil Management Strategy as part of the Outline Code of Constrction Practice (CoCP)
Separate stripping and storage of identified topsoil and subsoil resources.	To prevent mixing of soil materials which can reduce overall soil quality.	Secured in the Outline Soil Management Strategy as part of the Outline CoCP
Location of topsoil and subsoil heaps so as to avoid cross-contamination of materials and the trafficking of soil heaps by construction traffic	To prevent damage to and losses of soil materials.	
Maintenance of topsoil and subsoil heaps in order to reduce potential losses of soil materials during the length of storage.		
Control of the timing of soil handling operations.	To reduce potential soil damage through handling in unsuitable conditions.	
Choice of soil handling machinery and method for its use, in order to reduce potential for soil compaction and soil damage.		
Implementation of appropriate soil aftercare following reinstatement as defined in the Outline Soil Management Strategy.	To enable the land to be handed back to the farmer in a suitable condition.	
Careful supervision of soil handling operations on site.	To ensure that recognised good practice is effectively implemented on site.	
Development and implementation of an Outline Soil Management Strategy as part of the site waste management plan.	To provide suitable detailed soil handling guidance that can be implemented effectively on site.	
After construction has been completed within areas of the works,	To reduce the length of time land is out of agricultural production.	Secured in the Outline CoCP

Measures adopted as part of the Mona Offshore Wind Project	Justification	How the measure will be secured
the associated construction compounds and side accesses will be promptly dismantled and the land reinstated.		
Farm Holdings		
The maintenance and reinstatement, where reasonably practicable, of existing water supplies and drainage systems during the construction process.	To reduce potential disruption of soil drainage in areas beyond the Mona Proposed Onshore Development Area	Secured through landowner agreements
The maintenance of access routes across individual fields, where reasonably practicable, where these are severed during construction.	To allow the continued management of severed fields during the construction phase	Secured in the Outline CoCP
The maintenance of farm access routes, wherever reasonably practicable, between fields within a farm holding.	To enable the continued operation of farm holdings during the construction phase	
Appropriate fencing of the Mona Proposed Onshore Development Area, dependent upon the nature of the individual farm holding affected.	To ensure that livestock are kept out of construction areas.	Secured through landowner agreements
Appropriate construction practices to be implemented to ensure that the potential risk for the spread of animal and plant diseases is reduced as far as practicable.	To reduce, as far as possible, the risk for the spread of animal and plant diseases.	Secured in the Outline CoCP
Timing of construction works, where feasible, to minimise disruption to landowners/farming practice, through agreement with landowners.	To reduce, as far as practicable, impacts on farming and ongoing activities on the land affected.	
Recreation		
PRoW affected during the construction phase of the works will be crossed by either HDD or by open trench. When HDD is utilised the PRoW would remain open during the duration of construction. Where open trenching is used to cross PRoW, the routes would either be temporarily stopped up/diverted or traffic management measures would be put in place in some locations to maintain access. Where such measures cross a bridleway, all material used would be suitable for use by horses.	To minimise the effects on the PRoW network and maintain access where possible during the construction works.	Secured in the Outline PRoW Management Strategy as part of the Outline CoCP
Any PRoW affected during the construction phase will be reinstated following completion of the works to ensure that no permanent effects remain.	To maintain the connectivity of the PRoW network following the completion of the construction works.	Secured in the Outline PRoW Management Strategy as part of the Outline CoCP
Where a PRoW runs along the side of a construction side access traffic management measures would be put in place during construction. These would involve fencing to separate PRoW users from traffic.	To ensure the safety and separation of walkers and Heavy Good Vehicles.	

20.8 Assessment of significant effects

20.8.1.1 The impacts of the construction, operations and maintenance, and decommissioning phases of the Mona Offshore Wind Project have been assessed on land use and recreation. The potential impacts arising from the construction, operations and maintenance and decommissioning phases of the Mona Offshore Wind Project are listed in Table 20.20, along with the MDS against which each impact has been assessed.

20.8.1.2 A description of the potential effect on land use and recreation receptors caused by each identified impact is given below.

20.8.2 Agricultural land classification

Construction phase

Magnitude of impact – Temporary

20.8.2.1 The Mona Proposed Onshore Development Area would be likely to affect areas of the best and most versatile land during the construction phase of the Mona Offshore Wind Project and this could lead to the temporary loss of more than 20ha of such land as identified in Table 20.11 above. The duration of this temporary impact is considered to be medium term (i.e. one to five years).

20.8.2.2 However, the implementation of the measures adopted as part of Mona Offshore Wind Project (Table 20.22) would ensure that soils and the quality of the agricultural land would be restored at the end of the construction period to reduce, as far as possible, any permanent effects on the best and most versatile land.

20.8.2.3 Therefore, the magnitude of the temporary impact on the quality of agricultural land and soils is assessed to be **negligible**.

Magnitude of Impact – Permanent

20.8.2.4 During construction, there would be a permanent loss of approximately 12.5ha of land associated with the development of the Mona Onshore Substation footprint for either Option 2 or Option 7.

20.8.2.5 However, for the purposes of the assessment, it is assumed that the maximum area of best and most versatile land Subgrade 3a land identified within the Mona Onshore Substations zones for Option 2 and 7 would be affected by the Mona Onshore Substation footprint.

20.8.2.6 The desk study information indicates that, for the Mona Onshore Substation footprint for Option 2, there could be a maximum permanent loss of approximately 3.6ha of Subgrade 3a best and most versatile land according to the Welsh Government Predictive ALC viewer. The remaining 8.9ha of land is identified as lower quality Subgrade 3b land. The Mona Onshore Substation Option 7 would be likely to lead to the maximum permanent loss of approximately 5.0ha of Subgrade 3a best and most versatile land according to the Welsh Government Predictive ALC viewer. The remaining 7.0ha of land is identified as lower quality Subgrade 3b land.

20.8.2.7 In addition, there will be permanent losses of agricultural land associated with the areas of link boxes, including associated inspection covers, but these would require less than 0.1ha in area.

20.8.2.8 It is assumed that the soils within the search areas for landscape planting (as shown on Figure 20.1) would remain in situ and therefore that the quality of this resource would remain unaffected. Whilst land within these areas may be taken out of agricultural production, the availability of in situ soil quality would remain.

20.8.2.9 Therefore, the magnitude of the permanent impact, based on the loss of between 1ha and 20ha of agricultural land in total, is assessed as **medium.**

Sensitivity of receptor

20.8.2.10 The sensitivity of the agricultural land quality is assessed overall to be **high** due to the likelihood of the presence of areas of the best and most versatile Subgrade 3a land within the land use and recreation study area, including within the areas of the Mona Onshore Substation Options.

Significance of effect - Temporary

20.8.2.11 Following the implementation of the measures identified in Table 20.19, the agricultural land quality would be restored during the construction period, to reduce as far as possible any permanent loss of best and most versatile land. The magnitude of impact on agricultural land quality is therefore assessed to be **negligible** on a resource that is assessed to be of **high** sensitivity. The overall temporary effects of the construction period on agricultural land quality are therefore assessed to be of temporary **minor adverse** significance which is not significant in EIA terms.

Significance of Effect - Permanent

20.8.2.12 The significance of the permanent effect on agricultural land quality is based on the permanent loss of the land at the Mona Onshore Substation, together with potential losses of less than 0.1ha for link box covers within the land use and recreation study area. The magnitude of the loss of the land is assessed as **medium.** On a precautionary basis, the sensitivity of the agricultural land is assessed as **high,** due to the likely presence of approximately 5.0ha of Subgrade 3a within the area for the Mona Onshore Substation Option 7. The overall significance of the effect of the construction on agricultural land classification is therefore assessed to be **moderate adverse**. Based on National Policy under PPW and TAN 6 (Annex B, paragraph B2), this is not considered to be a significant loss of the best and most versatile agricultural land, as the area of Subgrade 3a affected falls well below the threshold of 20ha identified in this policy. Therefore, on this basis, the loss of a maximum of approximately 5.0ha of Subgrade 3a land is not assessed to be significant in EIA terms.

Operations and maintenance phase

20.8.2.13 Following the reinstatement of agricultural land during the construction phase, no further effects on agricultural land are assessed during the operation and maintenance period.

Decommissioning phase

20.8.2.14 During the decommissioning phase, the Mona Onshore Substation Options would be demolished and reinstated to agricultural, or an alternative use and the onshore cables would be left in place. The link boxes would also be removed. No further effects on agricultural land quality are therefore assessed during the decommissioning phase.

20.8.3 Farm holdings

Construction phase

Magnitude of impact – Temporary

20.8.3.1 Construction within the Mona Onshore Cable Corridor and the Mona 400kV Cable Corridor would also lead to the temporary severance of farmland during this period within a number of farm holdings. During this period there could be disruption to farming management, including changes to farm access within individual fields and along local roads, as well as temporary effects on field drainage and irrigation systems. The construction would be likely to temporarily affect the attributes of individual holdings but with the implementation of measures identified in Table 20.22 this would not affect the overall viability of farms. The duration of this temporary impact is considered to be medium term (i.e. one to five years).

20.8.3.2 Therefore, the magnitude of the temporary impact on the operation of farm holdings is assessed as **low**.

Magnitude of impact – Permanent

20.8.3.3 During construction, there would be a permanent loss of between approximately 12.5ha of land associated with the development of the Mona Onshore Substation footprint for either Option 2 or Option 7.

20.8.3.4 Both Mona Onshore Substations Option 2 and 7 would be situated within and affect the same single landholding. The land holding on which the Mona Onshore Substation Options would be located is a substantial holding in excess of 200ha.

20.8.3.5 Therefore, the magnitude of the permanent impact on the operation farm holdings is assessed as **low**.

Sensitivity of receptor – Temporary

20.8.3.6 The sensitivity of the farm holdings temporarily affected by construction could be up to **high**, where enterprises are dependent on the spatial relationship of that land to key infrastructure and access required between that infrastructure and the land on a frequent basis.

Sensitivity of receptor – Permanent

20.8.3.7 The sensitivity of the holding affected by the permanent loss of land associated with the Mona Onshore Substation Options is assessed to be **low** based on the loss of a single block of land within a large land holding.

Significance of effect – Temporary

20.8.3.8 Measures identified in Table 20.19 would be implemented to manage impacts on farm holdings during the construction period, as far as possible. However, on a precautionary basis it is assessed that there may be remaining issues, potentially related to severance of land and effects on day to day operation of farm holdings which could be as high as **minor adverse** based on a **low** magnitude of impact and a **high** sensitivity of some holdings.

Significance of effect – Permanent

20.8.3.9 The permanent loss of land from a single land holding associated with the Mona Onshore Substation Options is assessed to be of permanent **minor adverse** significance based on a **low** magnitude of impact on a receptor of **low** sensitivity.

Operations and maintenance phase

20.8.3.10 Following the reinstatement of agricultural land during the construction phase, no further effects on agricultural land holdings are assessed during the operation and maintenance period.

Decommissioning phase

20.8.3.11 During the decommissioning phase the Mona Onshore Substation Options would be demolished and reinstated to agricultural, or an alternative use and the onshore cables would be left in place. No further effects on agricultural land holdings are therefore assessed during the decommissioning phase.

20.8.4 Recreation

Construction phase

Recreation – coastal area

Magnitude of impact – Temporary

20.8.4.1 The coastal areas within the land use and recreation study area comprise beach access towards the western and eastern boundaries, with a limited strip of coastal defences located within the centre of the coastal zone. Whilst there could potentially be some requirement to secure an area of the beach against public access during construction activities associated with landfall, there remain large areas to the east and west that would remain accessible for beach based activities during the construction phase. Whilst there may be alterations to a limited area of the coastal area, this would not comprise the overall use of the coastal asset. The duration of this temporary impact is considered to be medium term (i.e. one to five years).

20.8.4.2 Therefore, the magnitude of the temporary impact on the recreational use of the coastal area is assessed as **low**.

Sensitivity of receptor – Temporary

20.8.4.3 The sensitivity of the coastal area is assessed to be **medium**, based on the availability of a large coastal area within the vicinity but noting regular use of the coastal area by local residents and holiday makers.

Significance of effect – Temporary

20.8.4.4 Based on the precautionary approach that the landfall construction works may require an area of beach at the eastern or western part of the land use and recreation study area to be secured temporarily from public access, the temporary effect on recreational access to the coast is assessed to be of **minor adverse** significance.

Recreation – recreational resources

Magnitude of impact – Temporary

20.8.4.5 There is potential for the installation of the landfall and Mona Onshore Cable Corridor and Mona Onshore 400kV Corridor to result in temporary disruption of a number of recreational resources that lie in or adjacent to the land use and recreation study area during the construction period including:

- Gwrych Castle Estate
- Castle Cove Holiday Park to the east of the potential landfall area
- The Beach Caravan Park to the west of the landfall with car parking area for coastal access
- Abergele golf club
- A holiday/camping park south of the B5381 at Sirior Bach
- The Tan-y-Mynydd Trout Fishery north of the B5381 at Moelfre which is celebrating 50 years as a leading trout fishery in 2022.

20.8.4.6 Therefore, the magnitude of the temporary impact on the recreational use of the recreational resources is assessed as **low**. This has been based on a potential temporary change in attributes of these assets, but not to the extent that the viability of the assets would be compromised. The duration of this temporary impact is considered to be short term (i.e. up to one year).

Sensitivity of receptor – Temporary

20.8.4.7 The sensitivity of the assets that could be temporarily affected is assessed to be up to **high**, based on their frequent use and susceptibility to severance and disruption

issues, which would be more severe for some facilities during the peak summer season.

Significance of effect – Temporary

20.8.4.8 The effect is assessed to be of up to temporary **moderate adverse** significance, which is significant in EIA terms, based on the potential for disruption to recreational assets identified during the construction period, particularly if construction takes place during peak times and either directly affects the assets or is near them.

Recreation – Wales Coast Path and NCR 5

Magnitude of impact – Temporary

20.8.4.9 The Wales Coast Path and NCR 5 run along the coast and may be located in close proximity to the construction works within the Mona Proposed Onshore Development Area. It is proposed that the Wales Coast Path and NCR 5 would remain in situ during the construction period and that the construction works would be managed to minimise impacts at peak times (e.g. public holiday). The duration of this temporary impact is considered to be short term (i.e. up to one year).

20.8.4.10 Therefore, the magnitude of the temporary impact on the recreational use of Wales Coast Path and NCR 5 is assessed as **negligible**.

Sensitivity of receptor – Temporary

20.8.4.11 Both the Wales Coast Path and NCR 5 are national trails and the sensitivity of these resources are therefore assessed to be **very high**.

Significance of effect – Temporary

20.8.4.12 Based on a negligible magnitude of effect on the Wales Coast Path and NCR 5 that are of very high sensitivity, it is assessed that the temporary effect would be of temporary **minor adverse** significance, which is not significant in EIA terms.

Recreation – PRoW and other linear routes

Magnitude of impact – Temporary

20.8.4.13 A series of PRoW cross the land use and recreation study area (as shown in the figures contained in volume 7, annex 20.3: Recreation resources plans of the PEIR) and there are other tracks and local lanes that are also used as recreational routes that may be affected within this area. These routes could be subject to temporary disruption during construction. Alternative routes may be available to the public, but these may result in longer journeys depending on their start and finish locations. The duration of this temporary impact is considered to be short term (i.e. up to one year).

20.8.4.14 Therefore, the magnitude of the temporary impact on the recreational use of PRoW and other linear routes is assessed as **low**. This has been based on incorporating potentially short lengths of diversions on temporary basis.

Sensitivity of receptor – Temporary

20.8.4.15 The sensitivity of the PRoW and other linear routes is assessed to be **medium**, as most of the routes identified appear to be in recreational routes for the communities, where alternative options within the network are commonly available.

Significance of effect – Temporary

20.8.4.16 Based on a l**ow** magnitude of impact on routes of **medium** sensitivity the effect on PRoW and other linear routes is assessed to be of temporary **minor adverse** significance, which is not significant in EIA terms.

20.8.5 Future monitoring

20.8.5.1 No land use and recreation monitoring to test the predictions made within the impact assessment is considered necessary.

20.9 Cumulative effect assessment methodology

20.9.1 Methodology

20.9.1.1 The Cumulative Effects Assessment (CEA) takes into account the impact associated with the Mona Offshore Wind Project 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 5.3: CEA screening matrix). Each project has been considered on a case by case basis for screening in or out of this chapter's assessment based upon data confidence, effect-receptor pathways and the spatial/temporal scales involved.

20.9.1.2 The land use and recreation CEA methodology has followed the methodology set out in volume 1, chapter 5: EIA methodology of the PEIR. As part of the assessment, all projects and plans considered alongside the Mona Offshore Wind Project have been allocated into 'tiers' reflecting their current stage within the planning and development process, these are listed below.

20.9.1.3 A tiered approach to the assessment has been adopted, as follows:

- Tier 1
  - Under construction
  - Permitted application
  - Submitted application
  - 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 and is in the public domain
- Tier 3
  - Scoping report has not been submitted or is not in the public domain

- Identified in the relevant Development Plan
- Identified in other plans and programmes.

20.9.1.4 This tiered approach is adopted to provide a clear assessment of the Mona Offshore Wind Project alongside other projects, plans and activities.

20.9.1.5 The specific projects, plans and activities scoped into the CEA, are outline in Table 20.23.

20.9.1.6 National Grid Electricity Transmission (NGET) are proposing to undertake upgrades to their Bodelwyddan substation; to facilitate the connection of multiple projects (e.g. Awel Y Mor). The upgrades will comprise works to the existing substation, an extension to the substation and associated works and infrastructure (e.g. new overhead gantries).

20.9.1.7 It is understood that works to the existing substation will be undertaken via NGET's permitted development rights. The proposed extension to Bodelwyddan substation will require planning consent. At the time of writing, an application had not been submitted to Denbighshire County Council, but the anticipated timeframe is early 2024. Given that an application has not been submitted, the potential cumulative impacts of the Bodelwyddan upgrade have not been assessed within the PEIR. This will be re-visited in the application for consent for the Mona Offshore Wind Project should further information become available.

Table 20.23: List of other projects, plans and activities considered within the CEA.

Project/Plan	Status	Distance from the Mona Proposed Onshore Development Area (km)	Description of project/plan	Dates of construction (if applicable)	Dates of operation (if applicable)	Overlap with the Mona Offshore Wind Project
Tier 1 -						
Awel y Môr Offshore Wind Farm	Submitted but not yet determined	0.0	Awel y Môr Offshore Wind Farm is a project being developed by RWE Renewables (RWE) to the west of the existing Gwynt y Môr Offshore Wind Farm. It is located approximately 10.5km off the Welsh coast in the Irish Sea, with a maximum total area of 78 square kilometres (km^2).	2026 to 2029	2030 to 2055	Construction of Awel y Môr Offshore Wind Farm coincides with the entire four-year construction phase of the Mona Offshore Wind Project (i.e. 2026 to 2029).
Major Development: 40/2021/0309	Planning application approved within the last five years	0.8	Erection of a 198 bed Registered Care Home (Use Class C2), landscaping, parking facilities and associated works (Resubmission)	2024 to 2027	N/A	Construction of this project coincides with construction of the Mona Offshore Wind Project for two years.

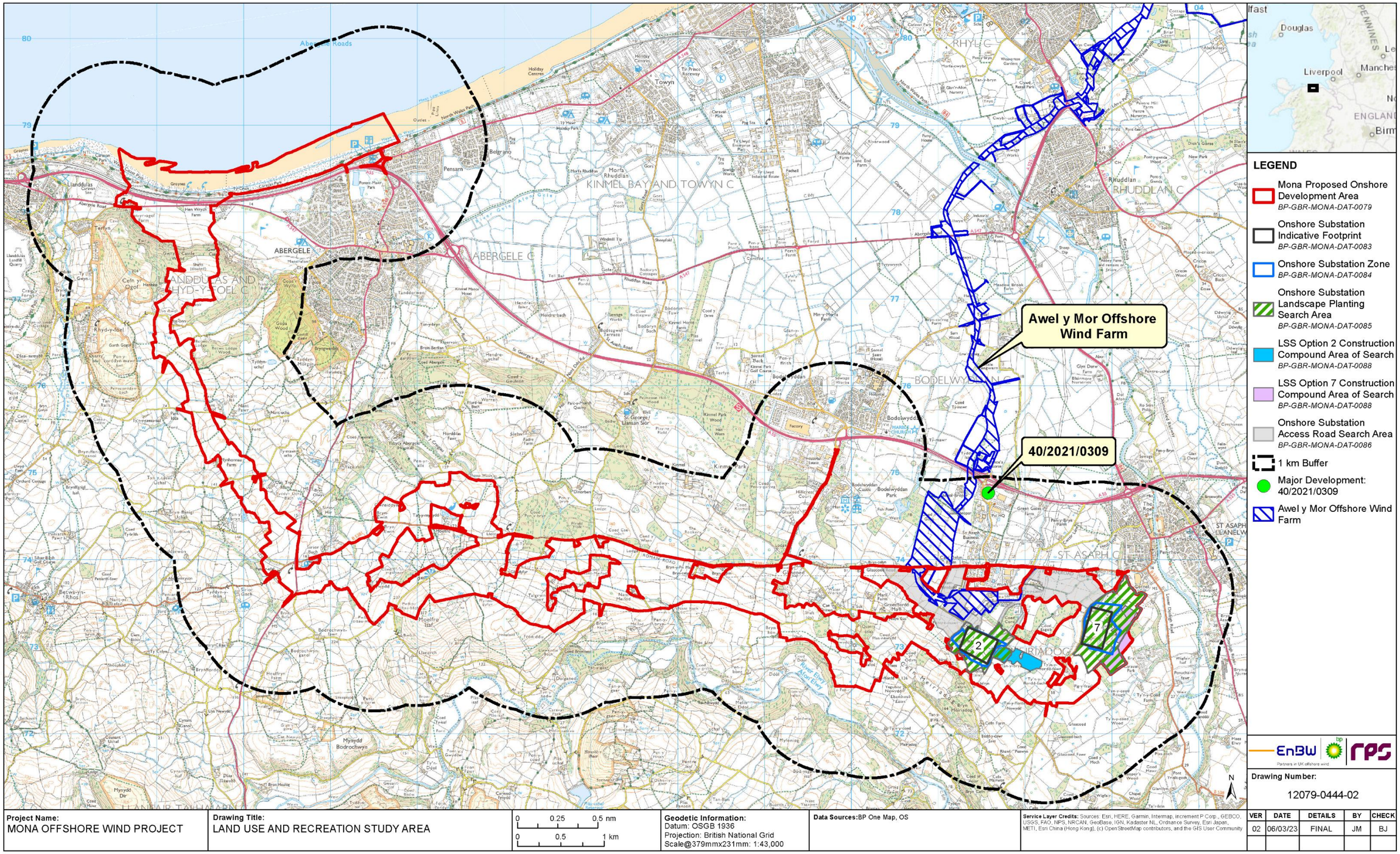

Figure 20.9: Other projects, plans and activities screened into the cumulative effects assessment.

20.9.2 Maximum design scenario

20.9.2.1 The MDSs identified in Table 20.24 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 5: Project Description, of the PEIR as well as the information available on other projects and plans, in order 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.

Table 20.24: Maximum design scenario considered for the assessment of potential cumulative effects on land use and recreation.

[a] C=construction, O=operations and maintenance, D=decommissioning

Potential cumulative effect	Phase[a]			Maximum Design Scenario	Justification
	C	O	D		
The temporary loss of best and most versatile land	✓	×	×	Maximum design scenario as described for the Mona Offshore Wind Project (Table 20.20) assessed cumulatively with the following other projects/plans: **Tier 1** • Awel y Môr Offshore Wind Farm • Major Development: 40/2021/0309.	The MDS presented in Table 20.20 above identifies the largest geographical area and longest time period for the construction, operations and maintenance and decommissioning phase of the Mona Offshore Wind Project. Therefore, the MDS provides the greatest potential for spatial and temporal cumulative effects to occur between the Mona Offshore Project and other projects/plans with respect to land use and recreation.
The permanent loss of best and most versatile land	✓	✓	✓		
The temporary disruption caused to the operation of farm holdings	✓	×	×		
The permanent disruption caused to the operation of farm holdings	✓	✓	✓		
The temporary impact on the recreational use of Coastal Areas	✓	×	×		
The temporary impact on the recreational use of recreational resources	✓	×	×		
The temporary impact on the recreational use of the Wales Coast Path and NCR 5	✓	×	×		

20.10 Cumulative effects assessment

20.10.1.1 A description of the significance of cumulative effects upon land use and recreation receptors arising from each identified impact is given below.

20.10.2 Agricultural Land Quality

20.10.2.1 Cumulative effects could occur where areas of the best and most versatile land are permanently affected by other projects or plans that have been screened into the CEA.

20.10.3 Farm Holdings

20.10.3.1 Cumulative effects could occur where farm holdings within the Mona Proposed Onshore Development Area are also affected by other projects and plans that have been screened into the CEA.

20.10.4 Recreational Resources

20.10.4.1 Cumulative effects could occur where recreational resources, including recreational facilities, public access land and/or PRoW affected within the Mona Proposed Onshore Development Area are also affected by other projects and plans that have been screened into the CEA.

Tier 1

Construction phase

Magnitude of impact

Agricultural Land Classification – Temporary

20.10.4.2 The changes arising from the construction of the onshore infrastructure of the Awel y Môr Offshore Wind Farm could be similar to those arising from the construction activities within the Mona Proposed Onshore Development Area. However, it is considered that this would primarily occur at the east end of the Mona Proposed Onshore Development Area.

20.10.4.3 Additional land would be temporarily affected in the cumulative scenario during the construction of the Awel y Môr Offshore Wind Farm cable route. The duration of this temporary impact is considered to be medium term (i.e. one to five years).

20.10.4.4 Therefore, the magnitude of the temporary impact on the quality of agricultural land and soils is assessed as **negligible**. This is based on the implementation of appropriate mitigation measures to protect soil resources during the construction phase of the Mona Offshore Wind Project.

Agricultural Land Classification – Permanent

20.10.4.5 The permanent loss of agricultural land following construction of the Awel y Môr Offshore Wind Farm substation and Major Development (40/2021/0309) would affect an area of approximately 7.1ha of Subgrade 3a land.

20.10.4.6 Therefore, the magnitude of the permanent impact, based on the loss of between 1 and 20ha of land, is assessed as **medium**.

Sensitivity of the receptor

20.10.4.7 The sensitivity of the agricultural land quality receptor is assessed as **high** due to the presence of Subgrade 3a land.

Significance of effect

Agricultural Land Classification – Temporary

20.10.4.8 The overall significance of the temporary cumulative effect of construction on agricultural land quality is assessed to be of **minor adverse** significance, based on a negligible magnitude of impact on a receptor of high sensitivity, which is not significant in EIA terms.

Agricultural Land Classification – Permanent

20.10.4.9 The overall significance of the effect of the construction on agricultural land classification is therefore assessed to be permanent **moderate adverse**. Based on National Policy under PPW and TAN 6 (Annex B, paragraph B2), this is not considered to be a significant loss of the best and most versatile agricultural land, as the area of Subgrade 3a affected cumulatively falls well below the threshold of 20ha identified in this policy. Therefore, on this basis, the cumulative loss of Subgrade 3a land is not assessed to be significant in EIA terms.

Magnitude of Impact

Farm Holdings – Temporary

20.10.4.10 There would be potential for some additional disruption to farm holdings belonging to several land owners at the eastern end of the Mona Proposed Onshore Development Area during the construction period, but the temporary cumulative effects would not affect the overall viability of these farm holdings. The duration of this temporary impact is considered to be medium term (i.e. one to five years).

20.10.4.11 Therefore, the magnitude of the temporary impact on the operation of farm holdings is assessed as **low**.

Farm Holdings – Permanent

20.10.4.12 The details of the holding/s belonging to several land owners affected by the permanent onshore infrastructure for Awel y Môr Offshore Wind Farm and Major Development (40/2021/0309) is unknown, but the Awel y Môr Offshore Wind Farm substation affects a total of approximately 7.1ha of land.

20.10.4.13 Therefore, the magnitude of the permanent impact on the operation of farm holdings is assessed as **low**.

Sensitivity of the receptor - Temporary

20.10.4.14 The sensitivity of the farm holdings belonging to several land owners affected is assessed to be **high**, based on the potential enterprises affected being dependent on the spatial relationship of that land to key infrastructure and access required between that infrastructure and the land on a frequent basis.

Sensitivity of the receptor – Permanent

20.10.4.15 The sensitivity of the farm holdings belonging to several land owners cumulatively affected is assessed to be **low**, based on two discrete areas of land required for the Mona Onshore Substation Options.

Significance of effect

Farm Holdings - Temporary

20.10.4.16 The potential cumulative effects on farm holdings belonging to several land owners is assessed to be **minor adverse** based on a **low** magnitude of impact and a **high** sensitivity of some holdings.

Farm Holdings – Permanent

20.10.4.17 The cumulative permanent loss of land from farm holdings belonging to several land owners associated with the Mona Onshore Substation Options is assessed to be of permanent **minor adverse** significance based on a **low** magnitude of impact on a receptor of **low** sensitivity.

Magnitude of Impact – Recreational Resources

20.10.4.18 There is the potential for cumulative effects on footpath DE/105/7 which falls within the Awel y Môr Offshore Wind Farm onshore infrastructure area. If there were to be an overlap in construction works for both Awel y Môr Offshore Wind Farm and Mona Proposed Onshore Development Area, measures would be identified to manage the interface between the two projects to ensure that the effect on this footpath is reduced, as far as practicable. The duration of this temporary impact is considered to be short term (i.e. up to one year).

20.10.4.19 There is no potential for cumulative effects between the Mona Offshore Wind project and Major Development (40/2021/0309) as there are no recreational resources likely to be affected by both developments.

20.10.4.20 Therefore, the magnitude of the temporary impact on the recreation use of recreational resources is assessed as **low**.

Sensitivity of receptor – Recreational Resources

20.10.4.21 The sensitivity of the PRoW is assessed to be **medium** as the route appears to be a recreational route used by the local community where there are alternative routes that can be followed.

Significance of effect – Recreational Resources

20.10.4.22 Based on a potential **low** cumulative magnitude of impact on a footpath and the **medium** sensitivity of the receptor, the cumulative effect on PRoW is assessed to be of **minor adverse** significance, which is not significant in EIA terms.

Operations and maintenance phase

20.10.4.23 No further cumulative effects for land use and recreation are identified in the operations and maintenance phase.

20.11 Transboundary effects

20.11.1.1 A screening of transboundary impacts has been carried out and has identified that there was no potential for significant transboundary effects with regard to land use and recreation from the Mona Offshore Wind Project upon the interests of other states.

20.12 Inter-related effects

20.12.1.1 Inter-relationships are considered to be the impacts and associated effects of different aspects of the proposal on the same receptor. These are considered to be:

- 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. subsea noise effects from piling, operational turbines, vessels and decommissioning)
- Receptor led effects: Assessment of the scope for all effects to interact, spatially and temporally, to create inter-related effects on a receptor. Receptor-led effects may be short term, temporary or transient effects, or incorporate longer term effects.

20.12.1.2 A description of the likely interactive effects arising from the Mona Offshore Wind Project on land use and recreation is provided in volume 3, chapter 25: Inter-related effects of the PEIR – Onshore.

20.13 Summary of impacts, mitigation measures and monitoring

20.13.1.1 Information on land use and recreation within the land use and recreation study area was collected through desk top review and recreational site survey.

20.13.1.2 Table 20.25 presents a summary of the potential impacts, measures adopted as part of the project and residual effects in respect to land use and recreation. The impacts assessed include: loss of agricultural land quality; impacts on farm holdings and impacts on recreation, including the coast, recreational resources and PRoW and other linear routes. Overall, it is concluded that there will be no potential significant effects on agricultural land quality and farm holdings and recreational use of the Wales Coast Path and NCR 5 during construction, operations and maintenance and decommissioning the Mona Offshore Wind Project. However, there will be potential temporary significant effects on recreational resources during construction of the Mona Offshore Wind Project.

20.13.1.3 Table 20.26 presents a summary of the potential cumulative impacts, mitigation measures and residual effects. The cumulative impacts assessed include: loss of agricultural land quality; impacts on farm holdings and impacts on recreational resources. Overall it is concluded that there will be no significant cumulative effects from the Mona Offshore Wind Project alongside other projects/plans.

20.13.1.4 No potential transboundary impacts have been identified in regard to effects of the Mona Offshore Wind Project.

Table 20.25: Summary of potential environmental effects, mitigation and monitoring.

[a] C=construction, O=operations and maintenance, D=decommissioning

Description of impact	Phase[a]			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							
The temporary loss of best and most versatile land	✓	✗	✗	Implementation of a soil management strategy during construction period in accordance with recognised best practice to reduce loss of agricultural land quality, as far as possible	C: Negligible	C: High	C: Minor adverse	No further mitigation measures proposed beyond measures adopted as part of the project	C: Minor adverse	No further monitoring proposed
The permanent loss of best and most versatile land	✓	✓	✓	None	C: Medium O: Medium D: Medium	C: High O: High D: High	C: Moderate adverse O: Moderate adverse D: Moderate adverse		C: Moderate adverse O: Moderate adverse D: Moderate adverse	
The temporary disruption caused to the operation of farm holdings	✓	✗	✗	Implementation of measures during construction to limit disruption to the operation of individual holdings.	C: Low	C: High	C: Minor adverse		C: Minor adverse	
The permanent disruption caused to the operation of farm holdings	✓	✓	✓	None	C: Low O: Low D: Low	C: Low O: Low D: Low	C: Minor adverse O: Minor adverse D: Minor adverse		C: Minor adverse O: Minor adverse D: Minor adverse	
The temporary impact on the recreational use of Coastal Areas	✓	✗	✗	Retention of access to the coastal areas throughout the construction period	C: Low	C: Medium	C: Minor adverse		C: Minor adverse	
The temporary impact on the recreational use of recreational resources	✓	✗	✗	Retention of access to recreational resources throughout the construction period	C: Low	C: High	C: Moderate adverse		C: Moderate adverse	
The temporary impact on the recreational use of the Wales Coast Path and NCR 5	✓	✗	✗	Retention of access to these routes throughout the construction period	C: Negligible	C: Very high	C: Minor adverse		C: Minor adverse	

Table 20.26: Summary of potential cumulative environmental effects, mitigation and monitoring.

[a] C=construction, O=operations and maintenance, D=decommissioning

Description of effect	Phase[a] C	O	D	Measures adopted as part of the project	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
Tier 1										
The temporary loss of best and most versatile land	✓	✗	✗	Implementation of a soil management strategy during construction period in accordance with recognised best practice to reduce loss of agricultural land quality, as far as possible	C: Negligible	C: High	C: Minor adverse	No further mitigation measures proposed beyond measures adopted as part of the project	C: Minor adverse	No further monitoring proposed
The permanent loss of best and most versatile land	✓	✓	✓	None	C: Medium O: Medium D: Medium	C: High O: High D: High	C: Moderate adverse O: Moderate adverse D: Moderate adverse		C: Moderate adverse O: Moderate adverse D: Moderate adverse	
The temporary disruption caused to the operation of farm holdings	✓	✗	✗	Implementation of measures during construction to limit disruption to the operation of individual holdings.	C: Low	C: High	C: Minor adverse		C: Minor adverse	
The permanent disruption caused to the operation of farm holdings	✓	✓	✓	None	C: Low O: Low D: Low	C: Low O: Low D: Low	C: Minor adverse O: Minor adverse D: Minor adverse		C: Minor adverse O: Minor adverse D: Minor adverse	
The temporary impact on the recreational use of recreational resources	✓	✗	✗	Retention of access to recreational resources throughout the construction period	C: Low	C: medium	C: Minor adverse		C: Minor adverse	

20.14 Next steps

20.14.1.1 Additional site specific surveys are required to inform the assessment of land use and recreation for the Environmental Statement. These additional site specific surveys would comprise:

- Reconnaissance surveys of soils to confirm the nature and ALC of soil types (identified as part of the desktop study) located within the land use and recreation study area. These surveys would include the use of hand auger borings and soil pits to confirm the characteristics of soil profiles within each of the soil types and assist in the development of the Outline Soil Management Strategy for the Mona Offshore Wind Project.
- A detailed ALC survey for areas within the land use and recreation study area where there would be permanent loss of agricultural land associated with the Mona Onshore Substation Options. These surveys would include hand auger borings taken at approximately 100m intervals across the areas experiencing permanent land take and soil pits as necessary.
- In addition, where required, proposals would be developed to be included in the Outline PRoW Management Strategy, in consultation with relevant local planning authorities, Sustrans, NRW, and other interested parties as appropriate.
- Discussions with landowners would be undertaken to inform the design of the Mona Offshore Wind Project to reduce as far as possible, the effects of the proposals on individual farm holdings during the construction phase.

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