

# MONA OFFSHORE WIND PROJECT

## Preliminary Environmental Information Report

Volume 8, annex 26.2: Seascape and landscape character baseline technical report



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FINAL

Image of an offshore wind farm

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## Glossary

Term	Meaning
Landscape	An area, as perceived by people, the character of which is a result of the action and interaction of natural and/or human factors.
Landscape character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
Landscape Character Areas	These are single unique areas which are the discrete geographical areas of a particular landscape type.
Landscape Character Assessment	The process of identifying and describing variation in the character of the landscape and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscape distinctive. The process results in the production of a Landscape Character Assessment.
Landscape Character Types	These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation, historical land use, and settlement pattern.
Zone of Theoretical Visibility	A map, usually digitally produced, showing areas of land within which, a development is theoretically visible.

## Acronyms

Acronym	Description
AONB	Area of Outstanding Natural Beauty
CEA	Cumulative Effect Assessment
LCA	Landscape Character Area
LCT	Landscape Character Type
MCA	Marine Character Area
MDS	Maximum Design Scenario
NLCA	National Landscape Character Area (Wales)
NRW	Natural Resources Wales
SCA	Seascape Character Area
SLVIA	Seascape and Landscape Visual Impact Assessment
SSSI	Site of Special Scientific Interest
SSZ	Seascape Sensitivity Zone
ZTV	Zone of Theoretical Visibility
PEIR	Preliminary Environmental Information Report
MLWS	Mean Low Water Springs
SLA	Special Landscape Areas

Acronym	Description
RSPB	Royal Society for the Protection of Birds
Ministry of Defence	MoD

## Units

Unit	Description
%	Percentage
km <sup>2</sup>	Square kilometres
W/m <sup>2</sup>	Watts per metre squared – used to assess wind power
nm	nautical miles

# 1 Seascape and landscape character baseline technical report

## 1.1 Introduction

1.1.1.1 This seascape, landscape and visual resources technical report describes the seascape and landscape character baseline that will form part of the Seascape Landscape and Visual Impact Assessment (SLVIA) in volume 4, chapter 26: Seascape, landscape and visual resources of the Preliminary Environmental Information Report (PEIR).

## 1.2 Study area

1.2.1.1 The SLVIA study area for the generation and transmission assets of the Mona Offshore Wind project, hereafter referred to as ‘the SLVIA study area’, which is shown in Figure 1.1 below. The SLVIA study area has been based on the findings of an analysis of the Zone of Theoretical Visibility (ZTV) and is described below:

- The area of land to be temporarily and permanently occupied during construction, operations and maintenance and decommissioning of the Mona Offshore Wind Project together with:
  - 50 kilometre (km) buffer from the Mona Array Area. This study area incorporates the Mona Offshore Cable Corridor. This distance threshold aligns with recommendations in the White Consultants report for Natural Resources Wales (NRW) ‘Seascape and Visual Buffer Study for Offshore Wind Farms’ (White Consultants, 2020).
  - 1km buffer from the Mona Proposed Onshore Development Area (i.e. the area landward of Mean Low Water Springs (MLWS) to be temporarily or permanently occupied during the construction, operations and maintenance and decommissioning of the Mona Offshore Wind Project
  - 10km from the Mona Onshore Substation.

1.2.1.2 The buffers used to define the SLVIA study area are based on the Maximum Design Scenario (MDS) set out in volume 4, chapter 26: Seascape, landscape and visual resources of the PEIR.

## 1.3 Desktop study

1.3.1.1 Information on the baseline landscape character within the SLVIA study area was collected through a detailed desktop review of published studies and datasets. These are summarised in Table 1.1 below.

**Table 1.1: Summary of key desktop characterisation sources.**

Title	Source	Year	Author
A Landscape strategy for Lancashire	Lancashire County Council	2000	Lancashire County Council
Supplementary Planning Guidance – Landscape Character Assessment of Sefton	Sefton Council	2003	Sefton Council

Title	Source	Year	Author
An assessment of the sensitivity and capacity of the Scottish seascape in relation to wind farms SNH Commissioned Report No. 103	Scottish Natural Heritage	2005	Scott, K.E., Anderson, C., Dunsford, H., Benson, J.F. and MacFarlane, R.
Isle of Man Landscape Character Assessment	Isle of Man Government	2008	Chris Blandford Associates
(2016-2019) National Character Area (NCA) Profile	Natural England website	Various (2012 to 2014)	Natural England
Conwy & Denbighshire Landscape Sensitivity and Capacity Assessment for Wind Energy Development	Conwy County Borough Council and Denbighshire County Council	2013	Denbighshire County Council
National Landscape Character	NRW website	Various (2013)	NRW
LANDMAP – the Welsh landscape baseline	NRW website	2023	NRW
Anglesey Seascape Character Assessment	Isle of Anglesey Council	2013	Fiona Fyfe Associates
Clwydian Range and Dee Valley Management Plan 2014 - 2019	Clwydian Range and Dee Valley Area of Outstanding Natural Beauty (AONB)	2014	Clwydian Range and Dee Valley AONB Partnership
Background Paper 27 Special Landscape Areas	Conwy Borough Council	2014	Conwy Borough Council
Landscape Unit and Strategy Area Maps	Conwy Borough Council	2014	Conwy Borough Council
Marine Plan Areas in England	Marine Management Organisation	2014	Marine Management Organisation
Supplementary Planning Guidance: Landscapes and Seascapes of Eryri	Eryri National Park (Snowdonia National Park) Authority	2014	Eryri National Park (Snowdonia National Park) Authority
The Isle of Anglesey AONB Management Plan Review 2015 to 2020	Isle of Anglesey AONB/Isle of Anglesey County Council	2015	Isle of Anglesey AONB/Isle of Anglesey County Council
National Seascape Assessment for Wales	NRW website	2015	Land Use Consultants (LUC)
Supplementary Planning Guidance: Landscapes Sensitivity and Capacity Assessment	Eryri National Park (Snowdonia National Park) Authority	2016	Eryri National Park (Snowdonia National Park) Authority
LANDMAP Guidance Note 1: LANDMAP & Special Landscape Areas	NRW website	2017	NRW
Seascape Character Assessment for the Northwest Inshore and Offshore Marine Plan Areas	Marine Management Organisation	2018	Land Use Consultants
Seascape and visual sensitivity to offshore wind farms in Wales: Strategic assessment and guidance. – Stages 1-3- Seascape and visual sensitivity assessment for offshore wind farms, NRW Report No. 331	NRW website	2019	S. White, S., S. Michaels, S., H. King, H.

Title	Source	Year	Author
Welsh National Marine Plan	Welsh Government	2019	Welsh Government
Wirral Landscape Character Assessment	Wirral Council	2019	Land Use Consultants

### 1.3.2 Introduction to results

- 1.3.2.1 This section provides summary descriptions of Landscape Character Areas (LCAs), Marine Character Areas (MCAs) and Seascape Character Areas (SCAs) relevant to the offshore generation component of Mona Offshore Wind Project. LANDMAP Aspect Areas relevant to the Mona Proposed Onshore Development Area are described in section 1.3.8.
- 1.3.2.2 The landscape character descriptions are drawn from published assessments and are supported by observations in the field. The descriptions include the characteristics and special qualities relating to internationally and nationally designated landscapes within the SLVIA study area, such as World Heritage Sites, National Parks and AONB. Information relating to local designations such as Special Landscape Areas (SLA) is also included. The extent of the ZTV has been used to identify those character areas and designated landscapes which have the potential to experience direct and indirect impacts of the Mona Offshore Wind Project.

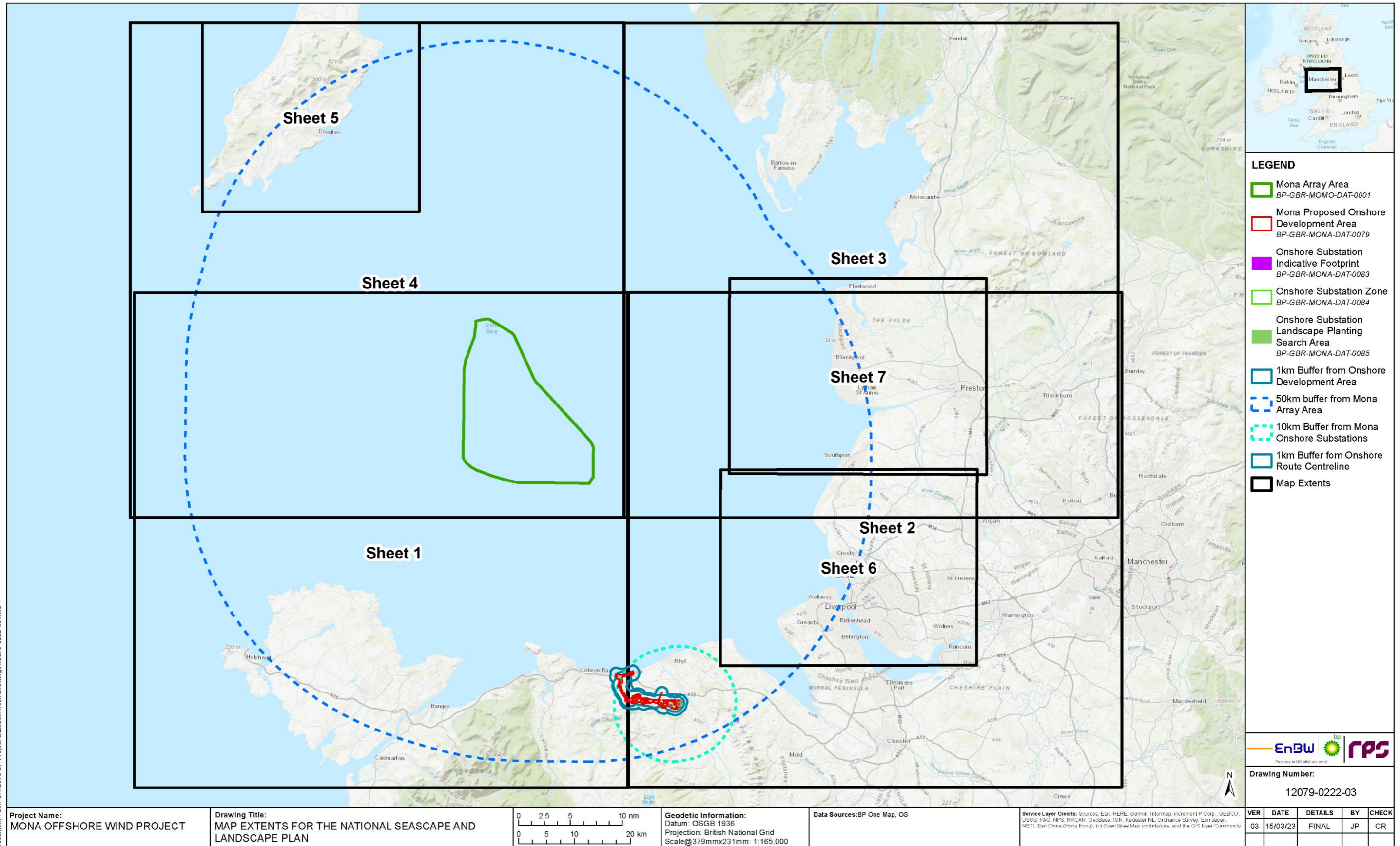


Figure 1.1: Map extents for the national seascape and landscape plan.

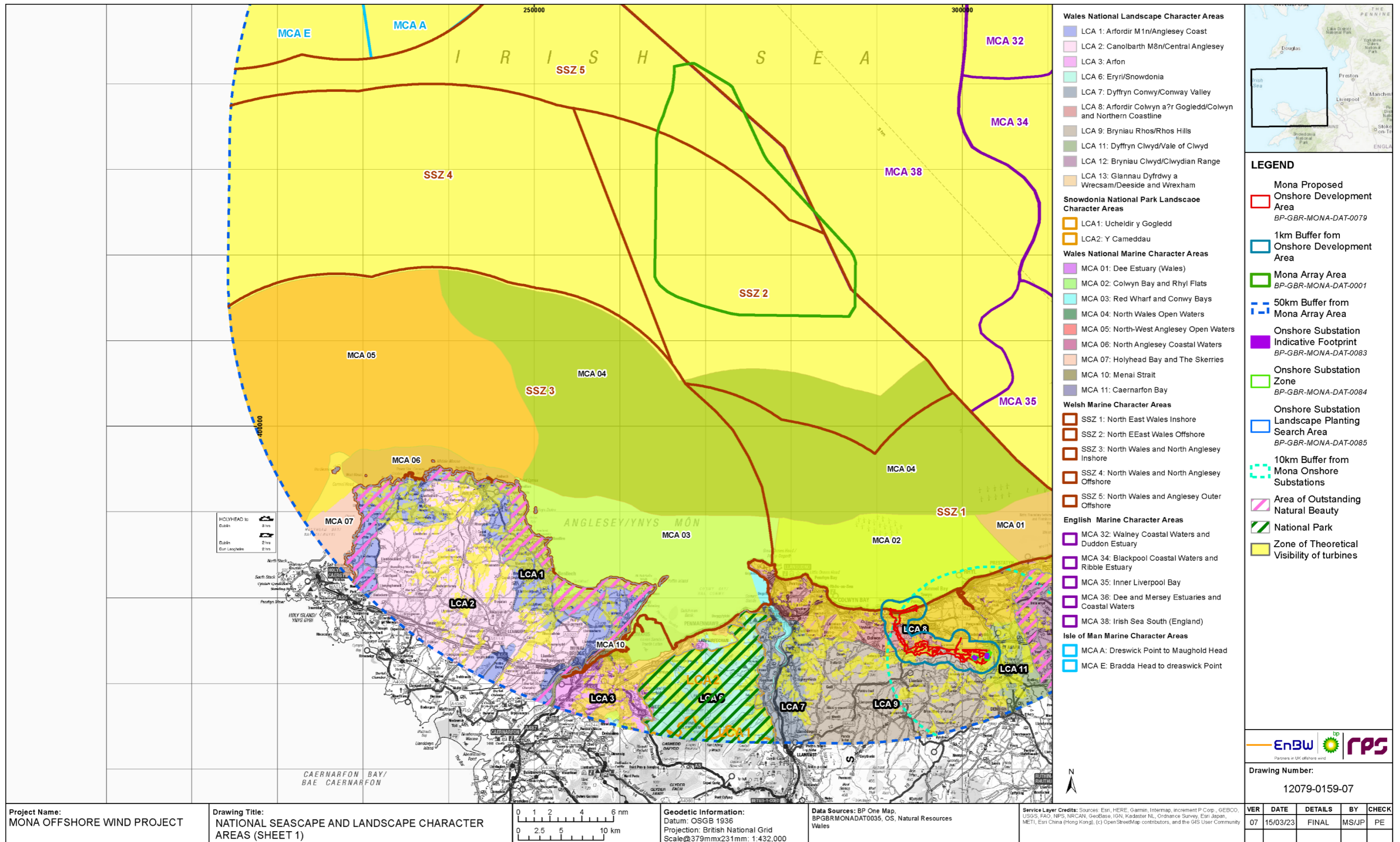


Figure 1.2: National SCAs, MCAs and LCAs within the SLVIA study area (sheet 1).



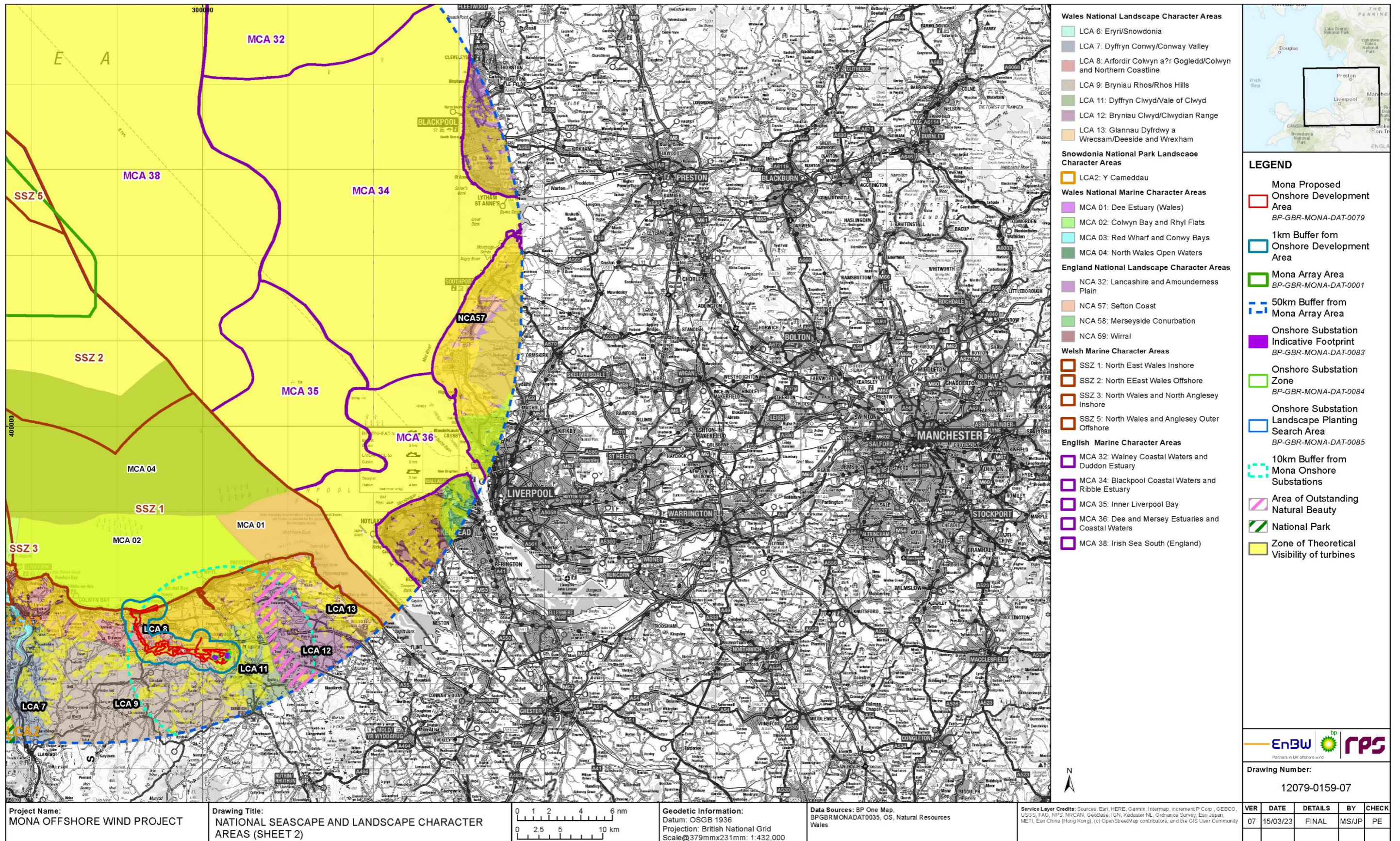


Figure 1.3: National SCAs, MCAs and LCAs within the SLVIA study area (sheet 2).

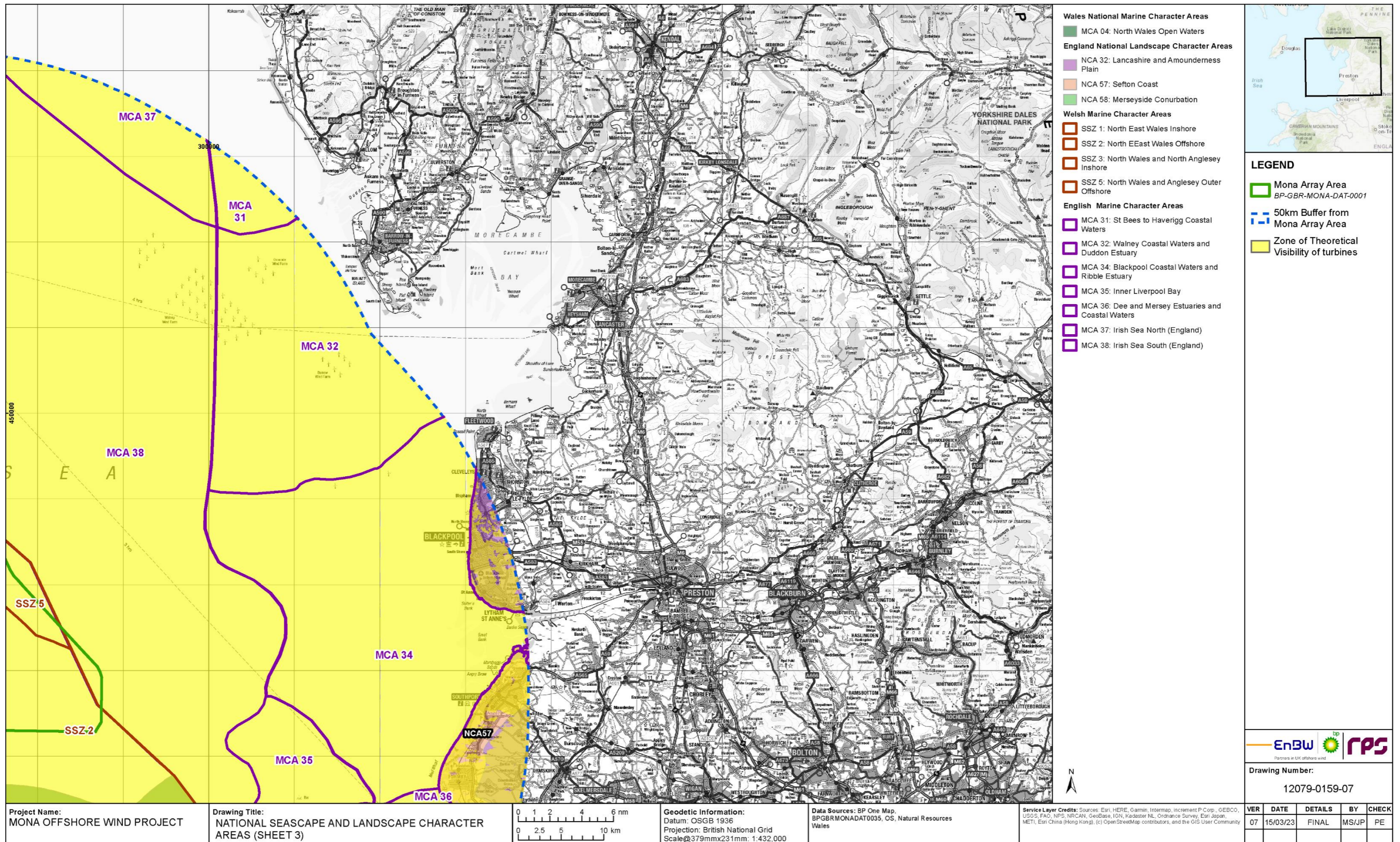


Figure 1.4: National SCAs, MCAs and LCAs within the SLVIA study area (sheet 3).

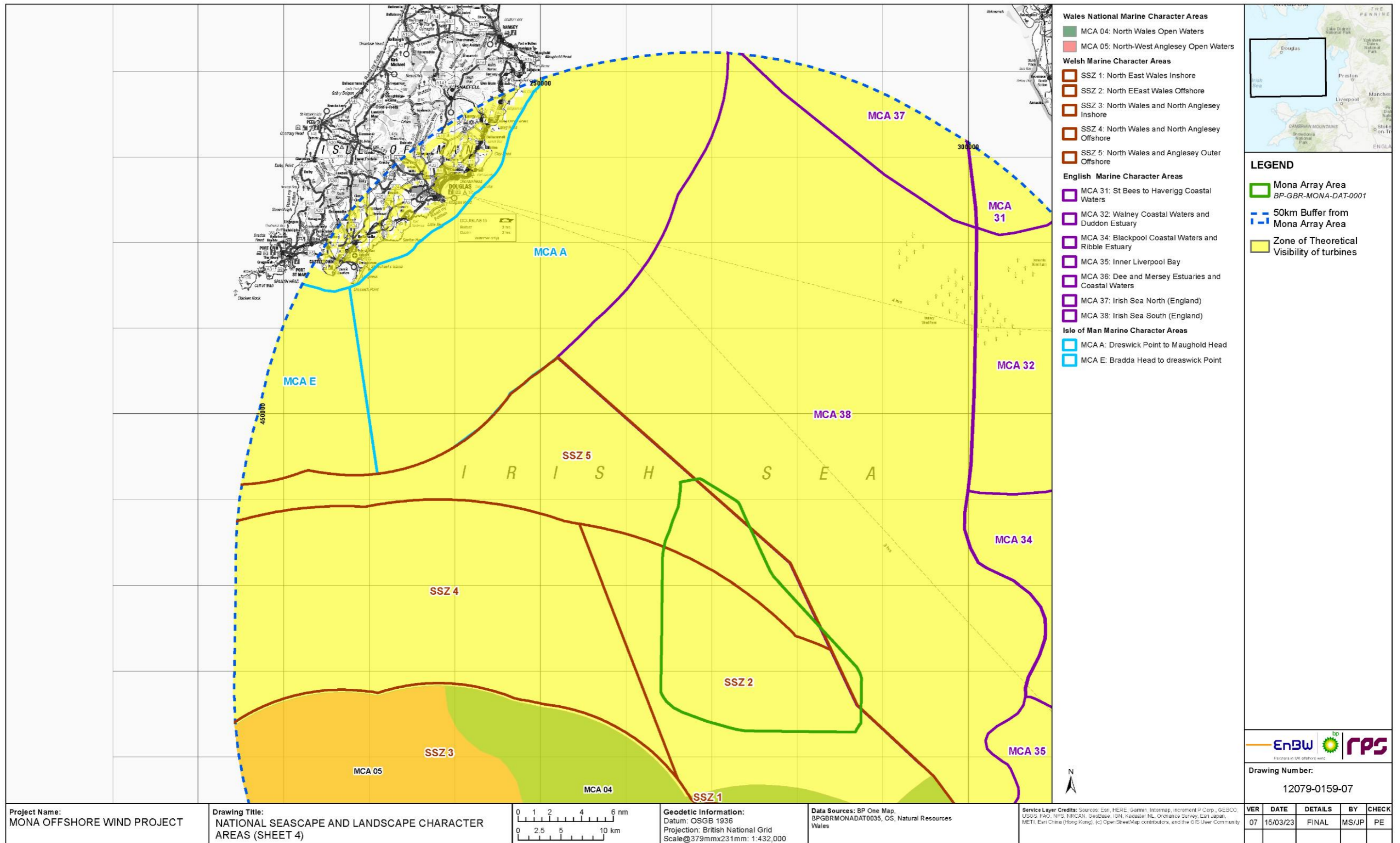


Figure 1.5: National SCAs, MCAs and LCAs within the SLVIA study area (sheet 4).

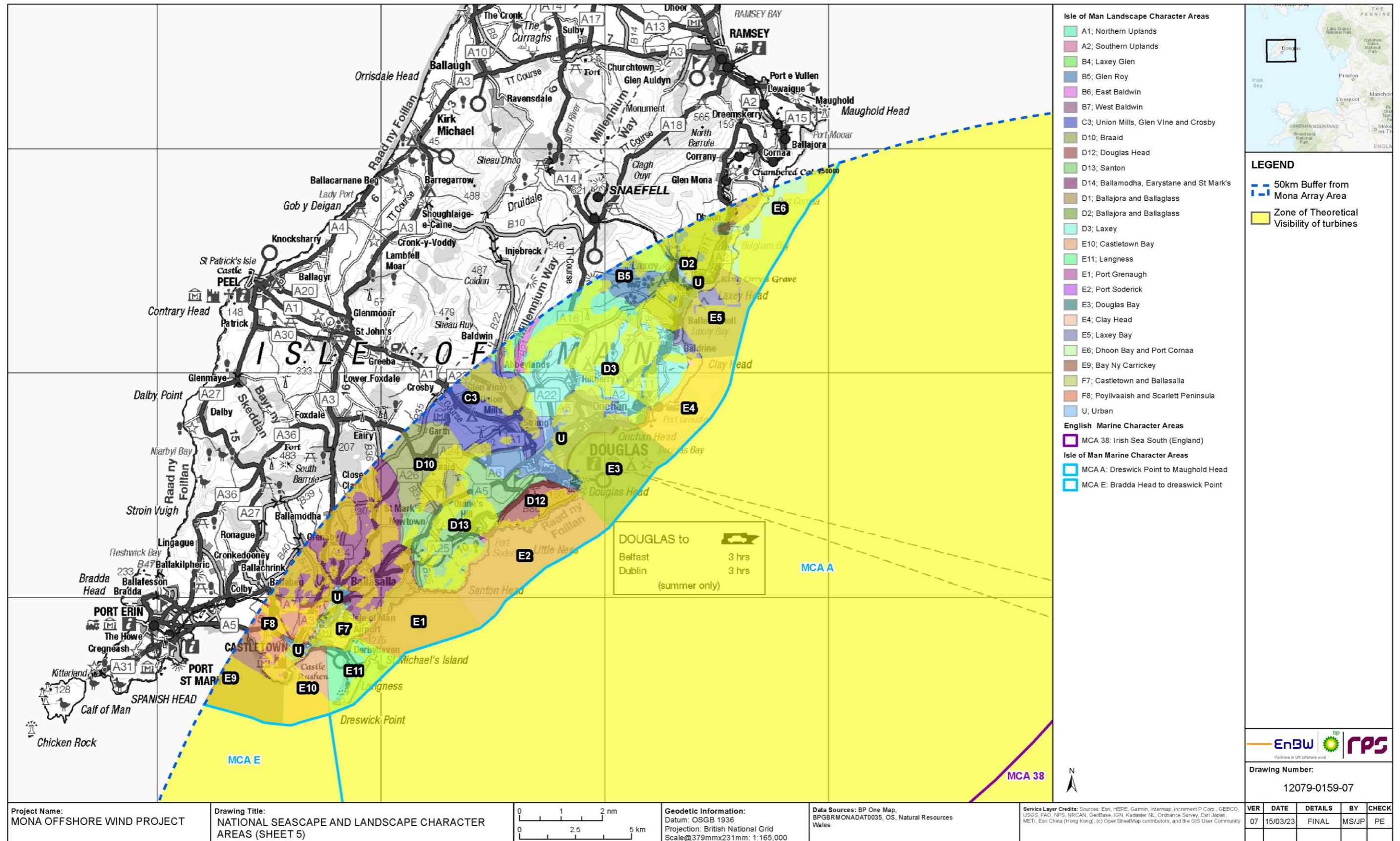


Figure 1.6: National SCAs, MCAs and LCAs within the SLVIA study area (sheet 5).

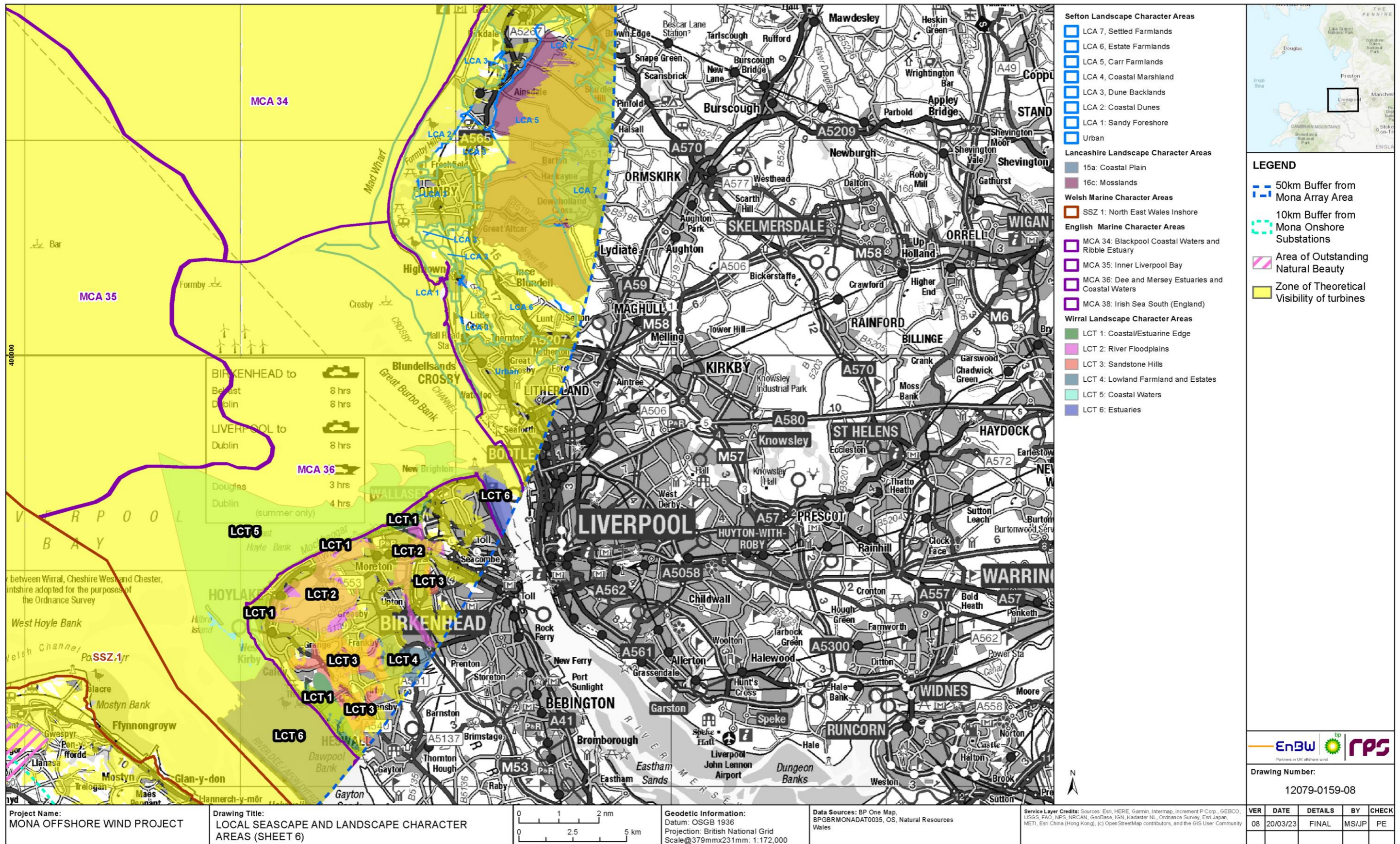


Figure 1.7: National SCAs, MCAs and LCAs within the SLVIA study area (sheet 6).

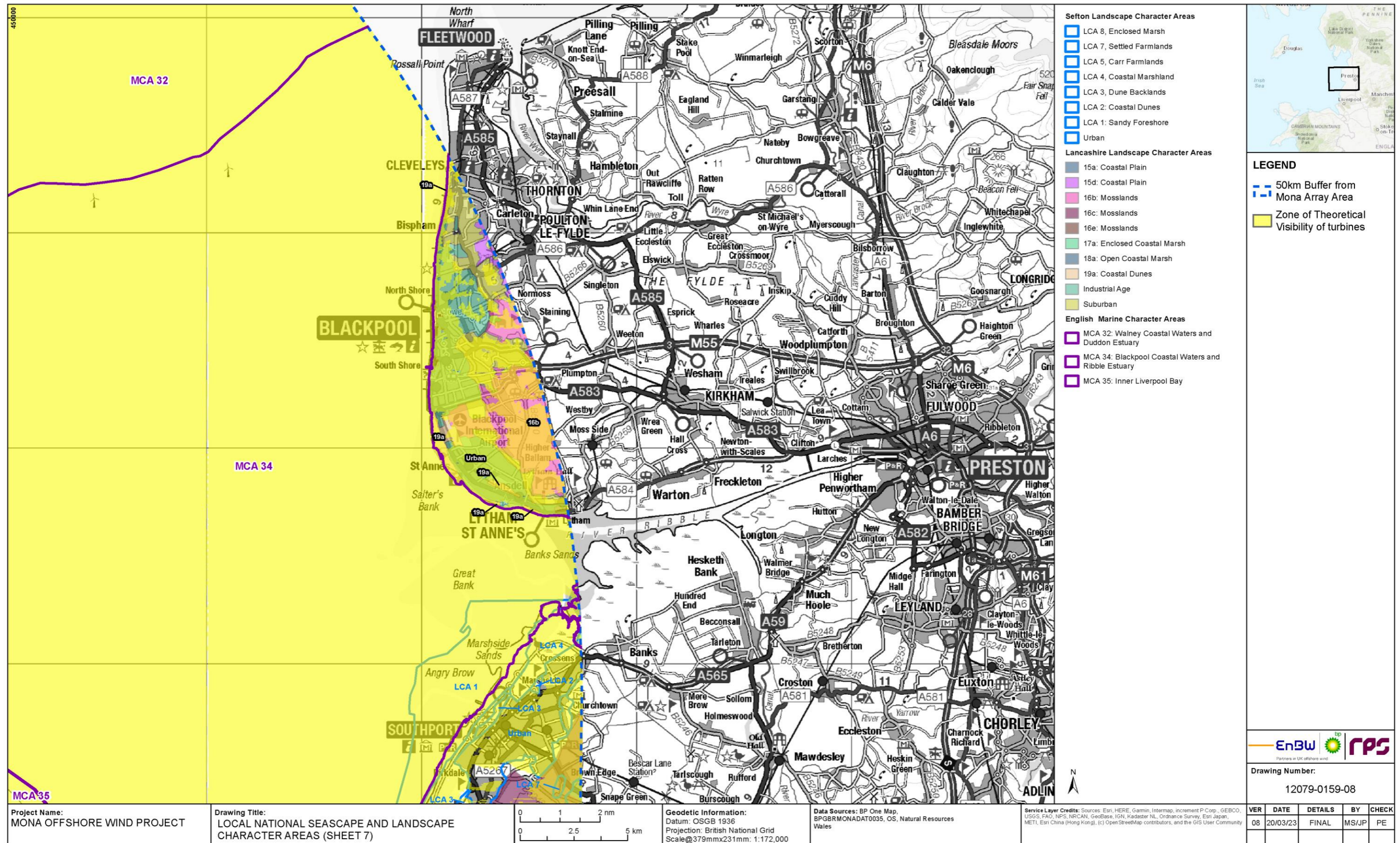


Figure 1.8: National SCAs, MCAs and LCAs within the SLVIA study area (sheet 7).

### 1.3.3 MCAs that coincide with the Mona Array Area ZTV

1.3.3.1 The ZTV for the Mona Array Area is shown in context with the English and Welsh MCAs in Figure 1.2 to Figure 1.5 of this technical report above.

#### Welsh MCAs

1.3.3.2 The Wales National Seascape Assessment undertaken by Land Use Consultants (LUC) in 2015 (LUC, 2015) identified and described MCAs within coastal and inshore areas of Welsh territorial waters.

#### MCA 01- Dee Estuary

1.3.3.3 Most of this MCA is within the 50km SLVIA study area, apart from the far southeast part up the Dee Estuary. The ZTV for the Mona Array Area overlaps with much of this MCA. Key characteristics relevant to the Mona Offshore Wind Project include:

- The Dee Estuary forms a natural border between Wales and England, backed by the rising foothills of the Clwydian Range and Dee Valley AONB
- Nationally important industries continue to dominate, including processing plants for Irish Sea gas and servicing plants for the nearby offshore wind farms from the Port of Mostyn
- MCA valued as an important recreational space providing access to the coast for nearby urban populations, including via the Wales Coast Path. Royal Society for the Protection of Birds (RSPB) reserves provide opportunities for bird watching
- The sand dunes at the bar of the estuary contain inland views and urban/industrial influence, creating a contrasting maritime character with expansive views along the coast and out to the Irish Sea (with its offshore wind farms).

#### MCA 02 – Colwyn Bay and Rhyl Flats

1.3.3.4 The Mona Array Area ZTV overlaps with this MCA. It includes the Rhyl Flats Offshore Wind Farm. Relevant key characteristics of this MCA include:

- Low-lying coastline backed by coastal levels associated with the broad mouth of the Vale of Clwyd to the east half of the MCA
- Little Orme and Great Orme headlands form dramatic rugged landmarks
- Developed coastline with many seaside resort towns, notably Llandudno (and pier) Colwyn Bay (and pier), Rhyl and Prestatyn, the latter having many caravan and chalet parks on their fringe. The coast serves as a traditional holiday destination
- Wales Coast Path and a popular cycleway run the length of the coastline. Collectively, the A55, A548 and main Holyhead to Chester railway line follow close to the coastline
- Rhyl Flats Offshore Wind Farm forms a dominating offshore feature. The moving turbines are supplemented by further turbines beyond (in MCA 29)

- Limestone hills form a backdrop, in the east linking to the adjacent slopes of the Clwydian Range and Dee Valley AONB. From further out to sea, views reach beyond to the mountains of Eryri National Park (Snowdonia National Park).

#### MCA 03 – Red Wharf and Conwy Bays

1.3.3.5 This MCA is located wholly within the ZTV of the Mona Array Area. Relevant key characteristics of this MCA include:

- Comprises – east to west; Conwy, Red Wharf and Dulas Bays, characterised by broad sand flats and low-lying sandy beaches, punctuated by rugged cliffs and prominent limestone headlands
- Northeast aspect of the bays in the west is unusual for Wales, with Great Orme's Head prominent in many land-to-sea views
- Popular tourist destination, evidenced by several coastal settlements. Activities include swimming, angling and diving, jet-skiing and pleasure trips. There are several recreational dive sites located along the coast
- The Wales Coast Path follows much of the coastline in this MCA. Most of the adjacent Anglesey coastline is AONB-designated, reflecting its nationally important scenic qualities. Eryri National Park (Snowdonia National Park) rises dramatically to the south from Colwyn Bay
- Puffin island a key feature of the seascape setting in views north, with Great Orme being a distinctive feature to the east; forming gateway features into Conwy Bay
- Off the Beaumaris shoreline views are dominated by the open expanse of Conwy Bay, its colours and textures continually changing in response to weather and tidal conditions, and numerous boats
- To the west of this MCA the seascape setting dominated by Ynys Dulas off the east coast of Anglesey, and by the large vessels waiting out at sea for the Liverpool Pilot.

#### MCA 04 - North Wales Open Waters

1.3.3.6 This MCA is located wholly within the ZTV of the Mona Array Area. The MCA includes the Gwynt y Môr Offshore Wind Farm. Relevant key characteristics include:

- Dominant maritime character is one of transit: recreational vessels entering or leaving the Menai Strait/Conwy Bay, or commercial vessels passing east and west to and from the Mersey and Dee
- Gwynt y Môr Offshore Wind Farm dominates the east of the MCA, and to the north – access is restricted around the Douglas Oil Field (marked by a series of lit buoys and shipping lanes depicted on marine charts).
- Commercial shipping seen offshore, including large vessels waiting for Liverpool Pilots to guide them safely into port
- Recreational boats are a feature particularly in the southeast of the MCA during the warmer months

- The landward view changes considerably throughout this MCA, with rocky headlands, islets and large bays found to the west and the large shallow opening of Conwy Bay to the east, with a backdrop of the mountains of Snowdonia.

**MCA 05 - Northwest Anglesey Open Waters**

1.3.3.7 This MCA is located wholly within the ZTV of the Mona Array Area and wraps around the north of Anglesey. Relevant key characteristics are:

- Glimpses of ferries and the Holyhead harbour breakwater are signs of significant human activity in adjacent MCA 24, while commercial shipping can be seen passing further offshore
- Recreational boats can also be seen in coastal waters during the warmer months
- The Skerries are prominent seascape features viewed from this MCA, with the Isle of Man and Holyhead Mountain also visible in clear conditions
- In the south, visual relationships with the adjacent rocky north coast of Anglesey, with small bays and inlets, which contribute to character
- The box-like form of Wylfa Power Station forms a prominent man-made feature in views to the coast, standing out against a rugged and open coastal scene
- Commercial shipping lanes offshore, recreational boats can be seen close to the shore in the warmer months.

**MCA 06 - North Anglesey Coastal**

1.3.3.8 This MCA is located wholly within the ZTV of the Mona Array Area and lies between MCA 05 and the north coastline of Anglesey. Relevant key characteristics of this MCA include:

- A rocky, high energy north-facing coastline with extensive wave-cut platforms and deeply incised bays
- Evidence of both modern and historic industry visible along the coast including historic brickworks, disused factories and the dominant form of Wylfa Power Station
- Coastal headlands, including Point Lynas are popular locations for spotting cetaceans. Coast crossed by the Isle of Anglesey Coast Path and large sections are owned by the National Trust
- Low-lying coast creates strong visual and physical connection between land and sea. The box-like, bright form of Wylfa Nuclear Power Station, with associated lighting at night, stands out in stark scale contrast
- Seascape features include the lighthouse on Point Lynas, the offshore islands of West Mouse, Middle Mouse and East Mouse and expansive views including the Skerries and the Isle of Man on the horizon.

**MCA 07 - Holyhead Bay and the Skerries**

1.3.3.9 MCA 07 is located off the north-west Anglesey coast. Due to the island blocking intervisibility with the Mona Array Area and the very small proportion that would be indirectly affected, that could have potential visibility, MCA 07 has been scoped out of the SLVIA.

**MCA 10 - Menai Strait**

1.3.3.10 MCA 10 is located off the south coast of Anglesey, between the mainland and Anglesey. Due to Anglesey blocking visibility of the Mona Array Area from this MCA, it has been scoped out of the SLVIA.

**1.3.4 Welsh Seascape Sensitivity Zones (SSZs)**

1.3.4.1 In addition to MCAs identified within the Wales National Seascape Assessment (LUC, 2015), Welsh SSZs have also been identified and described in NRW Report No. 331: Seascape and visual sensitivity to offshore wind farms in Wales - Stage 3 - Seascape and visual sensitivity assessment for offshore wind farms (White Consultants, 2019). Some of these SSZs overlap with the MCAs, but not all of them. Summary descriptions of the SSZs provided in NRW Report No. 331 are set out in the following sections below.

**Zone 01: Northeast Wales Inshore**

1.3.4.2 MCA 01 and MCA 02 and the east section of MCA 04 lie within SSZ 01. The descriptive summary of SSZ 1 is as follows:

1.3.4.3 To the east is a large scale open, relatively straight coastline with a large proportion of urban settlement, the tourism is focussed on beach holidays. There are already wind farm and gas developments offshore, which act as lit vertical foci together with related service vessels and commercial shipping. To the west the settled coast becomes embayed with headlands and more formal promenades terminating in the distinctive landform of Great Orme.

**Zone 02: Northeast Wales Offshore**

1.3.4.4 SSZ 2 falls mostly beyond the area of the Wales National Seascape Assessment (LUC, 2015). The descriptive summary of SSZ 02 is as follows:

1.3.4.5 The SSZ lies in open sea with the north edge of Gwynt y Môr Offshore Wind Farm located on its south margins and the Douglas oil and gas complex nearby. Beyond this to the south are further offshore wind farms and the northeast Wales coast which has large scale open, relatively straight coastline to the east and embayed coastline with headlands and the distinctive landform of Great Orme to the west. The coast has a high proportion of urban settlement focused on residential and tourism, with caravan and beach holidays to the east and Victorian resorts with associated promenades mainly to the west.

**Zone 03: North Wales and North Anglesey Inshore**

1.3.4.6 Welsh MCAs 03, central and west parts of MCA04, MCA05 and MCA07 lie within SSZ 03. The descriptive summary of SSZ 03 is as follows:



1.3.4.7 To the east the settled coast is backed by the mountains of Snowdonia (the Carneddau) and framed by the high cliffs of Great Orme's Head to the east and Puffin Island and the coast of Anglesey to the west. Anglesey generally has a lower plateau topography with resultant low cliffs and slopes, apart from the distinctive form of Holyhead Mountain which terminates the area with high sea cliffs to the west. Anglesey's north coast is rocky and convex meaning development out to sea would be largely unscaled whilst its northwest and east coasts have a series of small embayments and coves with associated small settlements and holiday accommodation in places.

1.3.4.8 Some industrial features such as Wylfa Nuclear Power Station are now disused, but structures may remain juxtaposed with onshore wind farms inland. The sea is open and exposed with commercial vessels running to and from the Mersey ports and ferries issuing from Holyhead's busy harbour.

#### **Zone 04: North Wales and North Anglesey Inshore**

1.3.4.9 This SSZ 04 falls beyond the area in the Wales National Seascape Assessment (LUC, 2015). The descriptive summary of SSZ 04 is as follows:

1.3.4.10 The area lies in open sea, offshore from Anglesey and the north Wales coast with the Isle of Man to the north. To the southeast lies the Great Orme and Snowdonia but the area is closest to the north coast of Anglesey from Lynas Point running round west to Holy Island. Anglesey generally has a low plateau topography with resultant low cliffs and slopes, apart from the distinctive form of Holyhead Mountain which terminates the likely affected coastline to the west. Anglesey's north coast is rocky and convex meaning development out to sea would be largely unscaled. On the other hand, its northwest and east coasts have a series of small embayments and coves with associated small settlements and holiday accommodation in places. The main built coastal landmark is Wylfa Nuclear Power Station, but structures may be seen juxtaposed with onshore wind farms inland. The sea is open and exposed. Commercial vessels running to and from the Mersey ports and ferries issuing from Holyhead's busy harbour tend to pass between SSZ 04 and the coast.

#### **Zone 05: North Wales and Anglesey Outer Offshore**

1.3.4.11 This SSZ falls beyond the area in the Wales National Seascape Assessment (LUC, 2015). The descriptive summary of the SSZ 05 is as follows:

1.3.4.12 The area lies in open sea at least 44km offshore from the Anglesey, North Wales and Llŷn peninsula coasts, although the SSZ's north edge is located around 22km from the Isle of Man. To the southeast there are the existing offshore wind farms at Gwynt y Môr and further Mona Array Areas lie to the northeast, including Walney Extension Offshore Wind Farm and West of Duddon Sands Offshore Wind Farm.

1.3.4.13 Anglesey predominantly has a low plateau topography and rocky coastline with a distinctive high point at Holyhead Mountain. Development out to sea would be largely unscaled in views. More elevated, northward views are possible from the north Wales coast at Great Orme and Conwy Mountain. The Llŷn peninsula also has cliff top views to the northeast towards the south-west extent of the SSZe. The sea is open and exposed with commercial vessels running inshore from this SSZ to and from the Mersey ports, and ferries issue from Holyhead's busy harbor.

### **1.3.5 English Marine Character Areas**

1.3.5.1 The character of English territorial waters within the SLVIA study area is described by LUC in Seascape Character Assessment for the Northwest Inshore and Offshore Marine Plan Areas (MMO, 2018).

#### **MCA 31 St Bees to Haverigg Coastal Waters**

1.3.5.2 MCA 31 is located off the Cumbria coast. Only a very small proportion of this MCA lies within the ZTV of the Mona Array Area, and it lies on the very northeast edge of the SLVIA study area. MCA 31 is predicted to experience negligible impacts, at most, and for this reason it has been scoped out of the SLVIA.

#### **MCA 32 Walney Coastal Waters and Duddon Estuary**

1.3.5.3 This MCA lies to the west of Morecambe Bay. Barrow, Ormonde and parts of Walney and West Of Duddon Sands Offshore Wind Farms lie within this MCA. The ZTV of the Mona Array Area overlaps with all of this MCA.

- Gently shelving, muddy sand seabed, extending from the coast and edges of Morecambe Bay westwards to a depth of around 20m
- Four wind farms lie off the coast, forming prominent moving structures within the seascape
- Views out from the south extent of the Lake District National Park are dominated by the undeveloped Duddon Estuary which forms a significant component of the Park's setting in this locality
- Views out to sea from Black Combe and the south Fells into the MCA are a significant characteristic of this part of the Lake District National Park
- Views inland have the backdrop of the Lake District's mountains and also industrial elements: views offshore feature the Isle of Man and the Galloway coast in Scotland.

#### **MCA 34 Blackpool Coastal Waters and Ribble Estuary**

1.3.5.4 This MCA shares a long east boundary with the Blackpool/Southport coastline.

- Shallow waters and a high tidal range (up to 9.8m at Lytham St Anne's) backed by extensive sandy and muddy/sandy beaches, intertidal sand flats and mudflats
- Along the Sefton Coast the landscape is dominated by sand dunes, stretching over 17km long. Around Formby and Ainsdale the dunes reach over 20m high, forming dominant features
- The Lennox Oil and Gas Field, one of five interlinked sites currently operational in Liverpool Bay, is in the southwest of the MCA
- The Fylde Coast is now very urbanised, with much industrial development (e.g. around Blackpool and Preston)

- From the coast there are long views to the mountains of North Wales and the Lake District, and from the Sefton Coast shipping lanes, wind turbines and oil and gas infrastructure are visible.

#### MCA 35 Inner Liverpool Bay

1.3.5.5 This MCA lies off the approach to Liverpool. The Burbo Bank Offshore Wind Farm lies within this MCA.

- Gently shelving coastal zone, from around 5m depth where it gives way to the inshore area of sand banks, mud flats and channels approaching the Mersey and Dee estuaries – to around 20m in the west and north
- A busy area for commercial shipping, with most vessels entering the Mersey passing through it. There is also moderate usage by recreational craft, including recreational anglers, as well as passenger ferries
- An important area for oil and gas extraction. One of the five interlinked sites is the Hamilton East Gas Field, connected by pipeline to the Hamilton North Gas Field in MCA 38: Irish Sea (South)
- More recently, offshore wind farms have been developed in this area.
- An area in the southwest of the MCA, and extending further west, is licensed by the Crown Estates for the dredging of marine aggregates, landed at Liverpool to supply the local market
- MCA widely visible from land in its south parts. The closer coasts are low lying and unlikely to be prominent in views from the sea, for example from the ferries which cross this area
- The offshore platforms, shipping activity and offshore wind turbines also influence views and perceptual qualities at night-time.

#### MCA 36 Dee and Mersey Estuaries and Coastal Waters

1.3.5.6 The Welsh National MCA01 lies within the west part of this MCA. The Birkenhead peninsular blocks some of the ZTV extent.

- The River Mersey, its historic waterfront and its maritime history are at the heart of Liverpool's strong sense of place and its importance as a tourist destination
- Burbo Bank Offshore Wind Farm, and several others in Welsh waters are prominent in views. There are also views across the Mersey to oil refineries at Ellesmere Port and to the Welsh coast
- Blackpool Tower is a distant landmark to the north, and on clear days Anglesey and Snowdonia can be seen
- Views also characterise both estuaries, with the vistas up and down the Mersey characteristic of Liverpool's setting.

#### MCA 37 Irish Sea North

- The east tip of the King William Banks is within the MCA where water depth is less than 10m. These banks extend westward into Isle of Man waters
- There are no fixed offshore structures in this MCA, and only a single light buoy at the east tip of the King William Banks, giving the MCA an undeveloped character
- Some recreational sailing routes cross the area, noted as medium or light use, connecting the ports of Whitehaven, Douglas and Ramsey
- Under clear conditions, there is intervisibility with the hills of the Lake District National Park, the Dumfries and Galloway coast, and the Isle of Man
- With an absence of offshore lights, there are dark skies across this MCA.

#### MCA 38 Irish Sea South

1.3.5.7 A very small part of the southern section of this MCA will experience direct impacts, as MCA 38 borders the northeast edge of the Mona Array Area. This MCA contains Walney Extension Offshore Wind Farm.

- A series of offshore oil and gas platforms. In the north the Morecambe, Calder and Millom fields supply gas via pipelines to Barrow-in-Furness
- The Hamilton and Douglas fields in the south deliver their gas to Point of Ayr in North Wales, while oil from these fields is transferred to tankers
- Dredging for aggregates is carried on in the north in the shallow sea east of the Isle of Man, and in the south in the vicinity of the Douglas oil field
- Walney Offshore Wind Farm extends west into this area from MCA 40, close to the North Morecambe gas platforms
- Several key shipping routes cross this sea, adding to the busy nature of the waters. These routes include the approaches to the major ports of Fleetwood and the Mersey
- Many 'medium use' recreational sailing routes cross the MCA, linking all the harbours on the English, Welsh and Isle of Man coasts
- The coast is relatively distant from this MCA, and the nearest areas are low-lying, meaning that there are low levels of intervisibility with the land. Under clear conditions, there is intervisibility with the hills of the Lake District National Park and the Isle of Man
- Lighting from the offshore platforms and wind turbines influences night-time seaward views
- The area is viewed from ferry services which link Liverpool and Heysham with Douglas, Belfast and Larne.

### 1.3.6 Isle of Man Seascape/Marine Character Areas (RPS characterisation)

#### MCA A: Dreswick Point to Maughold Head, Isle of Man Southeast Inshore Waters

1.3.6.1 This large MCA has been defined as extending from the east seaward boundaries of the Isle of Man coastal character areas E1 to E6, as well as E11 and part of H5, to the 12 nautical miles (nm) inshore waters boundary.

- The waters to the east of the Isle of Man are less than 50m deep, with a large area of shallower water to the north of MCA A
- This is a busy area of the Isle of Man inshore waters, as there are ferry routes from the English mainland (Liverpool and Heysham to Douglas) as well as smaller numbers of shipping from Ireland and Scotland. Shipping routes from the English mainland to Scotland and the Island of Ireland pass through this MCA
- This is also a popular area for recreational sailing, with boats crossing the Irish Sea, as well as travelling along the coast of the Isle of Man
- An Ministry of Defence (MoD) firing practice area is located to the north of MCA A. This is linked to a larger area in English territorial waters (D406C), extending from the MoD's Eskmeals Range, Cumbria. The west edge of Walney Extension Offshore Wind Farm is less than 5.5km from the east edge of this MCA.

#### MCA E: Bradda Head to Dreswick Point, Isle of Man Southwest Inshore Waters

1.3.6.2 This MCA has been defined as extending from the seaward boundaries of part of H4, J1, E9 and E10 Isle of Man coastal character areas.

- This is an area of smaller coves and islands. The depth of the sea is shallow within the coves, and around the rocks and islands. However, the depth of the seabed deepens close to the land and commercial shipping *en route* to Ireland comes close to the Isle of Man. This is a well-trafficked area of inshore waters which also hosts many recreational boats travelling in and out of Port St. Mary
- Lighthouses and light buoys mark the Islands, rocks and coasts of the Isle of Man. This, together with the commercial shipping and recreational craft, results in it being a busy MCA.

### 1.3.7 Onshore NCAs/NLCAs that coincide with the Mona Array Area ZTV

1.3.7.1 The ZTV for the Mona Array Area is shown in context with the English and Welsh NCAs and NLCAs in Figure 1.2 to Figure 1.5.

#### Welsh Landscape Character Areas

1.3.7.2 The landscape character of Wales within the SLVIA study area is described by NRW in its online NLCA resource.

### NLCA 01 Afordir Môn/Anglesey Coast

1.3.7.3 The ZTV for the Mona Array Area overlaps much of the north and east facing areas of this NLCA.

1.3.7.4 The NLCA coincides with much of the Anglesey Coast AONB designation.

- Much of the highest land on the island falls within the coastal area, including Parys Mountain (147m) and Holyhead Mountain (220m)
- Great variety of coastal types - The coastline has great variety, from sheer coastal cliffs and dramatic rocky headlands to small sandy coves and extensive low lying dunes and sandy estuaries
- Coastal Settlements – often relating to former industry. Much of the C20th coastal development relates to tourism and retirement property
- A number of prominent man-made landmarks – including Beaumaris Castle (World Heritage Site), the two bridges that cross the Menai Strait and connect with the mainland, Parys Mountain (distinctive industrial quarry landscape), Wylfa Nuclear Power Station, and the Aluminium works on Holy Island, with its tall, widely visible chimney.

### NLCA 02 Canolbarth Môn/Central Anglesey

1.3.7.5 The ZTV for the Mona Array Area mostly overlaps the north and east areas of Anglesey and higher areas away from the coast. Including Pen y Foel at 123m, Bryn Carmel 116m and Mynydd Bodafon 178m.

- The gentle topography, low lying and near flat in places, follows a northeast to southwest 'grain' imposed by major faults
- Extensive drumlin fields - thick layers of glacial boulder clays, especially in northwest
- Hedgerows and cloddiau - This is generally a rolling, open landscape with a well-established pattern of field boundaries, predominantly of hedgerows but with cloddiau in some areas
- Few woodlands - Woodlands larger than a small copse are an exception, being notably around Llangefni Dingle and Llyn Cefni reservoir, together with estate woodlands at Presaddfed (Bodedern). Except in sheltered areas, individual trees are few
- Generally rural settlement patterns - The only urban settlement is the county town of Llangefni, in the centre of the island. Its nucleated historic core contrasts with modern peripheral housing and expanding light industrial and business park developments
- There are only a few villages, but numerous scattered hamlets and farms throughout the area. Historic windmill towers - including some restored examples, form local features
- Modern wind farms - generally limited to an area north of Llandeusan but are seen in longer distance views from a much wider area.

**NLCA 03 Arfon**

1.3.7.6 The ZTV for the Mona Array Area mostly overlaps the northeast part of this NLCA and off the south coast area to the approaches to the Menai Straights.

- The Arfonian plateau – a broad, gently undulating lowland and valley land form, rising from the coast to about 200m and flanked by the much higher adjacent uplands of Eryri
- Soft open coastline – at Morfa Dinlle with shingle and sand beaches and dunes, extensive mud and sand flats in Foryd Bay and at Traeth Lafan
- A dramatic inland panorama of steeply rising mountains - with many views to well-known ridges and peaks, including Snowdon (Yr Wyddfa)
- Wooded valley slopes – by rivers and beside the Menai Strait
- Lowland – upland contrasts – from the intimate, wooded, lush, soft, sheltered lowland and pastures to the exposed, open, heavily grazed, marginal upland fringes
- Landed estates and their designed parklands - from the Medieval and post Medieval periods, such as Penrhyn, Faenol and Glynllifon, on the better land and often with designed parklands and scattered individual trees
- Settlement pattern relates to sites of strategic significance: river mouths and ports, coastal defensive, where the upland valleys emerge, and near slate workings.

**NLCA 06 Eryri/Snowdonia**

1.3.7.7 The ZTV for the Mona Array Area overlaps much of the north areas and ridges of this NLCA, including Tal y Fan 610m, Foel Lwyd 603m, Foel Pras 942m, Llwytmor 849m, Llwydmor Bach 690m, Bera Mawr 794m, Bera Bach 807m, Yr Aryg 876m, Y Drosogl 758m, Moel Wnion 580m, Ffridd Ddu 362m and Carnedd Llewelyn 1064m south edge of the 50km buffer study area.

1.3.7.8 It coincides with Eryri National Park (Snowdonia National Park) designation.

- A mountainous topography - with the principal mountain range orientated broadly northeast to southwest
- Wales's sharpest ridges and highest peaks lie within this area – in a landscape often defined by massive, angular skylines. Most famously this includes the massif of Snowdon, with the peak of Yr Wyddfa, highest in England and Wales at 1085m AOD (which lies beyond the SLVIA study area boundary), and several radiating ridges
- An upland character, principle land cover elements include: Hill sheep grazing, forestry, heather dominated moorland and upland grassland. Rock outcrops and slate/shale ridges and screes are frequently apparent
- Estuaries and coast – although only directly fronting open sea in a few places, the tempestuous, dark, mountainous character abuts, or is seen in views close to milder, sheltered, woodland-fringed estuaries and sunnier, sandy open coast. This combination provides an iconic and contrasting image of great appeal to many

- Sparsely populated/few large settlements – confined to valleys, the few include the small towns of Dolgellau and Bala, and the slate town of Blaenau Ffestiniog, and compact valley villages in slate and stone such as Beddgelert and Betws-y-Coed. Sublime, picturesque, iconic visual and sensory landscape of great drama – the inspiration for many artists over the last 200 years, part of the great tour for Wordsworth and others
- Tourism - today Snowdonia is recognised as a National Park and is visited by thousands of tourists who come to experience the natural and cultural heritage. The area forms a great outdoor challenge for many recreational visitors as they explore.

**NLCA 07 Dyffryn Conwy/Conway Valley**

1.3.7.9 The ZTV for the Mona Array Area is patchy over this valley landscape and mainly confined to the north around Conwy.

- A deep, major fault-guided glaciated valley - between the adjacent rugged and shapely uplands of Snowdonia to the west and gentler rolling Rhos Hills to the east
- A very abrupt, steep, wooded edge to the adjacent Snowdonia uplands, with cliffs - marking the terminal point of a bedrock geology
- Hanging woodland - including beech and oak, and areas of planted conifers, to slopes
- Busier north section around Conwy - with strategic transport crossing points over the wide estuary and shelter for boats
- Field patterns - geometric on the flood plain, with areas of dry-stone walls or reens (ditches) as boundaries. Mixed hedgerows generally, with small irregular fields on rising slopes to the west side. More improved fields and hedges to the east side slopes
- Conwy Castle with its associated walled town - a World Heritage Site, dramatically located on a promontory overlooking the estuary, and forming a landmark feature
- A strong sense of containment to the valley – creating a natural route for north-south road and rail links.

**NLCA 08 Arfordir Gogledd Cymru/North Wales Coast**

1.3.7.10 The ZTV for the Mona Array Area overlaps with the north facing parts of this coastal NLCA.

- Carboniferous limestone hills and coastal headlands - resulting in distinctive light- coloured rocky escarpments with cliffs and scree, including most prominently Great Orme's Head
- The mouth of the Vale of Clwyd – a broad flat coastal plain centred on Rhyl, including the small estuary of the River Clwyd, including a network of medium scale pastoral fields of regular pattern, with ditches and, to a lesser extent mixed, managed hedgerow, and occasionally interspersed with small stands of mixed farm woodland

- Seaside resort towns - urban development and arterial road and railway routes along coast, constricted in places by topography and rising hills
- Steep sided hill back drop to coastal towns - wooded, or exposed limestone and sheep pasture
- A generally man-made coastal edge – promenades, sea walls, groynes, rock armour and other forms of protecting the coastal edge run for most of the length of the coastline
- Hinterland away from the coast – with intervening hills makes for a quiet, sheltered, inland, rural feel, with some classic limestone outcrops, notably south of Llanddulas, Rhuddlan Castle is strategically sited at a crossing point over the Clwyd, at what was once the east boundary of the Medieval kingdom of Gwynedd
- A number of historic parklands - lie within the area, while the estate architecture of Gwrych Castle and wooded parkland is a locally prominent feature
- Iconic image of historic Llandudno and its famed natural setting – between two rocky headlands, with its pier, grand sweeping promenade and Victorian building façades, arguably the finest of their type in Wales, the town is known as the 'Queen of resorts' and is known nationally for seaside holidays.

**NLCA 09 Bryniau Rhos/Rhos Hills**

- 1.3.7.11 The ZTV overlaps with the north facing parts of this NLCA and peaks such as Moel Gyffyllog 340m, Cefn Du 345m, Mynydd Branar 326m and Fron Gynnen 316m, which are lower than the Snowdonia peaks to the west.
- Rural inland foothills and valleys – that rise to the adjacent Denbigh Moors to the south
  - Sheep grazed pasture – predominant land cover
  - Occasional woodlands – often occurring on the river valley slopes, for example on the Clywedog and the Ystrad, and running up riverside slopes
  - Mixed field patterns – often geometric but varies widely in scale, from small to large size fields. A denser network of mixed hedgerows with more trees in sheltered valleys, running up to sparse, windswept hedges and fences occupying areas of former moorland
  - Sparsely settled – affording rural peace and tranquillity, with wide views from the higher points and a sense of intimacy and enclosure in the valleys close by.

**NLCA 10 Mynydd Hiraethog/Denbigh Moors**

- 1.3.7.12 This area lies on the edge of the SLVIA study area and is sufficiently remote so as not to be affected by the Mona Offshore Wind Project. Therefore, it is not considered further in this assessment.

**NLCA 12: Clwydian Range**

- 1.3.7.13 The ZTV for the Mona Array Area overlaps with the higher landscapes in the north part of this NLCA.
- 1.3.7.14 Parts of the area are designated within the Clwydian Range AONB.
- Rounded, heather clad open hills in two main groups. The north chain rising to Moel Famau (554m), although this peak is outside the ZTV, peaks further north coincide with part of the ZTV for the Monas Array Area and include Moel y Gaer (258m), Cefn Du (268m), Moel Maenafa (287m) and St Elmos Summer House (235m)
  - Hedgerows and numerous hedgerow trees – improved hill sheep grazing and lowland pasture
  - Culturally a divide – the area reflects the historical divide between English influences to the east and Welsh influences to the west. Parts of the area are designated as an AONB
  - Offa's Dyke National Trail follows close to the highest points in this LCA.

**NLCA 13: Deeside and Wrexham**

- 1.3.7.15 The ZTV for the Mona Array Area overlaps with the north coastal parts of this NLCA.
- Lowland, foothills and levels – sloping down to the lower Dee and Dee Estuary
  - Mixed pasture and some arable – and farm woodland cover
  - A strongly settled character is apparent in the central and south parts of the area, with the relatively large, almost linked settlements of Holywell-Connah's Quay-Mold-Wrexham-Ruabon. Holywell being the only one of these settlements within the SLVIA study area.

**English NCAs**

**NCA 32 Lancashire and Amounderness**

- 1.3.7.16 The ZTV for the Mona Array Area overlaps the southwest part of this NCA around Lytham St Annes and Blackpool.
- A rich patchwork of pasture, arable fields and drainage ditches, on a relatively flat to gently undulating coastal landscape
  - Extensive views across the plain, within which small to medium-sized blocks of mixed woodland (wind-sculpted near the coast) provide punctuation and vertical accents
  - The Fylde coast, which extends from Fleetwood in the north to the mouth of the Ribble Estuary, includes significant urban areas along the coastal strip (such as Blackpool and Fleetwood)
  - Urban settlement is concentrated in the planned Victorian coastal resorts (including Blackpool) and inland towns (the largest of which is Preston)
  - Several long-distance paths cross the NCA, including the Lancashire Coastal Way, the Ribble Way and the Wyre Way, as well as canal towpaths.

**NCA 57 Sefton Coast 9**

- 1.3.7.17 The ZTV for the Mona Array Area overlaps most of this coastal NCA.
- Sedimentary coastline with wide, gently sloping beaches, estuaries, coastal sand dunes, coastal dune heathland, conifer plantations and settlements backed by farmland; low-lying, rising in places to 20m above sea level
  - A mixture of agriculture, ranging from open grazed marshes to areas of reclaimed pasture and enclosed fields supporting dairy or beef cattle and some arable farming
  - Development is primarily of Victorian date or later, orientated as a line of tourist/commuter towns and villages along the coastal railway and road
  - Coastal recreation facilities arise from the seaside tourist attractions, beach access, public rights of way and the coastal footpath; chalet/caravan sites and several golf courses introduce a manicured appearance into this varied coastline.

- 1.3.7.18 The Sefton DC LCA (LCAs 1 to 6) gives an additional level of detail which can be summarised as follows
- Coastal, sands dunes and saltmarsh have wide views to a far horizon and give a strong impression of sky and space. There are intimate, visually contained landscapes within the dunes and wide vistas and glimpses of the sea from dune summits. Extensive tracts of unenclosed saltmarsh. Within the estate plantations in the south the topography changes to gently rolling with plantations and tree belts.

**NCA 58 Merseyside Conurbation**

- 1.3.7.19 The ZTV for the Mona Array Area overlaps with the northwest parts of this coastal NCA, including Wallasey Bootle and Crosby.
- Low-lying but gently rolling platform punctuated by low ridges; however, the extensive urban development generally dominates the topography
  - Extensive intertidal mudflats/sand flats relating to the Mersey Estuary, although the waterfront is generally built up; wide coastal frontages along the open coast
  - Woodland cover is significant for such a heavily urban area; new community woodland has been created, while urban parks, cemeteries and suburban street plans provide trees and, in some cases, wooded habitats.

**NCA 59 Wirral**

- 1.3.7.20 The ZTV for the Mona Array Area overlaps with the northwest part of this coastal NCA. The following key characteristics are relevant to consider.
- Low-lying but gently rolling platform punctuated by low sandstone outcrops, this west portion of the Wirral peninsula stretches from the mid-Wirral sandstone ridge to the Dee Estuary

- The north Wirral coast is characterised by extensive beaches along the foreshore, while the large, funnel-shaped Dee Estuary lies between the Wirral peninsula and northeast Wales
- Recreation and tourism are supported by good access to the dramatic coastal landscape and its outstanding ornithological interest, with a number of country parks, Local Nature Reserves and Local Wildlife Sites; links-style golf courses are a distinctive feature along the coastline.

1.3.7.21 The Wirral Landscape Character Assessment (Wirral Council, 2019), gives additional level of detail which can be summarised as follows:

- Expansive views over the open water of Liverpool Bay to Sefton and beyond and across the adjacent estuaries, east towards Liverpool Docks and west towards the Welsh coast. Extensive offshore and onshore wind farms are prominent across these views
- Despite surrounding coastal settlement, the area retains a sense of remoteness with strong sensory characteristics including the contrasting colour and texture of habitats and changing sea moods.

**Isle of Man Landscape Character Types (LCTs)**

1.3.7.22 The landscape character of the Isle of Man is described in The Isle of Man Landscape Character Assessment (Isle of Man Government, 2008). The assessment includes the coastal waters immediately adjacent to the LCTs. In addition, for the purposes of this SLVIA, to fill in the gap in seascape assessment for the Isle of Man territorial waters, new MCAs have been defined by RPS up to 12nm from the Isle of Man coastline, as previously assessed above (e.g. MCAs A and E).

**LCT A Uplands**

- 1.3.7.23 The ZTV for the Mona Array Area overlaps the higher parts of the component LCA A1: North Uplands, including peaks of Sileau Ree 325m, Sileau Meayl, The Skoryn and Carn Gerjoil 430m. This part of the LCT can be summarised as follows:
- Rounded smooth peaks and spurs with combination of moorland vegetation and rough pasture
  - Tranquil and remote character away from the roads with evocative abandoned 'intact' farms in the area
  - Extensive and panoramic views of surrounding peaks and over the whole Island.

**LCT B Narrow Upland Glens**

- 1.3.7.24 The ZTV for the Mona Array Area overlaps the higher and east facing parts of the component LCA B5: Glen Roy. This part of the LCT can be summarised as follows:
- Regular field pattern of medium to large rectangular fields is faint at slope tops and strengthens down the valley
  - Tranquil valley with varied and interesting textures and a rural character.

### LCT C Broad Valley Lowland

- 1.3.7.25 The ZTV for the Mona Array Area overlaps a very small part of the only LCA C3: Union Mills, Glen Vine and Crosby, to the west of Douglas. The potential impact is predicted to be negligible, at most, and so this LCT is not considered further in this assessment.

### LCT D Incised Slopes

- 1.3.7.26 The ZTV for the Mona Array Area overlaps some of this LCT, particularly the higher ground and southeast facing slopes on the Isle of Man. The ZTV for the Mona Array Area overlaps with LCAs D2: Laxey, D3: Cornrhenny/Groudle, D10: Braaid, D12: Douglas Head, D13: Santon and D14: Ballamodha, Earystane and St. Mark's.

- The north area landward of Laxey Bay has strongly sloping topography. There is a strong sense of enclosure within Laxey, provided by the steep wooded sides of the glen and valley. Visual dominance of the sea, which contrasts with the coastal landform
- The LCAs to the south in this landscape type are more gently undulating with land sloping down south-eastwards towards the coast with numerous notable rounded hill tops. The landcover is a mosaic of densely wooded valley bottoms amongst undulating rolling land with large rectilinear arable and pastoral fields on the gently sloping hill sides and rounded tops. LCA D10 has rough heathland vegetation and includes the Coniferous Chibbanagh Plantation on hill tops and higher exposed areas
- Most of the area has dramatic, panoramic views eastwards across the ever-changing colour and nature of the sea and sky which contribute to strongly recognisable sense of place. The south part of this landscape type has open and expansive views from most of the area out to sea, along the coast, over Douglas Bay and inland over the incised plateau up to the north uplands.

### LCT E Rugged Coast

- 1.3.7.27 The ZTV for the Mona Array Area overlaps most of the east facing Rugged Coastline on the Isle of Man – from Castle Town in the south to Barony Hill in the north as far as the ZTV extends. The ZTV for the Mona Array Area overlaps with LCA E1: Port Grenaugh, E2: Port Soderick, E3: Douglas Bay, E4: Clay Head, E5: Laxey Bay and E11: Langness.

- South of Douglas the coastal landscape consists of Sheltered coves of Port Grenaugh and Port Soldrick with shelving shale beaches. The coastline is characterised by low rocky jagged sea cliffs, a strong sense of tranquillity, open and expansive views and a general sense of openness. In the south in LCA 11 the coastline becomes a relatively narrow peninsula/isthmus of predominantly flat landscape, protruding from the south edge of the Island. Locally, the sense of tranquillity greatly disturbed at times by proximity to Ronaldsway airport. Colour and movement of the sea contrasts with the coastal landforms and combine to create a dramatic landscape. The lighthouse and Dreswick Point act as dominating landscape features

- LCA E3 is characterised by the built-up areas of Douglas and Onchan which form dominating back-drop to the area. The gently graded sandy beach is contained by two prominent rocky headlands with jagged sea cliffs. Views along the coast are constrained by the two large headlands that enclose the area. There is little tranquillity in the area but an interesting character resulting from the urban back drop
- The north of LCT E is comprised of LCAs E4 and E5. LCA E4 is characterised by a jagged indented rocky coastline with some natural arches with a rocky foreshore with banded bedrock and scattered large offshore rocks. The headland is open and exposed headland with medium sense of tranquillity. Laxey Bay to the north is a rugged coastline lined by cliffs that fall steeply, from the Incised Inland Slopes to west, towards the sea. Houses nestle around the bay and overlook the wide expanse of blue sea to the east. A strong sense of enclosure is provided by rising headlands to the east and west, contributing to a sense of remoteness and seclusion. Little sense of remoteness and relatively low tranquillity due to the influence of Laxey, the railway and the A2. Colour and movement of the sea contrasts with the coastal landforms and combine to create a dramatic landscape throughout this section.

## 1.3.8 LANDMAP

- 1.3.8.1 LANDMAP (NRW, 2023) is considered the appropriate landscape baseline resource in Wales, with respect to the Mona Proposed Onshore Development Area.

### LANDMAP visual and sensory aspect areas that coincide with the Mona Proposed Onshore Development Area

#### CNWVS062 Llandulas Urban Coast, lies within Wales NCLA 8 Colwyn and North Coastline

- 1.3.8.2 The buffer zone for the Mona Proposed Onshore Development Area consists of two areas where it intersects with the A55 and North Wales Coastline railway.
- Narrow linear strip of development including caravans, chalet parks, car parks, minor promenades, sea defences and railway line. The settlement is not specifically orientated towards the beach as it is separated by the A55 road and railway. There are a few leisure uses associated with the coast. The settlement of Abergele is located immediately to the southeast
  - Views are possible out to sea, although these include offshore wind farms such as Rhyl Flats Offshore Wind Farm and Gwynt y Môr Offshore Wind Farm when weather conditions allow
  - The North Wales path follows the coast and the area is used primarily for recreation although there are permanent dwellings
  - Seaside resort towns – urban development and arterial road and railway routes along coast, constricted in places by topography and rising hills. Much 19<sup>th</sup> century development with more recent suburbia.

**CNWVS070 Abergele coastal plain, lies within Wales NCLA 8 Colwyn and North Coastline**

1.3.8.3 The buffer zone for the Mona Proposed Onshore Development Area crosses Llandulas Road (A547) to the west of Abergele and through the Abergele golf course.

- A wide strip of coastal levels with a diverse mixture of fertile arable and pastoral farmland drained by ditches. The field boundary/ditch pattern changes from irregular to rectilinear west to east. The land rises gently to the break of slope of the coastal hills to the south
- Hedgerows are overgrown and have gaps in places and replaced by fences. Generally, the area is open and exposed to coastal winds and views of development to the north. A golf course has been developed to the west. There are other tourism uses dominated by caravan sites and development along the A547
- Tranquillity is reduced by the busy A55 which passes through the area and from which views across the area are possible.

**CNWVS020 Kinmel Manor environs, Mosaic Rolling Lowland, lies within Wales NCLA 9 Rhos Hills**

1.3.8.4 A very small part of the Mona Proposed Development Area crosses from Aspect Area CNWVS023 into this Aspect Area near Moelfre.

- Hills rising steeply from the coastal plain with an undulating skyline. The north slopes are dominated by a mix of large blocks of deciduous and coniferous woodland. The woodlands are interspersed with regular pastures with low cut, sometimes gappy hedges
- Though the area appears well managed there is evidence of fly tipping indicating the proximity of the area to the urbanised coastal strip. From higher ground there are views out to the Rhyl Flats Offshore Wind Farm and Gwynt y Môr Offshore Wind Farm
- Kinmel Park a Grade II\* listed NRW Registered Historic Park and Garden of and its setting are in the east part of this Aspect Area. The Mona Proposed Onshore Development Area passes through the estate. The Park's Essential Setting lies to the north and Strategic views are north facing away from the Mona Proposed Onshore Development Area.

**CNWVS021 Cefn yr Ogof and environs, lies within Wales NCLA 8 Colwyn and North Coastline**

1.3.8.5 The buffer zone for Mona Proposed Onshore Development Area crosses north to south, to the east of Cefn yr Ogof.

- Limestone coastal hill forming a strong landform with steep slopes to the north, east and west. Dramatic rock outcrops are apparent to the west with cliffs and scree slopes and semi-natural grassland and scrub vegetation
- Mixed woodland lies on the north upper slopes and with the landform acts as a strong backcloth to the coastal lowlands. The light grey limestone Gwrych Castle and associated tower folly and battlemented farm buildings are

prominent features in and around the woodland giving the area a distinctive character. To the south, the gentler slopes are covered a mix of regular arable and pasture with low cut hedges and interspersed with woodland. Settlement is limited with some intrusion from development including a caravan site to the west. The area forms a strong boundary to Abergele

- There are views out to sea of the Rhyl Flats Offshore Wind Farm and Gwynt y Môr Offshore Wind Farm
- Steep sided hill back drop to coastal towns – wooded, or exposed limestone and sheep pasture
- This Aspect Area and the Proposed Onshore Development Area fall within the Rhyd Y Foel to Abergele SLA
- The proposed Mona Onshore Cable Corridor passes through Gwrych Castle Park Boundary a Grade II\* listed NRW Registered Historic Park and Garden and the Essential Setting to Gwrych Castle, immediately to the south on ground overlooking the Castle and Park.

**CNWVS023 Dulas Lowlands, lies within Wales NCLA 9 Rhos Hills**

1.3.8.6 The buffer zone for the Mona Proposed Onshore Development Area enters the Aspect Area from the north and passes the Dulas valley to the west and south, before heading in an easterly direction.

- A gently sloping undulating basin sheltered behind the coastal hills and linked to the coast by the steep valley of the River Dulas. The valley sides are clothed in irregular small to medium sized fields with low cut hedges with trees. Woodland strips lie along watercourses, on steep slopes and in occasional small copses
- The area is generally open with wide views and glimpses of the sea and associated offshore wind turbines, although it becomes more enclosed in the Dulas valley to the north. Only one B road and small lanes cross the area.
- An undulating landform – comprising a series of ridges and valleys associated with the river catchment, including the Cledwen and the Aled. A range in grades of slope
- Mixed field patterns – often geometric but varies widely in scale, from small to large size fields. A denser network of mixed hedgerows with more trees in sheltered valleys, running up to sparse, windswept hedges and fences occupying areas of former moorland
- This Aspect Area and the Mona Proposed Onshore Development Area fall within the Rhyd Y Foel to Abergele SLA.

**CNWVS061 Llandulas coast, lies within Wales NCLA 8 Colwyn and North Coastline**

1.3.8.7 The buffer zone for Mona Proposed Onshore Development Area crosses the A55 and the Wales Coast Path to the west of Abergele and through the Abergele golf course.

- Narrow linear strip of 20c development including caravans, chalet parks, car parks, minor promenades, sea defences and railway line. The North Wales



path follows the coast and the area is used primarily for recreation although there are permanent dwellings

- Low cost tourism operators generally have low environmental standards
- The location for the proposed Landfall site and route coincides with some of the north facing Strategic views to Gwrych Castle Park, a Grade II\* listed NRW Registered Historic Park and Garden.

**CNWVS062 Llandudno to Kinmel Bay intertidal, lies within Wales NCLA 8 Colwyn and North Coastline**

- 1.3.8.8 Intertidal Zone - a unique, dynamic and expansive natural intertidal area of the north Wales coast consisting of broad sweeping sandy beaches enclosed by headlands such as around Llandudno, Colwyn Bay and a linear beach at Kinmel Bay plus a pebbly beach.
- 1.3.8.9 The coast is highly man modified and managed for tourism which affects natural qualities of seascape.
- 1.3.8.10 A generally man-made coastal edge – promenades, sea walls, groynes, rock armour and other forms of protecting the coastal edge run for most of the length of the coastline.
- 1.3.8.11 The beaches have wide sea views to the north affected by offshore wind farms to the north and further east.
- 1.3.8.12 The route of the Mona landfall site is located in this Aspect Area. This also coincides with some of the north facing Strategic views to Gwrych Castle Park, a Grade II\* listed NRW Registered Historic Park and Garden.

**CNWVS070 Abergele Coastal Plain, lies within Wales NCLA 8 Colwyn and North Coastline**

- 1.3.8.13 The buffer zone for Mona Proposed Onshore Development Area crosses Llanddulas Rd (A547) to the west of Abergele and through the Abergele golf course.
  - A wide strip of coastal levels narrowing to the west with a diverse mixture of fertile arable & pastoral farmland drained by ditches. The field boundary/ditch pattern changes from irregular to rectilinear, west to east. The land rises gently to the south of the area
  - Urban fringe uses are beginning to intrude and field boundaries are deteriorating.

**Gwrych Castle Park a Grade II listed, NRW Registered Historic Park and Garden with public access, is located in the east part of this Aspect Area.**

- 1.3.8.14 The Mona Proposed Onshore Development Area passes through the estate. DNBGHVS033 Cefn Estate, lies within Wales NCLA 11 Rhos Hills Vale of Clwyd. Both Mona Onshore Substation Option 2 and 7 lie within this Aspect Area.
  - Wooded former estate landscape lying on the edge of St Asaph and the industrial areas surrounding Bodelwyddan. The area displays a fine array of woodland blocks and a well defined field pattern delineated by hedgerow with a high incidence of mature hedge

- A mature landscape defined by tree lined hedgerow and individual specimen trees within field parcels. This landscape needs to be carefully managed of the overall appearance is to be maintained
- A broad agricultural vale – between adjacent upland areas
- Many hedgerow and parkland trees and some woodland blocks
- Bodelwyddan Castle a Grade II listed, NRW Registered Historic Park and Garden and its setting, with public access, are located in the west part of this Aspect Area. The proposed Mona Onshore Cable Corridor passes through the estate. The Park's Essential Setting lies to the east and Strategic views are east facing away from the Mona Proposed Onshore Development Area.

**DNBGHVS037 Limestone Valley-Cefn, lies within Wales NCLA 9 Rhos Hills**

- 1.3.8.15 The buffer zone for the Mona Proposed Onshore Development Area enters the Aspect Area from the west, and exits eastwards to Aspect Area CNWVS021, near the Glascoed Water Works.
  - Strongly wooded river valley with limestone outcrops exposed in places linking St. Asaph in the north and Henllan to the south. The valley itself is strongly influenced by the well-defined mixed woodland structure that delineates the underlying topography
  - An undulating landform – comprising a series of ridges and valleys associated with the river catchment, including the Cledwen and the Aled. A range in grades of slope.

**DNBGHVS014 Area North and East of Bodelwyddan, lies within Wales NCLA 11 Rhos Hills Vale of Clwyd**

- 1.3.8.16 The buffer zone for the Mona Proposed Onshore Development Area enters the Aspect Area from the south and terminates at the junction with the A55.
  - Degraded agricultural landscape at north end of Vale of Clwyd with neglected tree cover with most hedgerow trees lost although some estate woods provide partial tree cover. The area is bisected by the A55 dual carriageway and is dominated by the surrounding settlement edges and light industrial development at Bodelwyddan and St Asaph
  - Field patterns are open and predominantly turned over to intensive arable and livestock farming, though relatively well defined by hedgerow boundaries this is being degraded through lack of management and inappropriate maintenance
  - A broad agricultural vale – between adjacent upland areas
  - Many hedgerow and parkland trees and some woodland blocks.

**1.3.9 LANDMAP habitat aspect areas that coincide with the Mona Proposed Onshore Development Area**

- 1.3.9.1 The Mona Proposed Onshore Development Area passes through several different Habitat Aspect Areas. From the landfall, northwest of Abergele, the route passes through CNWLH004, a small area of coastal grassland, separated from the sea by

- the A55 dual carriageway. Some relict dunes survive seaward of the A55; approximately half the area is occupied by a golf course, adjoining Abergele urban area.
- 1.3.9.2 To the south the Mona Proposed Onshore Development Area passes through a small part of CNWLH039 - an important area of broadleaved woodland and calcareous grassland, on a series of rocky limestone outcrops west of Abergele. Woodland predominates to the east and north, grassland and limestone pavement to the south, and a large part of the Aspect Area is a Site of Special Scientific Interest (SSSI).
- 1.3.9.3 Further south and east and for most of its length, the Mona Proposed Onshore Development Area passes through CNWLH034 and CNWLH035, a large 17<sup>th</sup> century deer park and some associated enclosed fields surrounding Kinmel Hall. The parkland contains many parkland trees and small copses.

### 1.3.10 LANDMAP geological aspect areas that coincide with the Mona Onshore Cable Corridor

- 1.3.10.1 The Mona Proposed Onshore Development Area passes through several different Geological Aspect Areas. From landfall northwest of Abergele, the route passes through CNWGL052, Coastal Flat.
- 1.3.10.2 Immediately to the south the Mona Onshore Cable Corridor passes through CNWGL048 - Boulder clay covered dip slope in the northeast to north-northeast, dipping Carboniferous Limestone from the north to south lower Dulas river valley through Abergele to Kimmel Park.
- 1.3.10.3 Further inland as the land rises the Mona Proposed Onshore Development Area passes through CNWGL047 east-southeast to west-northwest ridge in the north-northeast dipping Carboniferous Limestone between the north to south river valley through Abergele and St George.
- 1.3.10.4 Further inland and to the south and east it passes through CNWGL050 - Undulating dissected hilly plateau in the north, dipping Silurian mudstone-dominated succession thickly draped with boulder clay in north to south aligned valleys and on north-facing dip slopes and DNBGHGL016, a gentle, north-facing slope of Westphalian Coal Measures with undulating topography.

### 1.3.11 LANDMAP historic landscape aspect areas that coincide with the Mona Proposed Onshore Development Area

- 1.3.11.1 The Mona Proposed Onshore Development Area passes through several different historic landscape types.
- 1.3.11.2 From the junction with landfall northwest of Abergele, the route passes through CNWHL032 – foreshore on the west side of Conwy Bay and then initially through the designed landscape CNWHL051, an area of designed park and woodland surrounding Gwrych Castle, before being routed through irregular fieldscapes for most of its length, in Aspect Areas CNWHL080 and DNBHHL041.

### 1.3.12 LANDMAP cultural landscape aspect areas that coincide with the Mona Proposed Onshore Development Area

- 1.3.12.1 The Mona Proposed Onshore Development Area passes through several different cultural landscape types. From the junction with landfall, northwest of Abergele, the route passes through CNWCLS076 on the coast initially, to the west of Abergele. It then passes southwards, through the Wooded Hillside and Scarp Slopes of CNWCLS029 which contains the landscape of Gwrych castle, with commanding views over .
- 1.3.12.2 The Mona Proposed Onshore Development Area then passes through CNWCLS036, CNWCLS028, CNWCLS018, DNBGHCLS034, DNBGHCLS036 and DNBGHCLS030 a rural area, which despite its upland nature, includes some important garden landscapes, such as Coed Coch, Garthewin, Hafodunnos and Plas Isaf, all Grade II Listed and falls outside the Mona Proposed Onshore Development Area.

## 1.4 Summary

- 1.4.1.1 This technical baseline report identifies the seascape/marine and landscape character areas that have the potential to be affected by the Mona Offshore Wind Project. The SLVIA study area and ZTV is based on the MDS for the Mona Offshore Wind Project.
- 1.4.1.2 National landscape character areas, national MCAs and relevant regional seascape character areas which have the potential to be affected by the Mona Offshore Wind Project have been identified for the offshore elements of this SLVIA. LANDMAP Aspect Areas with potential to be affected by the Mona Proposed Onshore Development Area and substation elements have also been identified. The seascape/landscape characteristics with potential to be affected by the Mona Offshore Wind Project have been identified and described in section 1.2.1.2 of this baseline technical report. Extracts of published assessments for relevant seascape/marine and landscape character areas are reproduced at appendix A. Where there is no published seascape assessment coverage within the SLVIA study area, for instance around the Isle of Man, additional MCAs have been defined and described by RPS and included in this baseline assessment.
- 1.4.1.3 Those character areas which have very little or no coincide with the ZTV of the offshore and onshore elements, and which are likely to experience no change, or very slight/negligible change as a result of implementing the Mona Offshore Wind Project MDS, have been identified and scoped out of the SLVIA.

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## Appendix A: Extracts from Published Seascape and Landscape Character Assessments

Character Area/Type	Key Characteristics
<p><b>Landscape Character: England</b></p>	
<p><b>National (National Character Area Profiles, Natural England)</b></p>	
<p>NCA 32: Lancashire &amp; Amounderness Plain</p>	<ul style="list-style-type: none"> <li>• A rich patchwork of pasture, arable fields and drainage ditches, on a relatively flat to gently undulating coastal landscape</li> <li>• Extensive views across the plain, within which small to medium-sized blocks of mixed woodland (wind-sculpted near the coast) provide punctuation and vertical accents</li> <li>• Thickly blanketed by glacial till, with poorly-drained peat-filled hollows that give rise to mosses and meres (now mainly remnants)</li> <li>• Medium-sized to large fields form an open, large-scale agricultural landscape. Pasture is more dominant north of the Ribble Estuary, with arable to the south. There is a high density of relict pastoral field ponds on the east side of the NCA</li> <li>• Localised areas of intensive market gardening provide seasonally varied colours and textures</li> <li>• A complex network of wide meandering rivers, raised drainage ditches and dykes divide and drain the landscape. Along with fragmented relicts of reedbeds and mosses, and historic place names, these provide a reminder of the area's heritage of wetland reclamation</li> <li>• Coastal habitats and large areas of open water are of international importance for their migratory and wintering wildfowl and wading bird populations</li> <li>• Mixed arable and pastoral farmland habitats support a nationally important assemblage of breeding farmland bird species</li> <li>• A complex network of channelised rivers, canals, drainage ditches and dykes supports a nationally important population of water vole</li> <li>• The Fylde coast, which extends from Fleetwood in the north to the mouth of the Ribble Estuary, includes significant urban areas along the coastal strip (such as Blackpool and Fleetwood)</li> <li>• Urban settlement is concentrated in the planned Victorian coastal resorts (including Blackpool) and inland towns (the largest of which is Preston)</li> <li>• The Ribble Link, Lancaster Canal, and Leeds and Liverpool Canal all cross the NCA</li> <li>• Designed landscapes associated with large houses are locally common in the south, where they provide enclosure in an otherwise open landscape</li> <li>• A rectilinear network of lanes and tracks – usually without fences or hedges – subdivides the landscape, and isolated brick farmsteads occur in rural areas</li> <li>• Tourism is an important contributor to the local economy, with many opportunities for informal recreation – particularly along the Fylde coast</li> <li>• Several long-distance paths cross the NCA, including the Lancashire Coastal Way, the Ribble Way and the Wyre Way, as well as canal towpaths.</li> </ul>
<p>NCA 57: Sefton Coast</p>	<ul style="list-style-type: none"> <li>• Sedimentary coastline with wide, gently sloping beaches, estuaries, coastal sand dunes, coastal dune heathland, conifer plantations and settlements backed by farmland; low-lying, rising in places to 20m above sea level</li> <li>• Underlying soft sandstones and mudstones of Triassic age are almost entirely masked by thick deposits of glacial and more recent drift</li> <li>• A dynamic coastal landscape affected by the movements of the sea and wind; the estuary and dune systems are subject to ongoing change</li> <li>• Inland, the low-lying hinterland is pumped to drain the land for agriculture and to provide flood protection for urban areas such as Southport</li> <li>• Large conifer plantations (housing a colony of red squirrels) around Formby and Ainsdale, with isolated wind-sculpted deciduous woodland on estates and farmsteads</li> <li>• A mixture of agriculture, ranging from open grazed marshes to areas of reclaimed pasture and enclosed fields supporting dairy or beef cattle and some arable farming</li> <li>• Field boundaries include hedgerows, ditches, post-and-wire fencing and embankments</li> <li>• An extensive coast with internationally, nationally and locally recognised wildlife and geological sites including intertidal mudflats and sand flats, coastal salt marsh, embryonic shifting dunes, mobile dunes, dunes with creeping willow, humid dune slacks, fixed dunes, dune grasslands and dune heathland; the significant dune system is one of the largest in England</li> <li>• Evidence of human activity goes back to the Mesolithic period, but settlement was sparse until the 19<sup>th</sup> century; development is primarily of Victorian date or later, orientated as a line of tourist/commuter towns and villages along the coastal railway and road</li> <li>• Coastal recreation facilities arise from the seaside tourist attractions, beach access, public rights of way and the coastal footpath; chalet/caravan sites and several golf courses introduce a manicured appearance into this varied coastline.</li> </ul>
<p>NCA 58: Merseyside Conurbation</p>	<ul style="list-style-type: none"> <li>• A low-lying but gently rolling platform punctuated by low ridges; however, the extensive urban development generally dominates the topography</li> <li>• The underlying geology of Triassic sandstone overlain by glacial till forms part of an aquifer supporting groundwater abstractions</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Extensive intertidal mudflats/sand flats relating to the Mersey Estuary, although the waterfront is generally built up; wide coastal frontages along the open coast</li> <li>• Flowing northwest, the River Mersey dissects the area entering the Irish Sea in Liverpool Bay</li> <li>• Woodland cover is significant in such a heavily urban area, with new community woodland being created, while urban parks, cemeteries and suburban street plans provide trees and, in some cases, wooded habitats</li> <li>• Pockets of mainly versatile and good-quality farmland remain on the fringes of urban areas, often arable or horticultural</li> <li>• Field boundaries are generally hedgerows, sometimes marked by drainage ditches with grassy banks.</li> <li>• Green infrastructure is interspersed through the urban fabric, while pockets of ‘encapsulated countryside’ provide important wildlife refuges and opportunities to link local people to the natural world</li> <li>• Renowned for its strong maritime heritage, there is much industrial archaeology, along with Victorian public parks and designed gardens</li> <li>• The built environment is characterised by a mix of red brick and sandstone within the city and a diverse range of modern materials in the outlying suburbs</li> <li>• Distinct urban centres have amalgamated to form the Merseyside conurbation, surrounding the larger dominant centre of the city of Liverpool, but split by the River Mersey</li> <li>• Dense settlement pattern with extensive areas of housing and industry</li> <li>• Extensive transport infrastructure of motorways and railway lines, while the ports provide for significant international trade and cruise liners, as well as international and local passenger ferries.</li> </ul>
NCA 59: Wirral	<ul style="list-style-type: none"> <li>• A low-lying but gently rolling platform punctuated by low sandstone outcrops, this west portion of the Wirral peninsula stretches from the mid-Wirral sandstone ridge to the Dee Estuary</li> <li>• Geology is dominated by glacial till overlying Triassic red mudstones and sandstones, with sandstone ridges and outcrops</li> <li>• The north Wirral coast is characterised by extensive beaches along the foreshore, while the large, funnel-shaped Dee Estuary lies between the Wirral peninsula and north-east Wales</li> <li>• Drainage is into the Dee Estuary in the west and the Mersey Estuary in the east, with a network of small streams and drainage ditches</li> <li>• Woodland is predominantly broadleaved, with woodland cover on sandstone ridges, country parks and country estates</li> <li>• The formal landscape has been created by former large country estates and the core of the area is mixed agricultural land, with areas of improved pasture, arable farming and market gardens and extensive areas given over to grazing horses</li> <li>• Fields are defined by intermittent clipped hedgerows, with copses, some red sandstone walls and field ponds (‘marl pits’); coastal areas often feature a geometric field pattern bounded by ditches draining former marshlands</li> <li>• This is a significant coast and estuary, with internationally, nationally and locally recognised wildlife and habitats that include intertidal mudflats, sand flats and coastal salt marshes, with coastal sand dune systems. Inland, extensive areas of lowland heathland are associated with sandstone outcrops</li> <li>• The rural landscape, with country estates, scattered farms and a mix of ancient and post-medieval fieldscapes, is interspersed with residential commuter belt development, with towns and villages coalescing due to suburban development, linked by an intricate network of lanes, bridleways and footpaths</li> <li>• Red sandstone is common throughout the area; the pink hues of the local red stone bring warmth to the landscape and provide a unifying theme in buildings, walls, bridges and churches</li> <li>• Recreation and tourism are supported by good access to the dramatic coastal landscape and its outstanding ornithological interest, with a number of country parks, Local Nature Reserves and Local Wildlife Sites; links-style golf courses are a distinctive feature along the coastline.</li> </ul>
<b>Regional (A Landscape Strategy for Lancashire, Lancashire County Council, 2000)</b>	
LCA 16c: Martin Mere and Southwest Mosses	<ul style="list-style-type: none"> <li>• This landscape character area occurs in pockets on the West Lancashire Plain, consistent with the deposits of peat. It is a relatively new landscape, being more recently drained than the Tarleton Mosses to the north. The area is confined by the urban form of Southport to the west and to the east and south by the Coast Plain of Ormskirk and Chorley. It is an arable landscape of large geometric fields, geometric woodlands and small villages. Although there is much modern built development, there is important evidence of pre-drainage occupation. This occupation, along with the windmill and pumping sites, are important archaeological and historical sites. The dominant built material is red brick. There are several wetlands and meres which are of great importance ecologically; Martin Mere is a popular visitor attraction for bird watching and the area is an important winter feeding ground for over-wintering birds.</li> </ul>
LCA 19a: Fylde Coast Dunes	<ul style="list-style-type: none"> <li>• The Coast Dunes occur between the sea and farmland or urban land which lies inland. The landform varies from the natural form of the hummocky dunes at St Anne’s to more modified areas, some of which have been levelled and are now managed as amenity grassland. The dunes are located in open and exposed sites with sea views and dominant skies. They comprise small remnants of a once extensive system in a narrow discontinuous band sandwiched between the built coastal development and the sea wall or promenade. Their extent is determined and substantially reduced by the surrounding Victorian streets, car parks, tourist accommodation and golf courses. The vegetation is dominated by semi-natural grassland which is sometimes grazed. Access is by a winding, undulating network of minor paths or from the seafront promenades. Modern buildings and car parks, set within the dunes, are often linked to tourism development and are incongruous elements against the wild scenery.</li> </ul>

Character Area/Type	Key Characteristics
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**Local (Landscape Character Assessment of Sefton, Sefton Council, 2003)**

LCA 1: Sandy Foreshore	<ul style="list-style-type: none"> <li>Constantly changing intertidal foreshore</li> <li>Extensive sandy beach at low tide</li> <li>Wide views to far horizon</li> <li>Strong impression of sky and space</li> <li>Strandline marked by vegetation and other debris</li> <li>Large flocks of feeding birds</li> <li>Ever present roar of the wind and sea.</li> </ul>
LCA 2: Coast Dunes	<ul style="list-style-type: none"> <li>Small scale undulating topography</li> <li>Intimate, visually contained landscape</li> <li>Wide vistas and glimpses of the sea from dune summits</li> <li>Mobile dunes with areas of blown sand</li> <li>Older 'fixed' dunes dominated by marram grass</li> <li>Occasional damp hollows with shallow pools</li> <li>Localised pinewoods to the rear of the dunes.</li> </ul>
LCA 3: Dune Backlands	<ul style="list-style-type: none"> <li>Low-lying hummocky topography</li> <li>Sandy soils with patches of heathland</li> <li>Dispersed pattern of farmsteads and wayside dwellings</li> <li>Poorly defined pattern of small rectilinear fields</li> <li>Lines of willow and scrub along ditches.</li> </ul>
LCA 4: Coastal Marshlands	<ul style="list-style-type: none"> <li>Flat, low-lying topography</li> <li>Intricate network of muddy creeks and channels</li> <li>Extensive tracts of unenclosed saltmarsh</li> <li>Wide views to far horizon</li> <li>Seasonally flooded shallow pools</li> <li>Large flocks of feeding birds.</li> </ul>
LCA 5: Carr Farmlands	<ul style="list-style-type: none"> <li>Flat, low-lying topography</li> <li>Wide views framed by woodland edges or rising ground</li> <li>Dark, peaty soils</li> <li>Large fields of cereals and vegetables</li> <li>Grid-like pattern of drains and ditches</li> <li>Discrete blocks of secondary birch woodland</li> <li>Isolated brick-built farmsteads</li> <li>Straight, single track roads on raised causeways.</li> </ul>
LCA 6: Estate Farmlands	<ul style="list-style-type: none"> <li>Gently rolling lowland topography</li> <li>Nucleated pattern of small, closely spaced villages &amp; hamlets</li> <li>Sub-regular enclosure pattern of hedged fields</li> <li>Estate plantations and belts of trees</li> <li>Large country houses set in walled parkland</li> <li>Brick built farmsteads and barns</li> <li>Frequent field ponds with associated trees and scrub.</li> </ul>

Character Area/Type	Key Characteristics
LCA 7: Settled Farmlands	<ul style="list-style-type: none"> <li>• Gently rolling lowland topography</li> <li>• Dispersed pattern of farmsteads and wayside dwellings</li> <li>• Network of narrow, rural lanes</li> <li>• Sub-regular enclosure pattern of hedged fields</li> <li>• Arable cropping with field vegetables</li> <li>• Frequent field ponds with associated trees and scrub</li> <li>• Brick built farmsteads and barns.</li> </ul>
LCA 8: Enclosed Marsh	<ul style="list-style-type: none"> <li>• Flat, low-lying topography</li> <li>• Large fields of cereals and vegetables</li> <li>• Grid-like pattern of drains and ditches</li> <li>• Large, isolated farmsteads</li> <li>• Visually prominent sea defence embankments.</li> </ul>
<b>Local (Wirral Landscape Character Assessment, Wirral Council, 2019)</b>	
LCA 1a: North Wirral Coast Path	<ul style="list-style-type: none"> <li>• Flat or nearly flat inland coastal plain with extensive sandy and muddy/sandy beaches and rocky outcrops along the foreshore</li> <li>• Marine-influenced habitats, including sand dunes, saltmarshes, intertidal mudflats, maritime cliff and slopes and reedbeds extend along the foreshore</li> <li>• The coastal habitats and the open hinterland beyond are important in supporting populations of breeding, passage and overwintering birds</li> <li>• Open exposed landscape with low woodland cover. Small windswept trees limited to areas sheltered by sand dunes or within golf courses</li> <li>• Engineered sea defences, including the concrete embankment at Wallasey, separate the foreshore from undulating grassed sand dunes</li> <li>• Informal recreation is supported by good access to the dramatic coastline with its beaches and open access land within North Wirral Coastal Park</li> <li>• Large links-style golf courses are a distinctive feature. The Royal Liverpool Golf Course is designated as part of Meols Drive Conservation Area</li> <li>• Hedged boundaries mark a small area of former market gardens at Leasowe</li> <li>• The coastline within the LCA is largely undeveloped. Prominent historic buildings at Leasowe Castle and the lighthouse at Leasowe provide distinctive features on the skyline</li> <li>• Expansive views over the open water of Liverpool Bay to Sefton and beyond and across the adjacent estuaries, east towards Liverpool Docks and west towards the Welsh coast. Extensive offshore and onshore wind farms are prominent across these views</li> <li>• Despite surrounding coastal settlement, the area retains a sense of remoteness with strong sensory characteristics including the contrasting colour and texture of habitats and changing sea moods.</li> </ul>
LCA 1b: Dee Estuarine Edge	<ul style="list-style-type: none"> <li>• A gently undulating landscape rising from the Dee Estuary. The coastline varies with staggered cliffs in the north and a low-lying plain alongside extensive vegetated saltmarshes in the south</li> <li>• Small wooded streams in steep narrow valleys flow west into the Dee. There are a few field ponds scattered across the area</li> <li>• Extensive estuarine habitats associated with the wider Dee Estuary including intertidal mudflats, coastal saltmarsh, and maritime cliffs and slopes</li> <li>• Coastal habitats and the rural hinterland beyond are internationally important in supporting bird populations</li> <li>• Woodland is limited, with small windblown clumps or linear woodland along the coast and more extensive woodland inland around the settlements of Caldy and Heswall, much of which is locally designated</li> <li>• Mixed pastoral and arable farmland with a regular pattern of small to medium sized fields, many of historic origin, with dense hedgerows</li> <li>• A popular recreational area centred on Thurstaston Beach and Wirral Country Park with more formal recreation at Heswall and Caldy Golf Courses</li> <li>• A sparse settlement pattern with scattered farms except for ribbon development between Lower Heswall and the coast, and large caravan sites on the cliff top at Thurstaston. The surrounding urban areas are often screened by woodland. Roads are narrow and rural, and lined with hedgerows</li> <li>• Expansive views from the beach and higher ground over the open water, mudflats and saltmarsh of the Dee Estuary, to the Welsh coastline</li> <li>• Wooded ridgelines in the east form a backdrop to the area, and restrict views further inland, except for the spire of St Bartholomew's Church in Thurstaston which forms a landmark feature above the woodland</li> <li>• The area retains a sense of remoteness and tranquillity especially along the coastline. The changing character of the Dee Estuary has a strong influence on the coastal landscape, with contrasting colour and texture between the open water to the north and the broad green expanse of the coastal marsh to the south.</li> </ul>
LCA 2a: The Birket River Floodplain	<ul style="list-style-type: none"> <li>• Flat, low-lying farmland inland from the coast generally between 5m and 10m AOD, rising to 25m AOD in the south and east</li> <li>• Numerous tributary streams and ditches drain the surrounding farmland into the engineered River Birket. Field ponds are common and manmade pools from former quarrying and industry, many of which contain priority habitat reedbeds</li> <li>• Inland wetland and grassland habitats, including Meols Meadows SSSI and Meols Field LWS, are designated for their nature conservation value and their importance for overwintering migrating and breeding birds</li> </ul>

Character Area/Type	Key Characteristics
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- The area is open with low woodland cover except for small copses and linear woodlands along ditches and settlement edges
- Large scale arable farmland with pasture and horse paddocks more common in the north, although some land is under-utilised. Geometric fields are bounded by ditches and grassed bank with scrub, trees, or fragmented hedgerows
- Formed by draining marshland, the area retains extensive areas of pre-1600s field patterns including Medieval Townfields around Saughall Massie
- A sparse settlement pattern limited to red sandstone farmhouses with large outbuildings. Saughall Massie is the only historic clustered settlement, with a number of Grade II listed buildings within its Conservation Area
- Limited road access with roads and tracks bordered by tall intact hedgerows. The A553 is more open, with wide verges and no hedgerows. The railway crosses the north of the area, but is not dominant
- Recreational opportunities are provided by the good network of footpaths, part of North Wirral Coastal Park and Hoylake Municipal Golf Course
- Large scale open and exposed character with increasing tranquillity away from settlement edges
- Development on exposed urban edge of adjacent settlements, landfill and mineral operations and overhead powerlines are discordant features
- The coastline is mostly screened by the wooded edge of settlements to the north or the Wallasey Embankment, although offshore wind turbines are often visible on the skyline beyond

**Seascape Character: England**

**National (Seascape Character Assessment for the Northwest Inshore and Offshore Marine Plan Areas, LUC, 2018)**

<p>MCA 31: St Bees to Haverigg Coastal Waters</p>	<ul style="list-style-type: none"> <li>• A sandstone coast, with Triassic rock extending south from St Bees Head to Haverigg Point. The same sandstone extends offshore, giving way to mudstones and halite in the southwest</li> <li>• The rivers Esk, Mite and Irk meet at the coast at Ravenglass, forming a distinctive trident-shaped tidal estuary. Broad dune systems have built up either side of the main channel</li> <li>• Elsewhere, a long, smooth coast without significant indentation. The broad foreshore comprises sandy beaches with areas of shingle and exposed wave-cut rock</li> <li>• The foreshore and seafloor are mainly sandy, with more mud further offshore as well as overlying glacial till and gravels</li> <li>• Rocky scars project some way offshore in several locations, most notably at Selker Rocks some 2km from the High Water Mark, and Kokoarrah Scar off the Drigg dunes</li> <li>• The shallow sea slopes gently out from the coast towards the 20m depth contour, which represents a gradual transition into the adjacent MCA, with significant areas of less than 10m depth</li> <li>• Very limited low-energy tidal flows, of less than 0.5m/s</li> <li>• The Cumbria Coast MCZ and protects rocky and sandy habitats and peat exposures, from St Bees to the Esk. The Esk estuary and adjacent dune systems are protected at an international level</li> <li>• Haverigg Point, at the east edge of the Duddon Estuary, is protected at numerous levels for its intertidal habitats, and the area between here and the Esk provides an important area for foraging tern species</li> <li>• A particular concentration of shipwrecks is recorded off Haverigg Point</li> <li>• Britain's 'Energy Coast', with nuclear power having been generated at Sellafield from the 1950s to the early 21st century. The extensive plant remains a significant visual presence in views from land and sea</li> <li>• Military firing practice range based at Eskmeals on the dunes near Ravenglass; the range extends out to sea</li> <li>• An onshore wind farm is located at Haverigg, with offshore wind farms visible to the south (see MCAs 32 and 38)</li> <li>• Although there are no harbours on this coast, small yachts can moor at Ravenglass, and there are medium-use recreational sailing routes following the coast</li> <li>• Fisheries are limited but include crab, lobster, mussels and winkles around Ravenglass, and netting for bass, cod and thornback ray along the coast</li> <li>• Caravan parks located along the coastline, associated with the sandier stretches of foreshore. Ravenglass is a tourist centre in this part of the Lake District National Park</li> <li>• This area of sea is highly visible from land, including in views from the fells of the south-west Lake District National Park that look out to the Isle of Man: in turn it forms part of the seascape setting of the designated landscape</li> <li>• The higher hills in the south-west Lake District, including Black Combe, are prominent features in views from the sea, as is St Bees Head in the north</li> <li>• This MCA forms part of the seascape setting of St Bees Head Heritage Coast, in views south along the coastline</li> <li>• An undeveloped coastline with no large settlements. The exception is the nuclear power station and associated industrial development at Sellafield, at the mouth of the Calder</li> <li>• A strong sense of tranquillity with dark night skies, particularly between Ravenglass and Millom.</li> </ul>
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Character Area/Type	Key Characteristics
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<p>MCA 32: Walney Coastal Waters &amp; Duddon Estuary</p>	<ul style="list-style-type: none"> <li>• Gently shelving, muddy sand seabed, extending from the coast and edges of Morecambe Bay westwards to a depth of around 20m</li> <li>• The exception to this bathymetry is Lune Deep, a glacially incised channel over 10km in length which reaches 86m depth at one point</li> <li>• Glacial processes and subsequent movement of coastal sediments carried by strong tidal currents have resulted in a distinctive coastal landscape</li> <li>• Complex sediment movement resulting in the development of ness/foreland dunes at several locations in the Duddon Estuary. There are also spit dunes at North Walney, formed largely from river sediment</li> <li>• Walney Island is the largest barrier island in England, formed from glacial till and alluvium, and has been extended northwards and southwards by recurved shingle spits</li> <li>• International designations reflect the importance of the intertidal habitats, including sand dunes, vegetated shingle, salt marsh and lagoons supporting a rich birdlife</li> <li>• Offshore there are important subtidal habitats, protected by the West of Walney MCZ and Shell Flat and Lune Deep SAC</li> <li>• Piel Castle is a reminder of the earlier history of the area. Built in the 14th century by the abbot of the wealthy Furness Abbey, it provided protection for trading vessels using the harbour at Barrow</li> <li>• Natural systems have been much modified over time; much of the coastal marshland has been drained over the centuries to provide farmland</li> <li>• A chain of coastal defences dating to WWI and WWII, including pillboxes and observation posts, are reminders of the importance of Barrow's shipyard</li> <li>• Barrow-in-Furness has been a major ship-building centre from the 19th century. It continues to be a centre for building the UK's nuclear submarine fleet, requiring the Walney Channel to be heavily dredged</li> <li>• Lune Deep is important as a shipping access route through the sand banks and flats into Morecambe Bay</li> <li>• Significant shoreline protection works line the Duddon Estuary and Barrow area, with the coastal railway line forming an important sea defence</li> <li>• Four wind farms lie off the coast, forming prominent moving structures within the seascape</li> <li>• A 34km long pipeline from the Morecambe Bay Gas Field, located in MCA 38, supplies the Rampside Gas Terminal to the east of Walney Island</li> <li>• The waters of Duddon Estuary, Walney Channel and Foulney spit support harvested mussel beds, crab and lobster fisheries, and occasional cockles</li> <li>• Other fisheries include crab and lobster potting, cod, bass and thornback ray netting, and sole and flatfish beam trawling in the Lune Deep</li> <li>• Inshore areas support seagrass and are important as nurseries for pelagic and demersal fish species such as herring and plaice</li> <li>• There are important bird colonies around Walney Island, as well as Cumbria's only colony of seals</li> <li>• Wildlife and heritage are the principal attractions for visitors, with recreational angling also important for tourism</li> <li>• There is a marked contrast between natural and man-made elements on the land, coastline and sea, creating a distinct sense of place</li> <li>• Views out from the south extent of the Lake District National Park are dominated by the undeveloped Duddon Estuary which forms a significant component of the Park's setting in this locality</li> <li>• Views out to sea from Black Combe and the south Fells into the MCA are a significant characteristic of this part of the Lake District National Park</li> <li>• Views inland have the backdrop of the Lake District's mountains and industrial elements: views offshore feature the Isle of Man and the Galloway coast in Scotland.</li> </ul>
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<p>MCA 33: Morecambe Bay</p>	<ul style="list-style-type: none"> <li>• A shallow bay, mostly less than 10m deep and often below 5m, with a complex coastline incorporating the estuaries of four large rivers: the Leven, Kent, Keen, Lune and Wyre</li> <li>• Receives sand and mud from the surrounding hills and coastal sediments carried from the south by strong tidal currents and large tidal range of 10.53m</li> <li>• Intertidal estuarine flats of fine sand and mud, interlaced by a system of shifting tidal channels, creating a dynamic and changing seascape</li> <li>• The largest continuous intertidal area in Britain, with over 310km<sup>2</sup> exposed at low tide. Harbours are a long way inshore, with approach and exit normally only possible at high tide</li> <li>• Glacial till forms many coastal features, including Carboniferous limestone cliffs along the Silverdale coast to the north of the Bay. Foulney Island is a notable shingle feature</li> <li>• Accretion is causing salt marshes to grow, with regular maintenance required to remove silt from shipping channels. Erosion is also occurring in places along the west shores. This erosion and accretion is a natural process and is affected by man-made structures. The channel dynamics of the Kent estuary have a major influence, cyclically scouring away coastal salt marshes and depositing the material elsewhere</li> <li>• Natural systems much modified over time by human intervention: much of the coastal marshland has been drained for farmland. Coastal defences continue to be developed in places</li> <li>• Morecambe Bay's salt marshes, sand and mud flats and rocky skaers are designated at an international level and support large populations of wintering waterfowl, waders and seabirds</li> </ul>
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Character Area/Type	Key Characteristics
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	<ul style="list-style-type: none"> <li>• Until the 19th century the sands of the Bay were used, at low tide, as a principal access route between the Lancashire and Cumbrian coasts. Access can still be taken, led by the Queen's Guide to the Sands, an ancient royal appointment</li> <li>• The collection of cockles, mussels and shrimps, traditionally using shallow-drafted Morecambe Bay prawners, was historically an important part of the Bay's economy</li> <li>• The Bay is a valuable source of seed mussels, which are exported for planting in other estuaries. Aquaculture for oysters has also become established</li> <li>• Although the fishing industry is much declined from former years, the Bay remains important for high value commercial cockle and mussel fisheries, plus other commercial fishing for brown shrimp, crab and lobster, bass, flounder, sole, plaice, mullet, turbot, whitebait, codling, flatfish and thornback ray</li> <li>• The construction of the Lancaster Canal and the arrival of railways led to a more rapid development of trade and tourism centred on Morecambe. The Arnside Viaduct remains a key feature in the bay. Fleetwood was also developed as a major fishing port</li> <li>• Morecambe remains the focus for tourism in the area, though Arnside &amp; Silverdale and the Furness coast are popular for less intensive tourism. Recreational angling is also important for tourism</li> <li>• The Port of Heysham plays a key role in providing freight services to the Republic of Ireland and North Ireland and passenger services to the Isle of Man. Heysham nuclear power station is a notable visual landmark from coast and sea</li> <li>• Away from urban areas a strong sense of tranquillity and isolation results from the expansiveness of views and general absence of development</li> <li>• This is a very animated landscape, with the character of the Bay's surface constantly changing, through the interplay of tides and light and the movement of its birdlife</li> <li>• There are panoramic vistas across the bay from all directions, including views from the Lake District National Park, Forest of Bowland AONB, and Arnside &amp; Silverdale AONB (e.g. Arnside Knott)</li> <li>• Morecambe Bay forms a key component to the seascape setting of the Arnside and Silverdale AONB. In turn the elevated land of the protected landscapes forms a scenic backdrop to views across the Bay from its seaward side.</li> </ul>
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<p>MCA 34: Blackpool Coastal Waters &amp; Ribble Estuary</p>	<ul style="list-style-type: none"> <li>• A shallow, coastal area no more than 20m deep, shelving very gently down from the low-lying Lancashire coastal plain</li> <li>• Shallow waters and a high tidal range (up to 9.8m at Lytham St Anne's) backed by extensive sandy and muddy/sandy beaches, intertidal sand flats and mudflats</li> <li>• Complex coastal processes, with a high rate of movement of sand and shingle, although sea defences limit this in places</li> <li>• Frequent storm surges, combining with high tides to cause flooding. Man-made barriers protect most of the coast, and sand bars, salt marsh and dunes also provide a natural defence</li> <li>• Beyond the sandbanks, the Ribble Estuary is a landscape of intertidal salt marshes, pierced by dendritic creeks</li> <li>• Along the Sefton Coast the landscape is dominated by sand dunes, stretching over 17km long. Around Formby and Ainsdale the dunes reach over 20m high, forming dominant features</li> <li>• The protected dune systems support internationally and nationally important species including natterjack toad and sand lizard</li> <li>• The Ribble Estuary and the Sefton Coast dunes have distinctive character, and in places, when screened from urban influences, a sense of remoteness and wildness</li> <li>• Large intertidal areas are internationally designated for their importance for migratory wildfowl, wading birds and sea birds</li> <li>• The extensive Liverpool Bay SPA includes all of this coast and supports common scoter and red-throated diver. The Fylde MCZ includes extensive areas of subtidal sediment habitats typical of the area and overlaps with the Shell Flat and Lune Deep SAC</li> <li>• At Formby Point, coastal erosion of the foreshore has revealed preserved human, animal and wading bird footprints dating from the Mesolithic Period (7,000–5,000 years ago)</li> <li>• Coastal waters and the Ribble Estuary are important nursery areas for commercially fished species such as herring, plaice, Dover sole and bass</li> <li>• The Ribble Estuary supports commercial fisheries for brown shrimp and cockles. Other commercial fisheries in this MCA include mussels, bass, crab, lobster, flatfish and thornback ray</li> <li>• The Lennox Oil and Gas Field, one of five interlinked sites currently operational in Liverpool Bay, is located in the south west part of the MCA</li> <li>• The Fylde Coast, in particular, is now very urbanised, with much industrial development (e.g. around Blackpool and Preston)</li> <li>• The marshy coastal area was sparsely populated until the 19th century, when land drainage enabled agriculture and the railways boosted tourism, most notably for Blackpool and Southport</li> <li>• In addition to urban and beach-based tourism the coast is popular for bird watching, with a number of national and local nature reserves providing facilities for visitors. Recreational angling is also an attraction</li> <li>• There are a number of prominent landmarks on the developed areas of coast, such as Blackpool's tower, pier and rollercoaster</li> <li>• From the coast there are long views to the mountains of North Wales and the Lake District, and from the Sefton Coast shipping lanes, wind turbines and oil and gas infrastructure are visible.</li> </ul>
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Character Area/Type	Key Characteristics
MCA 35: Inner Liverpool Bay	<ul style="list-style-type: none"> <li>• A gently shelving coastal zone, from around 5m depth where it gives way to the inshore area of sand banks, mud flats and channels approaching the Mersey and Dee estuaries – to around 20m in the west and north</li> <li>• The seabed is covered with Quaternary, mostly glacial and post-glacial sand and gravel deposits. These are underlain by mudstones and halite</li> <li>• Large quantities of material dredged from estuary areas, such as the Mersey docks, have been deposited in this part of Liverpool Bay since Victorian times.</li> <li>• The semi-enclosed character of the Irish Sea means that wave heights are generally low</li> <li>• Several species of phytoplankton are noted for causing blooms in Liverpool Bay, the most visual expression of this being the ‘red tides’ associated with invertebrate mortalities</li> <li>• Spawning grounds for whiting, Dover sole and plaice extend southward and eastward as far as the north end west parts of the MCA</li> <li>• The whole of the MCA, along with other shallow waters along the north-west coast, is important as a nursery for pelagic and demersal fish species, including herring, plaice and Dover sole</li> <li>• Contains important foraging grounds sustaining the significant populations of red-throated diver, common scoter and terns, internationally designated as part of the Liverpool Bay SPA</li> <li>• Further offshore, cetaceans are found including dolphins, porpoise and occasional whales</li> <li>• A busy area for commercial shipping, with the majority of vessels entering the Mersey passing through it. There is also moderate usage by recreational craft, including recreational anglers, as well as passenger ferries</li> <li>• An important area for oil and gas extraction. One of the five interlinked sites is the Hamilton East Gas Field, connected by pipeline to the Hamilton North Gas Field in MCA 38: Irish Sea (South)</li> <li>• More recently, offshore wind farms have been developed in this area</li> <li>• An area in the southwest of the MCA, and extending further west, is licensed by the Crown Estates for the dredging of marine aggregates, landed at Liverpool to supply the local market</li> <li>• MCA widely visible from land in its south parts. The closer coasts are low lying and unlikely to be prominent in views from the sea, for example from the ferries which cross this area</li> <li>• The offshore platforms, shipping activity and offshore wind turbines also influence views and perceptual qualities at night-time.</li> </ul>
MCA 36: Dee & Mersey Estuaries and Coastal Waters	<ul style="list-style-type: none"> <li>• Coastal area consisting of the Dee Estuary, the Mersey Estuary, the smaller Alt Estuary and their associated coastal waters</li> <li>• Low-lying coastline underlain by Triassic shales and sandstones, which form distinctive, isolated, coastal outcrops such as Hilbre Island (at the mouth of the Dee) and Perch Rock (Mersey)</li> <li>• A high tidal range and shallow, very gently shelving coastal waters with numerous sand banks and mudflats</li> <li>• Sandstone bedrock constrains the width of the Mersey near its mouth, channelling water to create strong currents which cause localised tidal scour in places</li> <li>• The funnel shape of the Dee Estuary encourages sedimentation, largely from longshore drift, which over time has caused ports in the upper reaches of the estuary to silt up. The Dee itself has been channelized in the inner estuary</li> <li>• The inner Mersey Estuary is composed of extensive intertidal mud and sandflats, distinct areas of rocky shore, and areas of saltmarsh</li> <li>• Sand dunes are a notable feature, visually and ecologically, in particular the extensive system that starts at Seaforth and continues north for many miles. At up to 25m high and 5km wide, it is the largest dune system in England</li> <li>• Important nursery grounds for herring, plaice, Dover sole and bass. The Dee is also noted for a number of protected fish species, including sturgeon and allis shad, and for shellfish beds</li> <li>• Commercial fisheries include cockles, mussels, shrimps, bass, plaice, Dover sole, flounder, dab, turbot, brill, codling, whiting, cod, mackerel and mullet</li> <li>• Mudflats, sand flats, man-made lagoons and salt marshes are internationally important for a range of wildfowl and wading bird populations, reflected in overlapping international designations across the majority of this MCA</li> <li>• The Dee Estuary supports a population of grey seals</li> <li>• At the end of the last glaciation the coast was c.15km further west. Rising sea levels covered ancient landscapes but prehistoric sites and artefacts have been discovered in the intertidal zone</li> <li>• The Merseyside Conurbation, centred on Liverpool, developed largely as a result of the physical characteristics of the coastline, with natural tidal pools providing the basis for early docks</li> <li>• A major international port for several hundred years, Liverpool suffered a decline in the 1970s, but remains an important trade hub, with ongoing investment into the ‘superport’ and a range of associated industries and services</li> <li>• Shipping routes from the Irish Sea converge on the Queens Channel/Crosby Channel to access the Mersey, with onward links inland to the Manchester Ship Canal</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• The combination of high shipping volumes and numerous sandbanks has resulted in many hundreds of shipwrecks, concentrated along Queen’s Channel and between Liverpool and Birkenhead</li> <li>• The River Mersey, its historic waterfront and its maritime history are at the heart of Liverpool’s strong sense of place and its importance as a tourist destination, designated as a World Heritage Site</li> <li>• The MCA’s wide, sandy beaches and local and national nature reserves are recreation and tourism draws. At Crosby, Antony Gormley’s installation ‘Another Place’ is a further attraction on the foreshore</li> <li>• Long stretches of coast are protected by man-made defences in response to threats from storm surges and sea level rise</li> <li>• The Burbo Bank Wind Farm, and several others in Welsh waters are prominent in views. There are also views across the Mersey to oil refineries at Ellesmere Port and to the Welsh coast</li> <li>• Blackpool Tower is a distant landmark to the north, and on clear days Anglesey and Snowdonia can be seen</li> <li>• Views also characterise both estuaries, with the vistas up and down the Mersey characteristic of Liverpool’s setting.</li> </ul>
MCA 37: Irish Sea North (England)	<ul style="list-style-type: none"> <li>• Underlain largely by rocks of the Triassic period, with small areas of Carboniferous rock west of the Isle of Man with potential hydrocarbon deposits</li> <li>• The deep basin, formed by a syncline, is filled with deep Permo-Triassic mud, sand and gravel sediments which completely obscure these rocks</li> <li>• The resulting sea floor is relatively even, shelving gently down to the west from around 20m depth to around 40m, only becoming deeper in very small areas to the northwest</li> <li>• The east tip of the King William Banks is within the MCA, where water depth is less than 10m. These banks extend westward into Isle of Man waters</li> <li>• A calm sea with low tidal energy and flows, rising only slightly across the north part of the MCA where the Solway flows out</li> <li>• Areas of sea-bed mud support Nephrops (Dublin Bay prawn) as well as crabs, shrimp, sea urchins and hydroids. In the far south of the MCA these mud habitats form part of the West of Walney MCZ. Brittlestars are typical of more sandy areas</li> <li>• Spawning grounds for commercially exploited cod, whiting and plaice occur within this MCA</li> <li>• Cetaceans are found in this area, including dolphins, porpoise and occasional whales</li> <li>• Relatively few wrecks, reflecting the lower levels of activity and/or calmer seas, though a number of ships are known to have foundered off St Bees Head in the north-east of the MCA</li> <li>• There are no fixed offshore structures in this MCA, and only a single light buoy at the east tip of the King William Banks, giving the MCA an undeveloped character</li> <li>• Extensive military live-firing ranges cross the MCA, centred on Eskmeals Range off the Cumbrian coast and Kirkcudbright Range off the Scottish coast, resulting in potential for unexploded ordnance on the seabed</li> <li>• The principal fishing activity is benthic trawling for Nephrops by boats from Fleetwood, Whitehaven and further afield. Other important fisheries include bass, thornback ray, cod, codling and flatfish</li> <li>• Some recreational sailing routes cross the area, noted as medium or light use, connecting the ports of Whitehaven, Douglas and Ramsey</li> <li>• Under clear conditions, there is intervisibility with the hills of the Lake District National Park, the Dumfries and Galloway coast, and the Isle of Man</li> <li>• With an absence of offshore lights, there are dark skies across this MCA.</li> </ul>
MCA 38: Irish Sea South (England)	<ul style="list-style-type: none"> <li>• Seabed primarily comprising Triassic mudstones and sandstones, with volcanic dykes running across the north edge that coincide with shallower waters</li> <li>• The sea becomes steadily deeper from around 20m in the east to just over 40m at the westmost point – with shallower waters associated with the volcanic dykes</li> <li>• Sand, mud and gravel seabed deposits sitting on deep layers of glacial till deposited during the Pleistocene glaciation</li> <li>• Tidal flows are generally quite weak, only becoming slightly faster along the south-west edge of the MCA</li> <li>• West of Walney MCZ protects areas of mud habitat, supporting Nephrops (Dublin Bay prawn) as well as other molluscs, sea urchins and sea pens. There are high densities of brittlestars in more sandy areas</li> <li>• Spawning grounds for commercially exploited cod, Dover sole, whiting and plaice. Scallops, queen scallops and Nephrops are targeted by trawlers</li> <li>• A series of offshore oil and gas platforms. In the north the Morecambe, Calder and Millom fields supply gas via pipelines to Barrow-in-Furness</li> <li>• The Hamilton and Douglas fields in the south deliver their gas to Point of Ayr in North Wales, while oil from these fields is transferred to tankers</li> <li>• Dredging for aggregates is carried on in the north in the shallow sea east of the Isle of Man, and in the south in the vicinity of the Douglas oil field</li> <li>• Walney Offshore Wind Farm extends west into this area from MCA 40, close to the North Morecambe gas platforms</li> <li>• Several key shipping routes cross this sea, adding to the busy nature of the waters. These routes include the approaches to the major ports of Fleetwood and the Mersey</li> </ul>

**Character Area/Type** **Key Characteristics**

- Many 'medium use' recreational sailing routes criss-cross the MCA, linking all the harbours on the English, Welsh and Isle of Man coasts
- The coast is relatively distant from this MCA, and the nearest areas are low-lying, meaning that there are low levels of intervisibility with the land. Under clear conditions, there is intervisibility with the hills of the Lake District National Park and the Isle of Man
- Lighting from the offshore platforms and wind turbines influences night-time seaward views
- The area is viewed from ferry services which link Liverpool and Heysham with Douglas, Belfast and Larne.

**Landscape Character: Wales**

**National (National Landscape Character Assessment, NRW)**

- LCA 1: Anglesey Coast
- The coastal zone – off by far the largest island in Wales (720km<sup>2</sup>), containing the largest outcrop of Precambrian rocks in south Britain, but with areas of other rock types too
  - Much of the highest land on the island falls within the coastal area, including Parys Mountain (147m) and Holyhead Mountain (220m).
  - Strong geological orientation – There is a southwest to northeast geological orientation, resulting in corrugated topography, which is manifest along the coastline in places as rocky headlands and sandy bays. Igneous rock intrusions and outcrops of quartzite have created the dramatic landforms and skyline of Holyhead Mountain and South Stack, at Holy Island
  - Great variety of coastal types – The coastline has great variety, from sheer coastal cliffs and dramatic rocky headlands, to small sandy coves and extensive low-lying dunes and sandy estuaries. A legacy of coastal quarrying that has long since ceased, remains apparent in places, for example at Penmon
  - Wind exposure but some shelter – The striking and windswept heathland landscapes of the wild coastline at Holyhead Mountain and North and South Stack, together with the barren, mined landscape of Parys Mountain, contrast markedly with the gentler, green, pastoral landscapes inland, away from the immediate coastal edge
  - Pasture – Soils include deep loams supporting predominantly pastoral land cover with occasional hay meadows, away from the coastline
  - Heather and heath – a feature of the thin soils in the more elevated areas such as Holyhead Mountain, Mynydd Bodafon and the coastline near Amlwch
  - Cloddau – or earth bank field boundaries feature in the north and west with occasional stone walls, whereas hedges are more common in the south and east
  - Reclaimed marsh – The large sandy Malltraeth estuary includes significant reclaimed areas and the straightened tidal river channel of the Afon Cefni, with wetland elements including rush pasture and marsh
  - Lagoons – There are a series of distinctive freshwater lagoons on the coast facing Caernarfon Bay, sandwiched between rising inland landscapes and the very well-developed coastal dune systems
  - Prehistoric and funerary sites – including standing stones, chambered tombs, barrows and cairns, distinctive Iron Age hill and promontory forts, the largest and most prominent being Bwrdd Arthur, on the Penmon peninsula
  - Coastal Settlements – often relating to former industry, such as the mining town of Amlwch at the foot of Parys Mountain, or to strategic transport routes, such as Thomas Telford's A5 and the port town of Holyhead (the only large settlement in the area) on Holy Island. Much C20th coastal development relates to tourism and retirement property
  - A number of prominent man-made landmarks – including Beaumaris Castle (World Heritage Site), the two bridges that cross the Menai Strait and connect with the mainland, Parys Mountain (distinctive industrial quarry landscape), Wylfa Nuclear Power Station, and the Aluminium works on Holy Island, with its tall, widely visible chimney.

- LCA 2: Central Anglesey
- The land-locked central part of Anglesey – part of the largest island in Wales (720km<sup>2</sup>). Rock outcrops and a distinct geological grain – the gentle topography, low lying and near flat in places, follows a north-east to south-west 'grain' imposed by major faults. Contrasting rock types include Ordovician sandstones and shale, bands of volcanic tuffs and Carboniferous Limestone. In various places there are many craggy rock outcrops
  - Extensive drumlin fields – thick layers of glacial boulder clays, especially in north-west Anglesey, result in a classic 'basket of eggs' rolling drumlin landscape
  - Lowland pastures and mixed field patterns – silty and peat soils underlie lowland pastoral grazing land bounded by a strongly geometric pattern of medium to large scale and, more occasionally, small scale fields
  - Minor rivers and fens – A number of minor rivers and streams cross the landscape, whose alignment is influenced by the northeast to southwest trend. There are many shallow hollows and fens with wetland features including rush pasture and valley mires, for example Cors Erddreiniog NNR
  - Hedgerows and cloddiau – This is generally a rolling, open landscape with a well-established pattern of field boundaries, predominantly of hedgerows but with cloddiau in some areas
  - Few woodlands – Woodlands larger than a small copse are an exception, being notably around Llangefni Dingle and Llyn Cefni reservoir, together with estate woodlands at Presaddfed (Bodedern). Except in sheltered areas, individual trees are few
  - Generally rural settlement patterns – The only urban settlement is the county town of Llangefni, in the centre of the island. Its nucleated historic core contrasts with modern peripheral housing and expanding light industrial and business park developments. There are only a few villages, but numerous scattered hamlets and farms throughout the area. Linear, ribbon villages concentrate along Telford's the A5 road across the island

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Prehistoric and funerary sites – ritual and funerary monuments including cairns and round barrows, Iron Age hill forts and Early Christian churches, burial grounds and inscribed stones</li> <li>• Historic windmill towers – including some restored examples, form local features. Modern wind farms – generally limited to an area north of Llandeusan, but are seen in longer distance views from a much wider area.</li> <li>• Llyn Alaw – a large reservoir, nearly 3 miles long and a notable visual feature, providing significant over wintering habitat for wildfowl. Llyn Cefni is a smaller example of the same.</li> </ul>
LCA 3: Arfon	<ul style="list-style-type: none"> <li>• The Arfonian plateau – a broad, gently undulating lowland and valley landform, rising from the coast to about 200m and flanked by the much higher adjacent uplands of Eryri</li> <li>• Menai Strait – the tidal channel separating Anglesey and the mainland</li> <li>• Soft open coastline – at Morfa Dinlle with shingle and sand beaches and dunes, extensive mud and sand flats in Foryd Bay and at Traeth Lafan</li> <li>• Extensive sheltered inter-tidal areas at Foryd Bay and Traeth Lafan, with high ecological importance</li> <li>• A dramatic inland panorama of steeply rising mountains – with many views to well-known ridges and peaks, including Snowdon (Yr Wyddfa)</li> <li>• Deep ‘U’ shape valleys emerge from uplands into Arfon – and whose rivers then cross the area. The rivers include the Gregyn, Ogwen, Cegin, Gwyfrai, Seoint and Llyfni, and in the Llanberis area also include the ice-deepened lakes of Llyn Padarn and Llyn Peris</li> <li>• Very extensive slate workings – on the flanks of the upland valleys, including associated old mines, levels, railways, waste tips and workshops. Many are at a spectacular scale</li> <li>• ‘Gwerin’ – landscapes associated with slate quarry worker’s housing and smallholdings that encroached onto former commons, typically heavily dominated by slate walls and buildings, and in places (e.g. Nebo) tiny field sizes. Slate fencing in a few places (e.g. Mynydd Llandegai)</li> <li>• Pastoral land cover – predominates</li> <li>• Wooded valley slopes – by rivers and beside the Menai Strait</li> <li>• Lowland – upland contrasts – from the intimate, wooded, lush, soft, sheltered lowland and pastures to the exposed, open, heavily grazed, marginal upland fringes.</li> <li>• Prehistoric and funerary sites – a rich concentration of burial sites, hill forts and stone-built hut circles and their field systems, which often survive on the more marginal parts of the foothills</li> <li>• Landed estates and their designed parklands – from the Medieval and post Medieval periods, such as Penrhyn, Faenol and Glynllifon, on the better land and often with designed parklands and scattered individual trees</li> <li>• Settlement pattern relates to sites of strategic significance: river mouths and ports, coastal defensive, where the upland valleys emerge, and near slate workings</li> <li>• Caernarfon Castle – World Heritage Site, and its associated Medieval walled town overlooking the Menai Strait</li> <li>• The University City of Bangor – occupying a constricted site flanked by coast and wooded hills.</li> </ul>
LCA 6: Snowdonia	<ul style="list-style-type: none"> <li>• A mountainous topography – with the principal mountain range orientated broadly northeast to southwest</li> <li>• Wales’s sharpest ridges and highest peaks lie within this area – in a landscape often defined by massive, angular skylines. Most famously this includes the massif of Snowdon, with the peak of Yr Wyddfa, highest in England and Wales at 1085m AOD, and a number of radiating ridges</li> <li>• U-shaped glacial valleys and corries – carved through the mountainous terrain and deepened by the ice in the last Ice Age</li> <li>• An upland character to principal land cover elements – including hill sheep grazing, forestry, heather dominated moorland and upland grassland. Rock outcrops and slate/shale ridges and screes are frequently apparent</li> <li>• Moorland and blanket bog – substantial areas with significant ecological interest and large parts of the area are designated SSSI. Species rich crag flora and grassland is a feature of upland areas, for example, at Moel Hebog</li> <li>• Rivers, lakes, waterfalls – principal rivers include the Dysinni, the Llugwy, the source of the Conwy, the Mawddach, Glaslyn and Dwyryd. There are numerous small lakes and waterfalls (e.g. at Betws-y-Coed), and Llyn Tegid at Bala is Wales’ largest natural lake</li> <li>• Estuaries and coast – although only directly fronting open sea in a few places, the tempestuous, dark, mountainous character abuts, or is seen in views close to milder, sheltered, woodland-fringed estuaries and sunnier, sandy open coast. This combination provides an iconic and contrasting image of great appeal to many</li> <li>• Prehistoric archaeology – many ritual and funerary sites including cairns, standing stones and stone circles, many located along hill crests, mountains, ridges and passes, often forming strong visual features</li> <li>• Ancient stone built remains – deserted stone-built Iron Age, Roman period, Medieval and later, settlements and field systems survive in an almost unbroken “cordon” of relict landscapes along the lower slopes between the Dyfi in the southwest and the Conwy in the northeast</li> <li>• Slate mining heritage – abundant in many parts but notably created the extensive slate landscape of Blaenau Ffestiniog and slate is the principal building material in much of the area. Remains include quarries, waste heaps, mines, levels, workshops and cottages</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Copper, gold and other minerals heritage – copper mining was historically important, notably at Sygun, near Beddgelert and Drws-y-Coed, near Nantlle. The exploitation of other minerals, for example, gold, lead, zinc and manganese, have also left industrial archaeological remains in the landscape. Welsh gold is worn by the Royal Family</li> <li>• Sparsely populated/few large settlements – confined to valleys, the few include the small towns of Dolgellau and Bala, and the slate town of Blaenau Ffestiniog, and compact valley villages in slate and stone such as Beddgelert and Betws-y-Coed</li> <li>• Transport routes affected by steep topography – the majority of the area has few roads, these are routed along valleys, linked by the occasional twisting mountain pass. Railway routes do likewise and with tunnels. There are remains of numerous narrow-gauge quarry railways, some with inclines. There are several operational narrow-gauge heritage railways for tourists</li> <li>• Sublime, picturesque, iconic visual and sensory landscape of great drama – the inspiration for many artists over the last 200 years, part of the great tour for Wordsworth, and others</li> <li>• A stronghold of the Welsh language and culture – of small-scale rural farming, of large-scale mineral exploitation. It includes great contrast and exhibits an intimate relationship between the natural drama and the cultural heritage of its people</li> <li>• Tourism – today Snowdonia is recognised as a National Park and is visited by thousands of tourists who come to experience the natural and cultural heritage. The area forms a great outdoor challenge for many recreational visitors as they explore.</li> </ul>
LCA 7: Conwy Valley	<ul style="list-style-type: none"> <li>• A deep, major fault-guided glaciated valley – between the adjacent rugged and shapely uplands of Snowdonia to the west and gentler rolling Rhos Hills to the east</li> <li>• South flood plain section – deep river alluvium with silty and clayey soils and seasonal flooding, whose flatness contrasts with the adjacent spectacular wooded hillside to the west. Development and road links generally keep off the flood plain</li> <li>• A very abrupt, steep, wooded edge to the adjacent Snowdonia uplands, with cliffs – marking the terminal point of a bedrock geology of Silurian argillaceous rock. Dramatic, boulder-strewn, tumbling small rivers cascade down</li> <li>• Hanging woodland – including beech and oak, and areas of planted conifers, to slopes</li> <li>• Hilly farmed middle section with a meandering, serpentine estuary – fringed with marsh, reed beds and tidal flats, backed by pastures, hedges and deciduous woodland blocks. Strong tidal movement along estuary. Hamlets, villages, scattered farms</li> <li>• Lowland pasture and hay meadow – with hill sheep grazing to the valley sides</li> <li>• Busier north section around Conwy – with strategic transport crossing points over the wide estuary and shelter for boats. Historic road and railway bridges and a modern road tunnel</li> <li>• Field patterns – geometric on the flood plain, with areas of dry stone walls or reens (ditches) as boundaries. Mixed hedgerows generally, with small irregular fields on rising slopes to the west side. More improved fields and hedges to the east side slopes</li> <li>• Conwy Castle with its associated walled town – a World Heritage Site, dramatically located on a promontory overlooking the estuary, and forming a landmark feature</li> <li>• Settlement to lower valley sides – keeping off the flood plain, notably the linear Dolgarrog, Trefriw and Glan Conwy. Principle settlements are Conwy town and Llanrwst</li> <li>• A strong sense of containment to the valley – creating a natural route for north-south road and rail links.</li> </ul>
LCA 8: North Wales Coast	<ul style="list-style-type: none"> <li>• Carboniferous limestone hills and coastal headlands – resulting in distinctive light-coloured rocky escarpments with cliffs and scree, including most prominently Great Orme’s Head, with characteristic clints, grykes, stepped crags and scree slopes</li> <li>• The mouth of the Vale of Clwyd – a broad flat coastal plain centred on Rhyl, including the small estuary of the River Clwyd, including a network of medium scale pastoral fields of regular pattern, with ditches and, to a lesser extent mixed, managed hedgerow, and occasionally interspersed with small stands of mixed farm woodland</li> <li>• Seaside resort towns – urban development and arterial road and railway routes along coast, constricted in places by topography and rising hills. Much 19<sup>th</sup> century development with more recent suburbia. Some caravan parks and holiday camps between Llanddulas to Prestatyn coalesce settlements</li> <li>• Steep sided hill back drop to coastal towns – wooded, or exposed limestone and sheep pasture</li> <li>• A generally man-made coastal edge – promenades, sea walls, groynes, rock armour and other forms of protecting the coastal edge run for most of the length of the coastline</li> <li>• Limestone quarrying – a number of old and active limestone quarries have left holes and scars; coastal quarries having used sea ships for transportation</li> <li>• Hinterland away from the coast – with intervening hills makes for a quiet, sheltered, inland, rural feel, with some classic limestone outcrops, notably south of Llanddualas</li> <li>• Ecological importance – Great Orme is ecologically important for its concentration of calcareous grassland, while elsewhere, there is a diversity of habitat types, including the coastal dunes at Gronant and remaining areas of coastal habitat such as sandbanks, marshland and tidal river flats</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Archaeology – Great Orme has a range of archaeological features illustrating a variety of historic land uses, including prehistoric caves, extensive evidence of underground, Bronze Age copper mining, ritual and funerary monuments, and hillforts</li> <li>• Rhuddlan Castle is strategically sited at a crossing point over the Clwyd, at what was once the east boundary of the Medieval kingdom of Gwynedd</li> <li>• A number of historic parklands – lie within the area, while the estate architecture of Gwrych Castle and wooded parkland is a locally prominent feature</li> <li>• Iconic image of historic Llandudno and its famed natural setting – between two rocky headlands, with its pier, grand sweeping promenade and Victorian building façades, arguably the finest of their type in Wales, the town is known as the ‘Queen of resorts’ and is known nationally for seaside holidays.</li> </ul>
LCA 9: Rhos	<ul style="list-style-type: none"> <li>• Rural inland foothills and valleys – that rise to the adjacent Denbigh Moors to the south</li> <li>• Bedrock geology – is composed primarily of Silurian sandstone and argillaceous rock of the Ludlow and Wenlock Series, in addition to small areas of Carboniferous limestone and areas of slaty mudstone and siltstone</li> <li>• Extensive drift deposits – glacial till overlays the solid geology giving rise to the undulating land form of the area</li> <li>• River valleys and flood plains – river alluvium and fluvio-glacial river terrace deposits are present</li> <li>• An undulating land form – comprising a series of ridges and valleys associated with the river catchment, including the Cledwen and the Aled. A range in grades of slope</li> <li>• Soils – well drained fine loamy/silty typical brown earth soils, with seasonally wet silty soils over shale in the river valleys</li> <li>• Sheep grazed pasture – predominant land cover</li> <li>• Occasional woodlands – often occurring on the river valley slopes, for example on the Clywedog and the Ystrad, and running up riverside slopes</li> <li>• Mixed field patterns – often geometric but varies widely in scale, from small to large size fields. A denser network of mixed hedgerows with more trees in sheltered valleys, running up to sparse, windswept hedges and fences occupying areas of former moorland</li> <li>• Archaeology – a number of sites occupy the more elevated parts of the area, including Neolithic burial chambers, Bronze Age round barrows and cairns, and Iron Age hillforts such as Mynydd Y Gaer. The Pontnewydd Cave is internationally renowned for evidence of the earliest known humans in Wales</li> <li>• Sparsely settled – affording rural peace and tranquillity, with wide views from the higher points and a sense of intimacy and enclosure in the valleys close by.</li> </ul>
LCA 11: Vale of Clwyd	<ul style="list-style-type: none"> <li>• A broad agricultural vale – between adjacent upland areas</li> <li>• Distinctive line of hills forming the east boundary, also forming an upland-lowland boundary, following a geological fault line</li> <li>• Limestone and sandstone – predominantly Permo-Triassic sandstone but localised areas of Carboniferous Limestone</li> <li>• Undulating fringe either side of vale – being deposits of fluvio-glacial drift and till</li> <li>• Flood plain – river alluvium marks the extents of the broad, flat floodplain</li> <li>• Arable and pasture, well managed hedges</li> <li>• Many hedgerow and parkland trees and some woodland blocks – and of ecological importance, some Alder woodland, swamp and rush pasture and some ash-wych elm dominated woodland</li> <li>• Castles and towns – reflects historic strategic importance of main three towns of Denbigh and Ruthin and ecclesiastical importance of St Asaph cathedral</li> <li>• Rural – dispersed, scattered farms, settlement confined to small villages and hamlets and the three towns</li> <li>• Prosperity – enduring through history based on agriculture</li> <li>• Many cultural associations with people – a richness and diversity including William Morgan, the translator of the Bible into Welsh and the Victorian explorer H M Stanley.</li> </ul>
LCA 12: Clwydian Range	<ul style="list-style-type: none"> <li>• Rounded, heather clad open hills in two main groups, a north chain rising to Model Famau (554m), a south chain rising to Moel y Gamelin (577m). Formed by sandstones and argillaceous rocks and shales</li> <li>• Narrow, minor river valleys dissect the hills – draining into the Vales of Clwyd or Llangollen</li> <li>• A gentle intervening vale – the River Alyn flows north, at times incised, then east</li> <li>• Well defined west and south edges – with adjacent deep valleys</li> <li>• Carboniferous Limestone to the east – with classic scenery of clints, grykes, crags and scarp slopes, use of stone in field boundaries and buildings, large quarries, and in places an exposed appearance. Gentler slopes towards Deeside</li> <li>• A series of minor rivers – have their sources in the hills, draining west into the Clwyd in the Vale of Clwyd</li> <li>• Heaths – in the Halkyn Mountain area</li> <li>• Hedgerows and numerous hedgerow trees – improved hill sheep grazing and lowland pasture</li> </ul>



Character Area/Type	Key Characteristics
LCA 13: Deeside & Wrexham	<ul style="list-style-type: none"> <li>Quarries and mining heritage – a number of large limestone quarries in the east and slate quarries in the south near Horseshoe Pass. Extensive evidence of old mineral workings on Halkyn Mountain</li> <li>Archaeology – a relatively high density of prehistoric ritual and funerary monuments, including round barrows, and later, Iron Age hill forts indicate the area’s past strategic importance</li> <li>Historic parks – A number of historic parks and gardens occur within the area, notably Bryngwyn and Penbedw</li> <li>Culturally a divide – the area reflects the historical divide between English influences to the east and Welsh influences to the west. Parts of the area are designated as an AONB</li> <li>Sparse level of settlement – confined to compact, nucleated hamlets and isolated farmsteads. Crossed by a number of arterial ‘A’ roads, the presence of the A55 Expressway across the north part of the area is the most apparent.</li> </ul>
	<ul style="list-style-type: none"> <li>Lowland, foothills and levels – sloping down to the lower Dee and Dee Estuary. Carboniferous Coal Measures interspersed with outcrops of Millstone Grit, Holywell shales and Cefn-y-Fedw sandstones. Glacial till, fluvio-glacial and river terrace drift overlay in parts of the valley floor, giving rise to localised gentle land form variation</li> <li>A single large river, the Dee, traverses the area. The Dee opens out into a broad estuary with tidal sand and mud flats. A number of minor rivers dissect the landscape, for example, the Alyn and Eitha, and associated streams</li> <li>A broad flat flood plain adjacent to the Dee Estuary – with wide open views to Wirral</li> <li>Narrow, incised, wooded tributary valleys – many running down from the west</li> <li>Mixed pasture and some arable – and farm woodland cover</li> <li>Archaeology – variety of historic sites indicate the former strategic importance of the coastal route and the turbulent history of the Marchlands, including Offa’s Dyke and Wat’s Dyke. Late Medieval parklands and ecclesiastical /funerary sites</li> <li>Urban settlements – a strongly settled character is apparent in the central and south parts of the area, with the relatively large, almost linked settlements of Holywell-Connah’s Quay-Mold-Wrexham-Ruabon.</li> <li>An industrial character – evident in the line of coalesced settlements at Connah’s Quay and Holywell, associated both with the Chester to Holyhead railway line, mining and large scale power generation and industrial plants. Include landmark scale structures such as Broughton aircraft factory, Shotton Steel works and Connah’s Quay power station. Industry tends to dwarf historic settlement and features (e.g. Flint and its castle)</li> <li>Small settlements – outside urban areas, compact villages associated with landed estates and isolated farmsteads, or coalesced ribbon developments and encroachment upon commons, which are the legacy of the former coal and lead mining industries</li> <li>Culturally many connections to Chester and Merseyside.</li> </ul>

**LANDMAP**

**Landscape Character Types within 50km radius Mona Array Area**

Visual and Sensory Aspects	<ul style="list-style-type: none"> <li>Amenity Land</li> <li>Barren/Rocky Upland</li> <li>Cliffs and Cliff Tops</li> <li>Derelict/Waste Ground</li> <li>Dispersed Settlement</li> <li>Dunes and Dune Slack</li> <li>Estuary</li> <li>Excavation</li> <li>Flat Lowland Mosaic</li> <li>Flat Open Lowland Farmland</li> <li>Hill and Lower Plateau Grazing</li> <li>Hill and Lower Plateau Mosaic</li> <li>Hillside and Scarp Slope Grazing</li> <li>Hillside and Scarp Slope Moorland</li> <li>Hillside and Scarp Slope Mosaic</li> <li>Informal Open Space</li> <li>Intertidal</li> </ul>
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Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Lake</li> <li>• Lowland Wetland</li> <li>• Mosaic Lowland Valleys</li> <li>• Mosaic Rolling Lowland</li> <li>• Mosaic Upland and Plateau</li> <li>• Open Hillside and Scarp Slopes</li> <li>• Open Lowland Valleys</li> <li>• Open Rolling Lowlands</li> <li>• Open Upland Valleys</li> <li>• Open/Wooded Mosaic Upland Valleys</li> <li>• Other Coastal Wild Land</li> <li>• River</li> <li>• Road Corridor</li> <li>• Upland Grazing</li> <li>• Upland Moorland</li> <li>• Urban</li> <li>• Village</li> <li>• Wooded Hill and Lower Plateau</li> <li>• Wooded Hillside and Scarp Slopes</li> <li>• Wooded Lowland Valleys</li> <li>• Wooded Rolling Lowland</li> <li>• Wooded Upland and Plateau</li> <li>• Wooded Upland Valleys</li> </ul>
Historic Aspects	<ul style="list-style-type: none"> <li>• Communications</li> <li>• Design</li> <li>• Extractive</li> <li>• Irregular Fieldsapes</li> <li>• Marginal Land</li> <li>• Military</li> <li>• Non-nucleated settlement</li> <li>• Nucleated Settlement</li> <li>• Other Settlement</li> <li>• Other Fieldscape</li> <li>• Processing/Manufacturing</li> <li>• Reclaimed Land</li> <li>• Recreational</li> <li>• Regular Fieldsapes</li> <li>• Water and Wetland</li> <li>• Woodland</li> </ul>
Cultural Aspects	<ul style="list-style-type: none"> <li>• Artistic</li> <li>• Customs</li> <li>• Industrial</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Infrastructure</li> <li>• Institutions</li> <li>• Oral</li> <li>• Other</li> <li>• People</li> <li>• Places</li> <li>• Rural</li> <li>• Urban</li> </ul>
Geological Aspects	<ul style="list-style-type: none"> <li>• Active Lowland River Floodplain System</li> <li>• Active Upland River or Stream Channel System</li> <li>• Ancient Lowland River Floodplain System</li> <li>• Ancient Upland River/Stream System</li> <li>• Artificial Water Bodies and Channels</li> <li>• Coastal Flat</li> <li>• Coastal Slope</li> <li>• Doline or Sink Field, Pavements, Dry Valleys etc.</li> <li>• Engineered Features and Reclaimed/Infilled Land</li> <li>• Estuary</li> <li>• Glacial Mountain Valley</li> <li>• Lowland Dipslope</li> <li>• Lowland Escarpment</li> <li>• Lowland Glacial Outwash Plain/Field</li> <li>• Lowland Plateau</li> <li>• Lowland River Gorge</li> <li>• Lowland Till Plain/Field</li> <li>• Lowland Valley Slope/Escarpment</li> <li>• Mountain Glacial Erosion/Terrain</li> <li>• Other</li> <li>• Rock Cliff and Shore</li> <li>• Sand Dune</li> <li>• Soft-sediment Cliff and Shore</li> <li>• Spits, Bars and Ridges</li> <li>• Tectonically Controlled Valley</li> <li>• Undulating Lowland Hill Terrain</li> <li>• Undulating Upland Terrain</li> <li>• Upland Escarpment</li> <li>• Upland Glacial Outwash Plain/Field</li> <li>• Upland Gorge</li> <li>• Upland Plateau</li> <li>• Upland Till Plain/Field</li> <li>• Upland Valley Slope</li> </ul>
Landscape Habitat Aspects	<ul style="list-style-type: none"> <li>• Acid Grassland</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Amenity Grassland</li> <li>• Artificial Exposures and Waster Tips</li> <li>• Bog/Bare Peat/Flush/Spring</li> <li>• Bracken</li> <li>• Broadleaved Woodland</li> <li>• Coniferous Woodland</li> <li>• Dwarf Shrub Heath</li> <li>• Fen/Swamp/Marginal/Inundation</li> <li>• Improved Grassland</li> <li>• Industrial</li> <li>• Intertidal Muds/Sands/Saltmarsh/Shingle/Gravel and Boulders and Rocks</li> <li>• Maritime Cliff and Slope</li> <li>• Marsh/Marshy Grassland</li> <li>• Mixed Woodland</li> <li>• Mosaic</li> <li>• Natural Inland Cliff</li> <li>• Neutral Grassland</li> <li>• Reservoirs/Lakes/Margins</li> <li>• Residential Green Space</li> <li>• River Corridors</li> <li>• Sand Dune</li> </ul>

**Landscape Character Areas within 10km of Mona Onshore Substation Option 2 and 7**

**Visual and Sensory Aspects**

<p>DNBGHVS012 Rhuddlan, Urban</p>	<ul style="list-style-type: none"> <li>• Historic town of Rhuddlan with vernacular buildings and historic castle. Intimate historic core has maintained much of its original character and is a good example of historic settlement in the coastal area where many towns have suffered at the hands of modern development and the requirements of the tourist industry</li> <li>• <b>Overall Evaluation</b> (Q50) High: Important crossing point of the River Clwyd relatively untouched by the tourist development that has struck the coastal towns of Rhyl and to a lesser extent Prestatyn. Maintains much of the original historic core and character making it relatively rare/unique in the SLVIA study area.</li> </ul>
<p>DNBGHVS013 Coastal Fields near Towyn, Flat Open Lowland Farmland</p>	<ul style="list-style-type: none"> <li>• Coastal fields with open, regular and angular field pattern often delineated by post and wire fences and gappy hedgelines. Largely featureless, with wide open skies and some sense of being near coast. Field pattern bisected by long lengths of straight track and road corridors, with the occasional scattered farmstead, the main settlement development borders the aspect area on the north (Kinmel Bay/Conwy CBC) and east (Rhuddlan) sides. General lack of vegetation cover other than arable crops and gappy hedgelines results in a subtle colouring with seasonal contrasts dictated by the crops cultivated (i.e. Oil Seed Rape and cereal crops)</li> <li>• <b>Overall Evaluation</b> (Q50) Moderate: No particular character evident but provides some continuity in its agricultural land use and transition zone between settlement and countryside. Also provides an important setting for the adjacent settlement and although not highly unique or apparently well managed has the potential to provide increased biodiversity and an improved the overall visual appearance with relatively little input.</li> </ul>
<p>DNBGHVS014 Area north and east of Bodelwyddan, Flat Open Lowland Farmland</p>	<ul style="list-style-type: none"> <li>• Degraded agricultural landscape at north end of Vale of Clwyd with neglected tree cover with most hedgerow trees lost although some estate woods provide partial tree cover. The area is bisected by the A55 dual carriageway and is dominated by the surrounding settlement edges and light industrial development at Bodelwyddan and St Asaph. Field patterns are open and predominantly turned over to intensive arable and livestock farming, though relatively well defined by hedgerow boundaries this is being degraded through lack of management and inappropriate maintenance. Settlements are scattered and comprise mainly of farms with sometimes large associated ranges of low rise modern agricultural buildings</li> <li>• <b>Overall Evaluation</b> (Q50) Moderate: Despite the ongoing neglect in land management the aspect has the potential to improve through relatively simple changes in management and enhancement and still functions as an important transition between settlement, industrial and rural areas.</li> </ul>
<p>DNBGHVS015 River Valley of the Clwyd/Elwy-north of St Asaph, Open Lowland Valleys</p>	<ul style="list-style-type: none"> <li>• Highly attractive meandering river valley with dominant riverside trees, some localised steep slopes but generally opens up into a wider valley and transition to the surrounding agricultural lands to the east and west. Valley slopes are partly wooded and field pattern well defined by tree lined hedgerows, general field pattern is small to medium in size reflecting the underlying topography. Settlement is very limited with the occasional isolated farmstead, overall field and vegetation patterns and topography dictates a relatively complex and attractive landscape</li> </ul>

Character Area/Type	Key Characteristics
<p>DNBGHVS016 Vale Wooded Estate south of Dyserth, Flat Lowland Mosaic</p>	<ul style="list-style-type: none"> <li>• <b>Overall Evaluation (Q50) High:</b> Relatively unspoilt and attractive river valley with good definition of field boundaries and distribution of native species woodland and hedgerows. Becomes very valuable given its proximity to the dense settlements of the north coastal plain.</li> <li>• Agriculturally improved pastoral and estate wooded landscape. Hedgerow trees give the area a strong wooded effect character and provide good visual containment for views into and out of the area. A small to medium intimate field pattern gives the area a very rural agrarian appearance with the emphasis increasing on livestock rather than arable farming to the south of the area. Settlements are isolated and limited in the main to scattered farmsteads and small hamlets/clusters of houses. Transport links through the area are largely relatively quiet rural roads with mature hedgerow and tree lined boundaries reinforcing the rural character, generally an attractive and settled area</li> <li>• <b>Overall Evaluation (Q50) High:</b> Highly attractive, well defined and vegetated pastoral agricultural landscape that remains relatively intact and unspoilt considering its proximity to the large settlement spread of the north study area. Field pattern is of a relatively intimate scale instilling a feeling of settled security and traditional rural landscape.</li> </ul>
<p>DNBGHVS024 Coed Cwm, Wooded Rolling Lowland</p>	<ul style="list-style-type: none"> <li>• A forested outcrop rising to 290m AOD, dominant vegetation is coniferous and mixed woodland/forestry plantation with little species diversity, however very good footpath and public access including part of the route of the Offa's Dyke long distance footpath. Good views are available at points through the dominant mixed woodland cover and from clearings along the north side to the surrounding countryside and coastal plain. The north most section displays an attractive array of steep wooded slopes mixed with farmland. There has been felling of part of the plantation leaving bare slopes in places</li> <li>• <b>Overall Evaluation (Q50) Moderate:</b> A combination of the good public access, vegetation cover and views from this hill rising out of the coastal plain, and apparently stable management of land use with the underlying topography ensuring that little development is likely to be undertaken to spoil the area gives the aspect area a High evaluation however this is moderated in some part by the lack of species diversity within the plantation areas and limited views to the surrounding area.</li> </ul>
<p>DNBGHVS028 Clwydian Slopes south of Rhaultt, Hillside and Scarp Slope Mosaic</p>	<ul style="list-style-type: none"> <li>• North part of Clwydian Hills which form a distinctive, partly wooded range of hills characterised by an intimate small-scale, well-defined field pattern bounded by mixed species hedgerows with hedgerow trees, stone walls and small woodland blocks. Areas of woodland tend to lie along small valleys and depressions leading from the side slopes, whilst the upper slopes and ridge line is more open with a larger field pattern of rough grazing. Settlement pattern is dispersed largely concentrating on isolated farmsteads and their associated buildings. Views are clear and long distance carrying far inland and to the west and east over the adjacent county of Flintshire</li> <li>• <b>Overall Evaluation (Q50) Outstanding:</b> Combination of highly attractive, distinctive and traditional upland farming landscape which is unusual within the SLVIA study area and arguably of at least National importance in terms of its landscape quality.</li> </ul>
<p>DNBGHVS030 St Asaph, Urban</p>	<ul style="list-style-type: none"> <li>• Historic market town with vernacular architecture, fine medieval cathedral and attractive small town appearance. The town has some modern expansion development on the south extents but largely retains its original character. The A55 runs on an elevated highway to the immediate north of the town which leads to some detractive element to this side of the settlement although this is at some distance and detached from the historic core</li> <li>• <b>Overall Evaluation (Q50) Moderate:</b> The historic core is very attractive and has a number of areas that still retains much of the original character - especially in the vicinity of the cathedral of valuable architectural and townscape value. The towns setting has been degraded to some extent by the proximity of the A55 which now blocks views and disrupts the towns setting from the north.</li> </ul>
<p>DNBGHVS031 Vale of Clwyd north of Denbigh, Flat Lowland Mosaic</p>	<ul style="list-style-type: none"> <li>• Vale of Clwyd landscape but here displays a more wooded and stronger estate wooded character on the gently undulating flat valley floor. Hedgerow trees give the area a strong wooded effect character and provide good visual containment for views into and out of the area. A small to medium intimate field pattern gives the area a very rural agrarian appearance with the emphasis increasing on livestock rather than arable farming to the south of the area. Settlements are limited to a few small village/market towns settlements. Transport links through the area are largely relatively quiet rural roads with mature hedgerow and tree lined boundaries reinforcing the rural character, generally an attractive and settled area</li> <li>• <b>Overall Evaluation (Q50) High:</b> Very attractive rural landscape character, giving appearance of a traditional agrarian landscape although would benefit from instigation of long term management to promote greater diversity and to ensure stability in the maturity of the vegetation cover.</li> </ul>
<p>DNBGHVS033 Cefn Estate, Mosaic Rolling Lowland (Mona Onshore Substation options are located in this Aspect Area)</p>	<ul style="list-style-type: none"> <li>• Wooded former estate landscape lying on the edge of St Asaph and the industrial areas surrounding Bodelwyddan. The area displays a fine array of woodland blocks and a well defined field pattern delineated by hedgerow with a high incidence of mature hedgerow trees. Settlements are limited to small hamlets/villages and scattered farmsteads although the more urban influence of St Asaph forms a definite boundary to the north and east, the area still has a relatively enclosed nature largely contained by intervening vegetation</li> <li>• <b>Overall Evaluation (Q50) Moderate:</b> The attractive landscape quality of the aspect area whilst high, does not enable the overall evaluation of the area to achieve more than Moderate due to the proximity of industrial development and frequency of this landscape type within the wider area.</li> </ul>
<p>DNBGHVS034 Bodelwyddan and Industrial Fringe, Urban</p>	<ul style="list-style-type: none"> <li>• Some fine stone buildings including church make this town centre distinctive although other areas have no sense of identity. The wider settlement area is dominated by modern cul-de-sac residential development and on the south fringes large areas of light industrial complexes. The north fringe is dominated by Ysbyty Glan Clwyd hospital. These peripheral developments have degraded the overall integrity of the historic core and lead to little sense of place or individuality</li> <li>• <b>Overall Evaluation (Q50) Moderate:</b> High quality historic core degraded by surrounding residential, industrial and hospital developments that bear little relationship either to the original settlement or the surrounding wider countryside.</li> </ul>

Character Area/Type	Key Characteristics
<p>DNBGHVS035 Wooded Parkland and Parkland Remnants, Mosaic Rolling Lowland</p>	<ul style="list-style-type: none"> <li>Wooded parkland open character with fine views of stone built castle at Bodelwyddan. A good example of a formal estate parkland landscape with public access and showing the mature specimen trees and woodland blocks or covers. The area suffers from visual detractors being bounded by the A55 corridor to the north and containing an extensive industrial area on the boundary with Bodelwyddan at Kinmel Industrial Estate</li> <li><b>Overall Evaluation (Q50) High:</b> Good public access and one of the few former parkland estates in the wider county area to maintain public access in conjunction with well maintained formal parkland landscape features.</li> </ul>
<p>DNBGHVS036 Kinmel Park Fringes, Wooded Rolling Lowland</p>	<ul style="list-style-type: none"> <li>Densely wooded parkland of the former and privately owned and inaccessible Kinmel Estate. Only the edge of the estate is visible with no views in due to the dense vegetation</li> <li><b>Overall Evaluation (Q50) Moderate:</b> Private access makes overall evaluation on the ground difficult to assess, however this also means that the landscape elements of the parkland have remained intact and will presumably continue to be well maintained.</li> </ul>
<p>DNBGHVS037 Limestone Valley Cefn, Wooded Lowland Valleys</p>	<ul style="list-style-type: none"> <li>Strongly wooded river valley with limestone outcrops exposed in places linking St Asaph in the north and Henllan to the south. The valley itself is strongly influenced by the well-defined mixed woodland structure that delineates the underlying topography – in places this becomes more evident as limestone outcropping occurs on the upper slopes. A more open and larger scale valley complex than the adjacent Upper Elwy complex displaying a consistent landscape pattern of field parcels bounded by sinuous interconnected mixed woodland blocks, development is scattered and consists in the main of farmsteads and small hamlets</li> <li><b>Overall Evaluation (Q50) High:</b> Character, Landscape quality and rarity all display characteristics that are relatively uncommon within the county wide area. Management appears to be appropriate but is difficult to fully assess hence the moderate evaluation however the overall evaluation.</li> </ul>
<p>CNWVS08 Elwy and Aled Valleys Moorland Hills, Hillside and Scarp Slopes Grazing</p>	<ul style="list-style-type: none"> <li>A series of dramatic, steeply rising rugged hills with rock exposure and prominent skylines enclosing the adjacent valleys of the Elwy and Aled rivers. They covered in an open mosaic of moorland, bracken, rough grassland and with improved grassland shoulders, with some small scale pasture fields and scattered deciduous trees and scrub on lower slopes. The steeper hills have open access land while Tre-pys-llygod to the west is all enclosed and improved. A prehistoric fort is in evidence at Mynydd y Gaer. Settlement is very limited to the bottom of the slopes and is small scale, rural and scattered</li> <li><b>Overall Evaluation (Q50) High:</b> Attractive and dramatic steep sloping hills with rugged character with rock outcrops providing a positive backcloth to the valleys and providing scenic views. The hills have a diverse but consistent, unified and unspoilt character. They form a backcloth to the adjacent valleys with a distinctive sense of place. These landforms are rare within the County &amp; Region in terms of their consistency along the valley sides.</li> </ul>
<p>CNWVS010 Mynydd Bodrochwyn, Hill and Lower Plateau Grazing</p>	<ul style="list-style-type: none"> <li>Upland undulating hills and ridges with undulating skyline which can be more complex in places with steep sides falling to adjacent valleys. The landcover is characterised by open large to medium scale improved grassland with pockets of rough land, wetland and woodland on the hill shoulders and valley sides. Field boundaries are usually fences with gorse and occasional small trees such as rowan, willow or thorn. The area feels exposed at the top decreasing with height. Access is generally limited to minor roads and footpaths accessing very sparsely scattered farmsteads making the area tranquil. Wide views are possible across adjacent valleys and to the surrounding uplands</li> <li><b>Overall Evaluation (Q50) Moderate:</b> Simple undulating topography with occasional hillocks on the skyline with irregular fields allow wide views to valleys and surrounding uplands. The area is in moderate/poor condition due to intensification but is of consistent character. The undulating hill tops, views and exposure give the area a sense of place. These high upland improved pastures are relatively rare in the county.</li> </ul>
<p>CNWVS011 Central Ridges and Valleys, Hill and Lower Plateau Grazing</p>	<ul style="list-style-type: none"> <li>A large area of central Conwy comprises of rolling ridges with steep valleys with a north to south grain running from Denbigh Moors to the south. The landcover is characterised by a mosaic of medium sized regular usually improved pastoral fields on the ridges and contrasting small irregular fields on the slopes enclosed by thick hedges and trees. Deciduous woodland lies on the steeper slopes of the valleys and as riparian vegetation and there are very isolated small blocks of conifers. There are also scattered areas of bracken, scrub &amp; wetland which give added texture to the landscape. Settlement is scattered rural farmsteads with occasional small settlements associated with the A roads and B roads which pass through the area. However, generally the area is tranquil and unspoilt. Long views are possible from the upper slopes to the lower land to the north and to the Moors to the south. Here the wind farm at Moel Maelogen is visible on the skyline</li> <li><b>Overall Evaluation (Q50) Moderate:</b> A pleasing, undulating landscape with changing views from enclosure in wooded valleys to more open hilltops. The area is in generally good condition, unspoilt and of consistent character. The area has a pleasing rhythm of ridge and valley and is typical of much of the core of Conwy.</li> </ul>
<p>CNWVS020 Kinmel Manor environs, Mosaic Rolling Lowland</p>	<ul style="list-style-type: none"> <li>Hills rising steeply from the coastal plain with an undulating skyline. The north slopes are dominated by a mix of large blocks of deciduous and coniferous woodland. The woodlands are interspersed with regular pastures with low cut, sometimes gappy hedges. To the east, the parkland and buildings of Kinmel Manor are well screened by woodland. The overall area has an estate character with lodges and various historic settlements (e.g. St George and features). On some of the quiet winding narrow lanes there are limestone walls. A quarry disturbs the tranquillity in its environs and is visible from the south, although the related plant at the foot of the hill is more obtrusive. Abergele Hospital is a surprising large feature in the landscape visible from the north. Though the area appears well managed there is evidence of fly tipping indicating the proximity of the area to the urbanised coastal strip. From higher ground there are views out to the Rhyl Flats and Gwynt y Môr wind farms</li> <li><b>Overall Evaluation (Q50) High:</b> The area has a pleasing character of undulating landform with woodland, pasture and historic stone buildings and long views over the coast to the north at points. It has a consistent, relatively unspoilt character, generally in good condition although the quarry is a detractor and there is evidence of flytipping. The estate character of parkland, large woodland/plantation blocks interspersed with pasture and historic settlement and features give the area a distinct sense of place. The area is area in the county in terms of it estate character.</li> </ul>

Character Area/Type	Key Characteristics
<p>CNWVS021 Cefn yr Ogof and Environs, Wooded Hillside and Scarp Slope</p>	<ul style="list-style-type: none"> <li>Limestone coastal hill forming a strong landform with steep slopes to the north, east and west. Dramatic rock outcrops are apparent to the west with cliffs and scree slopes and semi-natural grassland and scrub vegetation. Mixed woodland lies on the north upper slopes and with the landform acts as a strong backcloth to the coastal lowlands. The light grey limestone Gwrych Castle and associated tower folly and battlemented farm buildings are prominent features in and around the woodland giving the area a distinctive character. To the south, the gentler slopes are covered a mix of regular arable and pasture with low cut hedges and interspersed with woodland. Settlement is limited with some intrusion from 20c development including a caravan site to the west. The area forms a strong boundary to Abergele. There are views out to sea of the Rhyl Flats and Gwynt y Môr wind farms</li> <li><b>Overall Evaluation (Q50) High:</b> The mixed woodland on the steep north slopes is complemented by the light limestone castle and associated features creating a picturesque and striking composition. The area is generally in good condition with only the west edges eroded by some development. Strongly wooded hills with stone castle and other associated landmarks provide a distinct character when viewed from north with added distinctiveness of limestone rock outcrops to the east. The combination of elements is rare in the County.</li> </ul>
<p>CNWVS023 Dulas Lowlands, Mosaic Rolling Lowland</p>	<ul style="list-style-type: none"> <li>A gently sloping undulating basin sheltered behind the coastal hills and linked to the coast by the steep valley of the River Dulas. The valley sides are clothed in irregular small- medium sized fields with low cut hedges with trees. Woodland strips lie along watercourses, on steep slopes and in occasional small copses. Settlement is generally scattered rural farmsteads although there are some clustered settlements on higher ground to the south and a distinctive dispersed settlement to the north at Llysfaen, possibly associated with quarry landscape over the hill. Suburban developments and a caravan site are impinging on the rural character. The area is generally open with wide views and glimpses of the sea and associated offshore wind turbines although it becomes more enclosed in the Dulas valley to the north. Only one B road and small lanes cross the area, making it fairly tranquil</li> <li><b>Overall Evaluation (Q50) Moderate:</b> The area is quietly pleasing generally with the picturesque valley of the Dulas to the north and also glimpsed views of the sea. The rural landscape is generally in good condition although some coastal related development such as caravan parks and suburban detailing is spoiling the area's rural character in parts. The area has a moderate sense of place as a quiet rural area with its north slopes and north part of the Dulas valley becoming both more distinctive although also more affected by development spilling over from the coastal fringe. The landscape type is fairly common in Conwy.</li> </ul>
<p>CNWVS024 Wydden and Ganol Valleys, Flat Open Lowland Farmland</p>	<ul style="list-style-type: none"> <li>Gently sloping wide rural valley floors with minor watercourses enclosed by coastal hills between Llandudno and Colwyn Bay. Predominantly pastoral with some arable the irregular field pattern is small- medium in size with low cut hedges. There is deciduous woodland in blocks and small coppices. Settlement pattern is a mix of scattered rural dwellings and clustered villages. The area feels on the edge of an urban area in parts with busy roads such as the A55 passing through in places. The area provides a valuable role as a rural backcloth to, and green wedge between, the urban areas and as a setting to the rural settlements</li> <li><b>Overall Evaluation (Q50) Moderate:</b> The area is quietly pleasing with mature deciduous woodland and trees, particularly seen against the backcloth of coastal hills. In places views are disrupted by adjacent urban areas. It is in good condition spoilt only adjacent development in places. The area has visual unity with an unassuming but positive character. The relatively level sheltered character of the area is moderately rare in the county.</li> </ul>
<p>CNWVS035 Abergele, Urban</p>	<ul style="list-style-type: none"> <li>The settlement is one of a series of mid 20c expanded towns and a minor coastal resort on the north Wales coast with a small promenade at Pensarn. The settlement is not specifically orientated towards the beach and promenade, but this is popular and partly the reason for its expansion. There are a few leisure uses associated with the coast. The settlement has a core inland and expands to the south, east and west in housing estates and is most noticeable to the southwest on steeper slopes which otherwise form a positive backcloth. The town is visually associated with the prominent derelict Gwrych Castle to the southwest which has a gatehouse on the fringes of the town. Positive views are possible out to sea and to the wooded coastal hills which act as a backcloth to the town. Now Rhyl Flats wind farm is noticeable from the coast</li> <li><b>Overall Evaluation (Q50) Low:</b> The promenade allows positive views of the sea, with long views of the Great Orme but the built form of the settlement is lacking structure and elegance. The town itself has limited scenic quality. The settlement has some coherence and hierarchy, with a clear core. The core has the moderately strong character with some positive buildings. The rest of the town has a weak character apart from the castle/estate buildings on the southwest fringes. The settlement is relatively common in type on the coast. Overall the value is considered low-moderate.</li> </ul>
<p>CNWVS052 Llandudno to Kinmel Bay intertidal, Estuary</p>	<ul style="list-style-type: none"> <li>Intertidal Zone – a unique, dynamic and expansive natural intertidal area of the north Wales coast consisting of broad sweeping sandy beaches enclosed by headlands such as around Llandudno, Colwyn Bay and a linear beach Kinmel Bay plus a pebbly beach at Penrhyn Bay. There is coastal protection in the form of groynes and a masonry wall behind the two main settlement beaches, sea defences at Rhos and a rubble protected seawall elsewhere. The beaches have wide sea views to the north affected by offshore wind farms to the north and further east. The jetties relating to quarries are detractors</li> <li><b>Overall Evaluation (Q50) High:</b> The area is open with panoramic views to the sea and the backcloth of hills with aesthetically pleasing wild elements and patterns. The area is in moderate condition with consistent character throughout slightly spoilt by intrusive development. The area has a highly distinctive character as an exposed coast. An intertidal area is relatively rare in Conwy.</li> </ul>
<p>CNWVS061 Llandulas, Urban</p>	<ul style="list-style-type: none"> <li>The settlement is one of a series of mid 20c expanded settlements on the north Wales coast with a small seafront. The settlement is not specifically orientated towards the beach as it is separated by the A55 road and railway. There are a few leisure uses associated with the coast. The settlement expands to the south, east and west in housing estates and is most noticeable to the south on steeper slopes which otherwise form a positive backcloth. An upper row of housing is a particular detractor. Positive views are possible out to sea although these include offshore wind farms such as Rhyl Flats and Gwynt y Môr when weather conditions allow. Coastal hills enclose the area to the south</li> <li><b>Overall Evaluation (Q50) Low:</b> The seafront allows positive views of the coast although it is linear in form here but the built form of the settlement is lacking structure and elegance. The settlement is incoherent and detractive in parts. The settlement has a weak character with no recognisable core . However, the village hall, outside the settlement boundary must be among the finest in Wales. The settlement is relatively common in type on the coast.</li> </ul>

Character Area/Type	Key Characteristics
CNWVS070 Abergele Coastal Plan, Flat Open Lowland Farmland	<ul style="list-style-type: none"> <li>A wide strip of coastal levels narrowing to the west with a diverse mixture of fertile arable &amp; pastoral farmland drained by ditches. The field boundary/ditch pattern changes from irregular to rectilinear, west to east. The land rises gently to the break of slope of the coastal hills to the south. There is some poorly drained land and standing water in places. Hedgerows are overgrown and gappy in places and replaced by fences. There is some mixed plantation tree cover to the southeast around Kinmel Place but generally the area is open and exposed to coastal winds and views of development to the north. A golf course has been developed to the west. There are other tourism uses dominated by caravan sites and development along the A548. Tranquillity is reduced by the busy A55 which passes through the area and from which views across the area are possible</li> <li><b>Overall Evaluation</b> (Q50) Moderate: The linear pattern of watercourses and field boundaries is pleasing although there are detractors adjacent. The integrity of the area is reduced by hedgerows in poor condition in parts, golf courses and visually intrusive development including the A55. The area has a distinctive levels character and some visual unity. Coastal levels are rare in the County although occur in several places along the North Wales coast.</li> </ul>
<b>Historic Aspect Areas</b>	
DNBGHHL005 Bodelwyddan Park, Designed Parkland/Garden	<ul style="list-style-type: none"> <li>Well preserved 18th and 19th C landscape park with 19th century arts and crafts accretions, Arts and Crafts Garden by Thomas Mawson</li> <li><b>Overall Evaluation</b> (Q40) High: Noted in Register of Parks and Gardens, building also listed.</li> </ul>
DNBGHHL006 Rhuddlan, Planned Settlement – Medieval	<ul style="list-style-type: none"> <li>Historic Medieval core of the town of Rhuddlan, planned town of the 13th century as well as remains of earlier medieval features, and later growth of the settlement</li> <li><b>Overall Evaluation</b> (Q40) Outstanding:.</li> </ul>
DNBGHHL009 Morfa Cwybr, Large Fields	<ul style="list-style-type: none"> <li>Morfa Rhuddlan, recently enclosed and drained marshland.</li> <li><b>Overall Evaluation</b> (Q40) Moderate.</li> </ul>
DNBGHHL019 St Asaph core, Planned Settlement – Medieval	<ul style="list-style-type: none"> <li>Medieval core of historic St Asaph.</li> <li><b>Overall Evaluation</b> (Q40) Outstanding.</li> </ul>
DNBGHHL020 St Asaph, Clustered Settlement – C19th/20 <sup>th</sup>	<ul style="list-style-type: none"> <li>St Asaph, recent development and growth of the town from the medieval core</li> <li><b>Overall Evaluation</b> (Q40) Moderate.</li> </ul>
DNBGHHL021 Bont-newydd, Evolved/Mixed Fieldscape	<ul style="list-style-type: none"> <li>Area of limestone grassland and woodland which contains an important hillfort and internationally important cave sites with early human occupation</li> <li><b>Overall Evaluation</b> (Q40) Outstanding: Internationally important for the archaeology and historic character of the area.</li> </ul>
DNBGHHL038 Rhuallt, Irregular Fieldscape	<ul style="list-style-type: none"> <li>Predominantly irregular fields in area of valley bottom, north vale of Clwyd some later [sic] fields close to the river</li> <li><b>Overall Evaluation</b> (Q40) Moderate.</li> </ul>
DNBGHHL041 Pentre-mawr, Irregular Fieldscape	<ul style="list-style-type: none"> <li>Organic enclosures south and west of St Asaph, fieldscapes which have grown up over time, a predominantly rural environment</li> <li><b>Overall Evaluation</b> (Q40) Moderate.</li> </ul>
DNBGHHL043 Bodelwyddan, Regular Fieldscape	<ul style="list-style-type: none"> <li>Regular, i.e., probably recent enclosures north of Bodelwyddan, flat land, once part of Morfa Rhuddlan marshland, drained from the late 18th century onwards thus the dominant historic interest is recently</li> <li><b>Overall Evaluation</b> (Q40) Low:</li> </ul>
CNWHL005 Elwy Valley East, Regular Fieldscape	<ul style="list-style-type: none"> <li>The sinuous narrow flat floored valley of the River Elwy to the east of Llanfair Talhaiarn. It is characterized by a reasonably regular hedged fields and small patches of woodland. Its archaeology is dominated by the remains of post medieval agriculture with scattered remains of metal mining</li> <li><b>Overall Evaluation</b> (Q40) High. A relatively rare example of a narrow limestone valley with considerable potential for cave deposits and other early occupation, but not in wonderful condition.</li> </ul>
CNWHL032 Conwy east foreshore, Water and Wetland	<ul style="list-style-type: none"> <li>Foreshore area to the west of the Conwy estuary. Comprising sand and shingle beach backed by managed sea fronts and promenades at Rhos-on-Sea, Colwyn Bay and Old Colwyn. The beaches have yielded a number of prehistoric (and some Roman) finds which derive from the significant areas of now inundated prehistoric land surface known to lie offshore. Later medieval and post medieval activity is evidenced by a number of fish traps and fish weirs and the remains of the occasional 'modern' shipwreck</li> <li><b>Overall Evaluation</b> (Q40) Moderate: Foreshore with some potential but otherwise limited historic value.</li> </ul>
CNWHL049 Kinmel Park, Designed	<ul style="list-style-type: none"> <li>Area of landscaped parkland surrounding Kinmel Hall. The original house dated from the mid-16th century but was replaced (on an adjacent site) by a succession of later buildings – the present house dates from 1871. The park dates largely from the 19th century but incorporates earlier features and probably had its origins in the deer park surrounding the 16th century house. As well as many buildings and structures relating to the park the area also contains the site of a prehistoric chambered tomb and a medieval well</li> <li><b>Overall Evaluation</b> (Q40) Outstanding: An exceptional example of post medieval parkland.</li> </ul>



Character Area/Type	Key Characteristics
CNWHL051 Gwrych Castle, Designed	<ul style="list-style-type: none"> <li>An area of designed park and woodland surrounding Gwrych Castle. The house dates from between 1813 and the mid-1830s and the gardens and park were laid out from the 1820s. Although the house was occupied one way or another until 1986 both it and the parkland were in a poor state by the 1990s. Work has recently been undertaken (by a preservation Trust) to recover and restore some of the parkland features</li> <li><b>Overall Evaluation (Q40) Moderate:</b> A much degraded area of parkland, but with a number of (similarly degraded) associated buildings and structures.</li> </ul>
CNWHL052 Llandulas, Non-nucleated Settlement	<ul style="list-style-type: none"> <li>Although now exhibiting the modern coastal ribbon development and spread of caravan parks of its neighbours, Llandulas has its origins as a small, nucleated settlement focused on a medieval church at the mouth of the Afon Dulas. It is separated from its coastal caravans and seafront by the A55 and the Chester to Holyhead railway line</li> <li><b>Overall Evaluation (Q40) Low:</b> Originally medieval settlement but with most of its original focus removed.</li> </ul>
CNWHL053 Abergele and Pensarn, Non-nucleated Settlement	<ul style="list-style-type: none"> <li>Originating in the small, nucleated settlement of centred on an early (possibly 9th century) church site and a small medieval earthwork castle at the mouth of the Afon Gele, Abergele is now a typical coastal development with a spread of modern seaside buildings. Like their neighbours Abergele &amp; Pensarn are separated from their caravan parks and seafront by the A55 and the Chester to Holyhead railway line</li> <li><b>Overall Evaluation (Q40) Moderate:</b> Although much diluted by modern development Abergele still retains a number of its historic elements.</li> </ul>
CNWHL075 Morfa Rhuddlan, Regular Fieldscapes	<ul style="list-style-type: none"> <li>The west (undeveloped) end of an extensive area of reclaimed coastal marsh lying behind the settlements of Abergele, Towyn and Kinmel Bay. Characterized by regular square and rectangular fields defined by cut drains. Some scattered medieval and later settlement on the slightly higher ground to the south of the area – most notably Plas Kinmel of 1789 which replaced an earlier building on the same site. This south part of the area is also crossed by the modern A55 trunk road. (This) Morfa Rhuddlan is one of two possible sites of a battle between Welsh forces and a (victorious) Mercian army under King Offa; the other possible site being Rhuddlan in Denbighshire</li> <li><b>Overall Evaluation (Q40) High.</b> Although a small area of somewhat mixed fieldscape, the high status houses and the outstanding archaeological potential of this area increases its evaluation considerably.</li> </ul>
CNWHL077 Faerdre and Dinorben, Regular Fieldscapes	<ul style="list-style-type: none"> <li>A small area of regular hedged fields, and four small blocks of woodland, adjoining Kinmel Park on the east and bounded by the St Asaph to Abergele turnpike road on the north. The area contains the minor settlement of St George (ostensibly a post medieval village but formerly having medieval church) and significant late medieval houses at Dinorben Hall and Faedre. Perhaps the area is most famous however for its Iron Age hillfort (now totally destroyed by quarrying), which was archaeologically excavated from 1912 to 1922 and further between 1965 and 1969. The hillfort was occupied from the late Bronze Age through the Iron Age and again reused in the Roman and possibly in the early medieval periods. Recent archaeological excavation in advance of further quarry expansion has revealed an extensive area of prehistoric and later occupation outside the hillfort and which may well extend over a wider area</li> <li><b>Overall Evaluation (Q40) High.</b> Although a small area of somewhat mixed fieldscape, the high status houses and the outstanding archaeological potential of this area increases its evaluation considerably.</li> </ul>
CNWHL080 Rhyd-y-Foel, Irregular Fieldscapes	<ul style="list-style-type: none"> <li>A broad undulating shelf of upland, at about 100m OD, running east west between the high ground above the Elwy valley and the coastal plain. It is incised by small, occasionally wooded, stream valleys running northward into the Dulas and Gele rivers and is characterized by small irregular hedged fields, small woodlands and a settlement pattern of isolated farmsteads and houses of medieval and later date. The area is crossed by the line of the Roman road from St Asaph to Caerhun and its north edge is dominated by the Iron Age hillforts of Pen-y-Corrdyn and Castell Cawr. Mining remains of Roman, medieval and later dates also feature</li> <li><b>Overall Evaluation (Q40) High.</b> Although a large area of fairly uneventful mixed fieldscape, the area's diverse archaeological contents drive up its overall evaluation.</li> </ul>
CNWHL085 Towyn and Kinmel Bay, Other Settlement	<ul style="list-style-type: none"> <li>Lying partly on reclaimed marsh land between the mouth of Clwyd and Morfa Rhuddlan, the adjacent settlements of Kinmel Bay and Towyn (and the smaller Belgrano) are an almost entirely 20th century resort development, although Towyn does have a small 19th century nucleus focused on its church of 1872. The areas is dominated by modern housing and extensive caravan parks</li> <li><b>Overall Evaluation (Q40) Low:</b> Although its integrity as a modern resort development is undoubted, its historic landscape value is limited.</li> </ul>
<b>Cultural Aspects</b>	
DNBGHCLS030 CNWCLS102 DNBGHCLS034 DNBGHCLS036 CNWCLS018 CNWCLS028 CNWCLS036	<ul style="list-style-type: none"> <li>NRW is in the process of updating information on the new Cultural Aspect Area classification. The information available on the NRW web site has yet to include profile descriptions for these Aspect Areas. However, if profile descriptions for these Aspect Areas becomes available following submission of the PEIR, this will be presented and considered within the relevant sections of the Environmental Statement.</li> </ul>

Character Area/Type	Key Characteristics
CNWCLS029	
CNWCLS104	
CNWCLS076	
<b>Geological Aspects</b>	
DNBGHGL015 Tywch, Other	<ul style="list-style-type: none"> <li>• Low-lying, flat, alluvial plain on the west side of the River Clwyd. Reclaimed, farmed land</li> <li>• <b>Overall Evaluation</b> (Q33) Moderate: Ancient alluvial fan.</li> </ul>
DNBGHGL016 Bodelwyddan, Undulating Lowland Hill Terrain	<ul style="list-style-type: none"> <li>• Gentle, north-facing slope of Westphalian Coal Measures with undulating topography, blanketed with Quaternary till. The slope is down from the limestone ridge in the south to the coastal plain and the alluvial Clwyd estuary</li> <li>• <b>Overall Evaluation</b> (Q33) Moderate: Classic glacial terrain transition from limestone upland to estuarine/floodplain. Extensive drift cover.</li> </ul>
DNBGHGL017 The Roe, Ancient Lowland River Floodplain System	<ul style="list-style-type: none"> <li>• Gentle, north-facing slope of Westphalian Coal Measures with undulating topography, blanketed with Quaternary till. The slope is down from the limestone ridge in the south to the coastal plain and the alluvial Clwyd estuary</li> <li>• <b>Overall Evaluation</b> (Q33) Moderate: River terraces, active fluvial processes.</li> </ul>
DNBGHGL019 Waen Gloeugoed, Other	<ul style="list-style-type: none"> <li>• Extensive till covering the undulating and gently westward-sloping sides of the east side of the half-graben and glacially widened U-shaped Vale of Clwyd. A glacial terminal moraine is cut by the River Clwyd and streams</li> <li>• <b>Overall Evaluation</b> (Q33) High: Periglacial features including a possible terminal moraine and alluvial fans.</li> </ul>
DNBGHGL020 Dyserth-Cwm, Other	<ul style="list-style-type: none"> <li>• Till-covered slope on the east side of the Vale of Clwyd, cut by streams</li> <li>• <b>Overall Evaluation</b> (Q33) Moderate: Glacial features of the flanks of the Vale of Clwyd.</li> </ul>
DNBGHGL030 St Asaph, Other	<ul style="list-style-type: none"> <li>• Line of SSW-NNE trending, undulating, lowland hills between the Clwyd &amp; Elwy rivers, cut by several streams. The east side has steeper slopes than the west side</li> <li>• <b>Overall Evaluation</b> (Q33) Moderate: Hills between the Clwyd &amp; Elwy rivers draped with till.</li> </ul>
DNBGHGL031 Cefn Meiriadog, Other	<ul style="list-style-type: none"> <li>• Northwest-southeast trending limestone ridge with limestone exposed at several localities. There are several caves in the limestone and a wooded limestone pavement at the south end</li> <li>• <b>Overall Evaluation</b> (Q33) High: 1 RIGS for limestone pavement.</li> </ul>
CNWGL046 Cefn yr Ogof, Lowland Escarpment	<ul style="list-style-type: none"> <li>• ESE-WNW ridge in NE dipping Carboniferous Limestone between the steep sided Dulas valley and N-S river valley to Abergele. High ground of Cefn yr Ogof and other hills, quite extensive woodland. Boulder clay deposits on slopes and in fault controlled (NE-SW, NW-SE) gullies. Lower Dinantian Ffernant Formation conglomerates, sandstones, mudstones form the lower part of the south slopes</li> <li>• <b>Overall Evaluation</b> (Q33) High: Carboniferous Limestone ridge; Cefn yr Ogof RIGS (Stratigraphy/Quaternary and Geomorphology).</li> </ul>
CNWGL047 Tower Hill, Lowland Escarpment	<ul style="list-style-type: none"> <li>• ESE-WNW ridge in NNE dipping Carboniferous Limestone between the N-S river valley through Abergele and St George. High ground of Tower Hill and other hills, quite extensive woodland. Old and active Limestone quarries. Boulder clay deposits on slopes and in fault controlled (N-S) gully. Lower Dinantian Ffernant Formation conglomerates, sandstones, mudstones form the lower south slopes</li> <li>• <b>Overall Evaluation</b> (Q33) High: Carboniferous Limestone ridge, old quarries.</li> </ul>
CNWGL048 Abergele, Lowland Dipslope	<ul style="list-style-type: none"> <li>• Boulder clay covered dip slope in NE-NNE dipping Carboniferous Limestone from the N-S lower Dulas river valley through Abergele to Kimmel Park. Urban development of Abergele across Nant y Bryniau river valley. Lower topography through Limestone E of St George</li> <li>• <b>Overall Evaluation</b> (Q33) Moderate: N-facing dip slope in Carboniferous Limestone draped by boulder clay.</li> </ul>
CNWGL050 Betws yn Rhos, Undulating Lowland Hill Terrain	<ul style="list-style-type: none"> <li>• Undulating dissected hilly plateau in N dipping Silurian mudstone-dominated succession thickly draped with boulder clay in N-S valleys and on N-facing dip slopes. Drumlins (N-S) across slopes</li> <li>• <b>Overall Evaluation</b> (Q33) High: Dissected Silurian (Elwy Formation) mudstone-dominated slopes covered with boulder clay with drumlins.</li> </ul>
CNWGL051 Towyn, Other	<ul style="list-style-type: none"> <li>• Extensive low area of tidal flat deposits at the west mouth of Afon Clwyd, crossed by Afon Gele, with settlements of Pensarn and Towyn. Stretches of blown sand forming undulating ground or low dunes along the coast east of Pensarn</li> <li>• <b>Overall Evaluation</b> (Q33) Moderate: Extensive tidal flat area at mouth of Afon Clwyd.</li> </ul>
CNWGL052 Penmaen Rhos to Kimmel Bay Coast, Other	<ul style="list-style-type: none"> <li>• Fringing sand beaches from Penmaen Rhos to Kimmel Bay at mouth of Afon Clwyd</li> </ul>

Character Area/Type	Key Characteristics
CNWGL054 Moelfra Uchaf, Undulating Upland Terrain	<ul style="list-style-type: none"> <li>• <b>Overall Evaluation</b> (Q33) Moderate: Sand beaches fringing coast.</li> <li>• E-W upland ridge terrain of rounded hills and south facing slopes in E-W striking Silurian mudstones and sandstones (Elwy Formation) between the Elwy and Dulas river valleys. Dissected deeply by N and S-draining tributary river and glacial U-shaped valleys (e.g. Coed Mawr) following NW-SE to N-S fault lines. Limited drift cover, with boulder clay limited to lower valley slopes and floors. Areas of head on valley slopes</li> <li>• <b>Overall Evaluation</b> (Q33) Moderate: Dissected E-W upland terrain with limited drift cover in Silurian (Elwy Formation) mudstone-dominated succession.</li> </ul>
<b>Landscape Habitat Aspects</b>	
DNBGHLH011 Clwyd Estuary and Floodplain Grassland, Improved Grassland	<ul style="list-style-type: none"> <li>• Key biodiversity features include mudflats and saltmarsh of the tidal River Clwyd and coastal floodplain grassland which here consists predominantly of improved grassland with some arable. These fields are crossed by a network of ditches, with this area being a key stronghold for water voles. Other key habitats include the saline lagoon of Marine Lake and standing water of Brickfields Pond, the result of a flooded disused claypit. The extensive floodplain fields (with sparse hedges and trees), water bodies and banks of the tidal River Clwyd provide important roosting and feeding grounds for wintering and migrating waders and wildfowl, some species of which occur in significant numbers, justifying designation of over half this area as a Wildlife Site</li> <li>• <b>Overall Evaluation</b> (Q45) High: This is a significant area of coastal floodplain grassland alongside a tidal river and other water features, with important species of waders and wildfowl.</li> </ul>
DNBGHLH012 Rhuddlan Urban Area, Residential/Green Space	<ul style="list-style-type: none"> <li>• Predominantly built-up area of Rhuddlan, including caravan site, with some amenity grassland</li> <li>• <b>Overall Evaluation</b> (Q45) Low: Predominantly urban development.</li> </ul>
DNBGHLH017 Vale of Clwyd north, Improved Grassland	<ul style="list-style-type: none"> <li>• Largely improved grassland landscape with some arable, and a good network of hedges containing numerous mature hedgerow trees mainly of Oak, pond clusters supporting great crested newt, and scattered pockets of broadleaved and conifer woodland. A major river and network of tributaries are a feature of the area</li> <li>• <b>Overall Evaluation</b> (Q45) Moderate: This is a significant area of improved grassland but contains important watercourse, pond and woodland features, and numerous hedgerow oak trees.</li> </ul>
DNBGHLH018 Clwyd Floodplain Grassland Mosaic	<ul style="list-style-type: none"> <li>• Mainly improved grassland but important biodiversity features including main river and associated floodplain and suitable habitat for wintering birds, justifying designation as a Wildlife Site</li> <li>• <b>Overall Evaluation</b> (Q45) High: This is a significant area of floodplain grassland, supporting species of waders and wildfowl.</li> </ul>
DNBGHLH019 Bodelwyddan Fields, Mosaic	<ul style="list-style-type: none"> <li>• Largely improved grassland with significant arable, with poor hedges, few trees, occasional streams and ditches, and scattered pockets of mixed woodland</li> <li>• <b>Overall Evaluation</b> (Q45) Low: This This is a significant area of improved grassland and arable with overall low biodiversity interest.</li> </ul>
DNBGHLH020 Bodelwyddan Urban Area, Residential/Green Space	<ul style="list-style-type: none"> <li>• Predominantly built-up area of Bodelwyddan with mostly mix of amenity and neutral grassland and pockets of scrub</li> <li>• <b>Overall Evaluation</b> (Q45) Low: Predominantly urban development.</li> </ul>
DNBGHLH021 Bodelwyddan Lowland Parkland, Mosaic	<ul style="list-style-type: none"> <li>• A lowland parkland landscape of improved grassland, amenity grassland and some arable with a mix of veteran trees, semi-natural broadleaved and planted mixed woodland and ponds</li> <li>• <b>Overall Evaluation</b> (Q45) Moderate: Although predominantly a lowland parkland with characteristic features such as veteran trees and woodland, including a semi-natural broadleaved woodland Wildlife Site, it is dominated by improved or amenity grassland.</li> </ul>
DNBGHLH022 St Asaph Business Park, Industrial	<ul style="list-style-type: none"> <li>• Ponds and adjoining habitats within Business Park are important breeding ponds and foraging grounds for great crested newt meta-populations</li> <li>• <b>Overall Evaluation</b> (Q45) Moderate: Predominantly industrial development although part of key breeding area for meta-populations of great crested newt.</li> </ul>
DNBGHLH023 Cefn Improved Grassland	<ul style="list-style-type: none"> <li>• An intensively farmed improved grassland landscape with some arable, and a good network of hedges containing many mature trees, many small blocks of semi-natural broadleaved and planted mixed woodland, and some parkland</li> <li>• <b>Overall Evaluation</b> (Q45) Moderate: Although predominantly improved grassland, there is a good network of hedges with many mature trees, some parkland and plentiful cover of broadleaved woodland, including semi-natural woodland with a high biodiversity value.</li> </ul>
DNBGHLH027 Elwy Hills Improved Grassland	<ul style="list-style-type: none"> <li>• Dominated by improved grassland with arable, with variable network of hedges and pockets of semi-natural broadleaved woodland</li> <li>• <b>Overall Evaluation</b> (Q45) Moderate: Although largely improved grassland, there is a variable network of hedges and scattered trees, together with pockets of broadleaved woodland.</li> </ul>
CNWLH001 Kinmel Bay Dunes and Foreshore, Intertidal including Muds/Sands, Saltmarsh, Shingle/Gravel and Boulders/Rocks	<ul style="list-style-type: none"> <li>• This aspect area is made up of the large expanse of sand and foreshore along the North Wales coast, it contains an intact sand dune system at Kinmel Bay which is a local wildlife site and vegetated shingle communities at Traeth Pensarn SSSI which supports a range of rare plants. The foreshore as a whole is an important bird area for a range of shore feeding species</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• <b>Overall Evaluation</b> (Q45) High: Despite many of the sand dunes in the area being damaged by recreation or development this part of the coast still supports a good dune system at Kinmel Bay and an important shingle community at Traeth Pensarn. It is also an important bird area for coastal species, giving a high overall evaluation.</li> </ul>
<p>CNWLH003 Abergele Urban Area, Residential/Green Space</p>	<ul style="list-style-type: none"> <li>• This town has some open green space, including some woodland and trees and some grassland which has a coastal influence. However, the majority of the area is intensive urban housing</li> <li>• <b>Overall Evaluation</b> (Q45) Low: The area has some urban green space and trees, as well as some grassland with a coastal influence. Species records are confined to hedgehogs, however, the gardens backing onto the woodland of CNWLH039 Gwrych castle wood and mosaic are likely to support a range of common species, in generally though the density of this urban development gives a low evaluation.</li> </ul>
<p>CNWLH004 Abergele Grassland Mosaic</p>	<ul style="list-style-type: none"> <li>• A small area of coastal grassland, separated from the sea by the A55 dual carriageway. Some relict dunes seaward of the A55. Around half the area is golf course, adjoining Abergele urban area</li> <li>• <b>Overall Evaluation</b> (Q45) Low: An area of little immediate interest, although it does about and provide a buffer to other more interesting areas. The coastal strip adjoins the Traeth Pensarn shingle beach SSSI. The golf course adjoins the Gwrych Woods SSSI. It borders on the low to moderate value.</li> </ul>
<p>CNWLH032 Abergele Grasslands, Improved Grassland</p>	<ul style="list-style-type: none"> <li>• An area of low-lying productive grassland inland from Towyn and Kinmel Bay. It comprises formerly reclaimed coastal marshland, with rectangular fields, bounded by drainage ditches, and protected from the sea by a seawall, which was infamously breached in the damaging 1990 floods. There is one small area of woodland</li> <li>• <b>Overall Evaluation</b> (Q45) Moderate: A much changed, well drained and well managed agricultural area of productive grassland, where the main habitat interest is in the drainage ditches and channels. Water voles (a BAP species) have been seen in the area.</li> </ul>
<p>CNWLH033 Bodelwyddan Fields, Mosaic</p>	<ul style="list-style-type: none"> <li>• An area of productive agriculture west of Bodelwyddan village, largely in arable use, with large fields bounded by well managed and low hedges. There are four small areas of woodland, presumably planted as game cover on Kinmel Park or Bodelwyddan estates</li> <li>• <b>Overall Evaluation</b> (Q45) Low: Productive and well-managed agricultural land, with little sign of any conservation headlands on the arable land. The habitat interest is limited to the small woodland patches, and the well maintained and trimmed hedges.</li> </ul>
<p>CNWLH034 Kinmel Park Woods, Mosaic</p>	<ul style="list-style-type: none"> <li>• Three blocks of coniferous and mixed woodland planting, to the north and west of Kinmel Park. The planting appears to encompass some older broadleaved woodland</li> <li>• <b>Overall Evaluation</b> (Q45) Low: Very dense and regular planted woodland, of little habitat interest, apart from some older broadleaved woodland and trees that are contained within the planted areas.</li> </ul>
<p>CNWLH035 Kinmel Parkland, Improved Grassland</p>	<ul style="list-style-type: none"> <li>• A large 17<sup>th</sup> century deer park and some associated enclosed fields surrounding Kinmel Hall. The parkland contains many parkland trees and small copses, as well as a small lake</li> <li>• <b>Overall Evaluation</b> (Q45) High: A nationally important parkland landscape with fine veteran trees.</li> </ul>
<p>CNWLH036 Moelfra Grasslands, Improved Grasslands</p>	<ul style="list-style-type: none"> <li>• A large area of largely improved grassland south of Abergele, with some arable cropping, in a gently undulating landscape, with fields of mixed size, surrounded by mature hedgerows with hedgerow trees and small areas of woodland. A number of small tree-lined streams cross the area</li> <li>• <b>Overall Evaluation</b> (Q45) Moderate: Although largely improved and well managed grassland and arable cropping, the patchwork nature of the small irregular fields, hedges, copses and tree-lined streams does provide some habitat interest giving a moderate to low value.</li> </ul>
<p>CNWLH038 Abergele Woodland, Mosaic</p>	<ul style="list-style-type: none"> <li>• An area of mixed woodland, mostly plantation with some original broadleaved, in the valleys of the Nant Creigian and Nant Bryniau streams south of Abergele. The woodland is generally on steeply sloping land and north-facing</li> <li>• <b>Overall Evaluation</b> (Q45) Moderate: The plantation woodland is of limited habitat interest in itself, but its situation along the two narrow valleys, encompassing the streams and older broadleaves fringing the streams, does create a more valuable habitat setting for the woodland. Lesser horseshoe bat has been seen in the area.</li> </ul>
<p>CNWLH039 Gwrych Castle Wood and Mosaic</p>	<ul style="list-style-type: none"> <li>• An important area of broadleaved woodland and calcareous grassland, on a series of rocky limestone outcrops west of Abergele. Woodland predominates to the east and north, grassland and limestone pavement to the south, and a large part of the area is SSSI</li> <li>• <b>Overall Evaluation</b> (Q45) Outstanding: A nationally important area for calcareous grassland, of special interest for vascular plants, bryophytes, butterflies, moths and lesser horseshoe bat. The woodland is largely planted beech and scots pine, but over a former ancient woodland site, still retaining much of its original ground flora.</li> </ul>
<p>CNWLH062 Mynydd Bodrochwyn Grasslands, Improved Grasslands</p>	<ul style="list-style-type: none"> <li>• A small area of thin soils and rocky outcrops over limestone and mudstone north of the River Elwy valley, supporting grassland of variable agricultural quality. The grassland is improved, but remains of poor quality on the many rocky outcrops, with remnants of original semi-natural grassland, and bracken on the steeper slopes. Fields are large, with an open feel to the landscape, especially on the higher points of Moelfre Isaf and Mynydd Bodrochwyn. There is little woodland or water within the area</li> <li>• <b>Overall Evaluation</b> (Q45) Low: As a very improved grassland area, much of the original habitat diversity will have been destroyed, although diversity may remain in and around the many rocky outcrops.</li> </ul>

Character Area/Type	Key Characteristics
CNWLH064 Afon Aled Valley Mosaic, Improved Grassland	<ul style="list-style-type: none"> <li>A large area of valley grasslands, interspersed with some woodlands, in the valleys of the Afon Elwy and Afon Aled as they flow through the largely Silurian hard rock uplands of middle Conwy. Soils are deep and productive when compared to the surrounding uplands, with high quality grasslands in the valley floors, and mixed broadleaved and conifer woodlands along the steeper valley sides. Field sizes are variable, bounded by both hedgerows and stone walls, with some hedgerow trees and fringing trees along most rivers and streams</li> <li><b>Overall Evaluation (Q45) Outstanding:</b> The broadleaved woodland, with intervening grassland fields forms a highly important linear habitat and corridor for movement along the Elwy valley, with internationally important assemblages of woodland plant and bryophyte species.</li> </ul>

**Seascape Character: Wales**

**National Insure Region Marine Character Areas (Welsh National Marine Plan, Welsh Government, 2019)**

MCA1: Dee Estuary (Wales)	<ul style="list-style-type: none"> <li>The Dee Estuary forms a natural border between Wales and England, backed by the rising foothills of the Clwydian Range AONB</li> <li>Estuary internationally and nationally designated for biodiversity, the expansive intertidal sand, mudflats and saltmarsh supports thousands of wetland birds including shelducks, teals, godwits, waders and tern</li> <li>Constantly shifting sandbanks with changing depths; hazards marked by numerous buoys, lights and fog horns, including the former Point of Ayre lighthouse. Main entry channel to the Dee maintained by dredging</li> <li>Flat, open topography and low water stand means the area can be quickly inundated during high tide. A small bore can develop on a particularly high spring tide</li> <li>Long-standing importance for trade, defence and occupation, including the nationally important remains of Flint Castle and Basignwerk Abbey – the latter exploiting the rich natural resources of the coast and surrounding farmland</li> <li>The Dee provided the maritime approaches to the Roman port of Chester. Signs of past industry are visible along the length, including abandoned industrial waste heaps</li> <li>The remains of historic ships foundering on the sand banks include an emigrant vessel en-route from Liverpool to America in 1801 with 300 passengers (all rescued)</li> <li>Nationally important industries continue to dominate, including processing plants for Irish Sea gas and servicing plants for the nearby offshore wind farms from the Port of Mostyn</li> <li>Waters commercially and recreationally fished, including shrimp trawling and the traditional hand gathering of cockles and mussels</li> <li>MCA valued as an important recreational space providing access to the coast for nearby urban populations, including via the Wales Coast Path. RSPB reserves provide opportunities for bird watching</li> <li>The sand dunes at the bar of the estuary contain inland views and urban/industrial influence, creating a contrasting maritime character with expansive views along the coast and out to the Irish Sea (with its offshore wind farms)</li> <li>The sounds and sights of thousands of birds and the expansive intertidal habitats with ever-changing tidal character provide a contrast to nearby human activities and noise.</li> </ul>
MCA 2: Colwyn Bay & Rhyl Flats	<ul style="list-style-type: none"> <li>Low-lying coastline backed by coastal levels associated with the broad mouth of the Vale of Clwyd to the east half of the area</li> <li>High, exposed, rocky limestone hills and open headlands with intermediate developed bays to the west half of the area. Little Orme and Great Orme headlands form dramatic rugged landmarks</li> <li>Long sandy beaches and shingle storm beaches. All the soft coastline is protected by various coastal defences including groynes, rock armour, beach recharging, walls and traditional promenades</li> <li>Shallow waters (&lt;20m) with gently shelving beaches and extensive network of offshore sandbank and flats</li> <li>Significant peat exposures off Rhyl and at Rhos on Sea attesting to inundated land surfaces dating to the end of the last Ice Age</li> <li>Extensive marine sediments of sand and gravel extending from the neighbouring Dee Estuary MCA and forming long, linear sandbanks running roughly parallel to the shore</li> <li>Constantly shifting sandbanks with changing depths; hazards marked by numerous buoys, lights and fog horns</li> <li>South Hoyle Channel and Inner Passage provided the approaches to Roman port of Chester. The present-day navigation channels are maintained regularly by dredging.</li> <li>Most of the area is included in the Liverpool Bay SPA, designated for its international importance to overwintering populations of red-throated diver and common scoter</li> <li>The flats, sand banks, bays and rocky shores are important for biodiversity extensively designated including SPA, SAC and SSSI</li> <li>Wave exposure generally low closer to shore, increasing in more open waters where the sheltering effect of Great Orme's Head (in MCA 03) diminishes</li> <li>Developed coastline with many seaside resort towns, notably Llandudno (and pier), Colwyn Bay (and pier), Rhyl and Prestatyn, the latter having many caravan and chalet parks on their fringe. The coast serves as a traditional holiday destination</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Recreational activity includes water sports such as jet skiing and speed boating. Tourist pleasure trips run from the pier at Llandudno, usually heading westwards around Great Orme's Head</li> <li>• Wales Coast Path and a popular cycleway run the length of the coastline. Collectively, the A55, A548 and main Holyhead to Chester railway line follow close to the coastline</li> <li>• Concentrations of documented shipwrecks in the approaches to Rhyl and Foryd harbours, also in locations where they were blown ashore from traditional anchorages.</li> <li>• Both Colwyn Bay and Rhyl are popular shore and boat angling areas. Rhyl includes the main harbour along this stretch of coast</li> <li>• Historic military use of the seascape at Rhyl providing the last coastal fix for aircraft operating out of Hawarden and Sealand</li> <li>• Rhyl Flats Offshore Wind Farm forms a dominating offshore feature. The moving turbines are supplemented by further turbines beyond (in MCA 29)</li> <li>• Limestone hills form a backdrop, in the east linking to the adjacent slopes of the Clwydian Range AONB. From further out to sea, views reach beyond to the mountains of Eryri National Park (Snowdonia National Park).</li> </ul>
MCA 3: Red Wharf & Colwyn Bays	<ul style="list-style-type: none"> <li>• Comprises Conwy, Red Wharf and Dulas Bays, characterised by broad sand flats and low-lying sandy beaches, punctuated by rugged cliffs and prominent limestone headlands</li> <li>• Offshore waters deepening to a maximum of 30m. There is an extensive intertidal area around the mouth of the Conwy Estuary, extending westwards and including Lavan Sands</li> <li>• North-easterly aspect of the bays in the west is unusual for Wales, with Great Orme's Head prominent in many land-to-sea views</li> <li>• Varied coastal geology of cliffs and rocky or sandy beaches giving rise to diverse nationally and internationally important habitats within a relatively small area, including valued maritime grasslands and limestone heath</li> <li>• Limestone cliffs of the Great Orme host a variety of birds including guillemot, razorbill, kittiwake, fulmar and peregrine. Grey Seals haul out on the rocky beaches</li> <li>• A mosaic of seabed types found in the north of the MCA with algae and fauna covered bedrock and boulders amongst sand and mixed sediments</li> <li>• Significant area within the Liverpool Bay SPA, designated for overwintering populations of red-throated diver and common scoter. Lavan Sands (SPA/SSSI) is also designated for its wintering birdlife, especially the oystercatcher</li> <li>• Partly within the Menai Strait and Conway Bay SAC, recognised for its unusual and varied coastal and intertidal habitats and the associated reef communities</li> <li>• Migratory salmon and trout pass through these waters on their way to and from the river Conwy</li> <li>• The bays are sheltered by Anglesey with Great Orme headland being the only area exposed to the full force of the sea, especially in northerly wind conditions</li> <li>• Rich evidence for a long history of human occupation, with large sections of the adjacent coast designated as Landscapes of Outstanding Historic Interest</li> <li>• The 12th Century Conwy and Beaumaris Castles (World Heritage Sites) overlook the MCA</li> <li>• Nationally important Bronze Age copper workings on Great Orme are thought to be the earliest metal workings in the UK</li> <li>• A number of shipwrecks, including the tragic loss of the Royal Charter in 1859 and the planned sinking of the Ghambira. The wreck of the Flying Foam is visible in the intertidal area on the east side of the Conwy Bay</li> <li>• The North Menai Strait mussel fishery is located within this MCA and is the UK's biggest, producing 7-10,000 tonnes of mussels per year (up to 75% of the UK's production). Red Wharf Bay is used for bait digging</li> <li>• Popular tourist destination, evidenced by several coastal settlements. Activities include swimming, angling and diving, jet-skiing and pleasure trips. There are a number of recreational dive sites along the coast</li> <li>• The Wales Coast Path follows much of the coastline in this MCA. Most of the adjacent Anglesey coastline is AONB-designated, reflecting its nationally important scenic qualities. Eryri National Park (Snowdonia National Park) rises up dramatically to the south</li> <li>• Puffin island a key feature of the seascape setting in views north, with Great Orme being a distinctive feature to the east; forming gateway features into Conwy Bay</li> <li>• Two distinctive bridges, built by Telford and Stephenson cross the river at Conwy and mirror those found in the Menai Strait.</li> </ul>
MCA 4: North Wales Open Waters	<ul style="list-style-type: none"> <li>• An offshore MCA where depth increases gradually from approximately 15m below chart datum near Conwy Bay to over 60m in the northwest</li> <li>• A thin layer of mostly coarse quaternary sediments overlying Carboniferous and Triassic sedimentary bedrock. Finer sand is found in the southeast of the MCA</li> <li>• Includes a significant proportion within the Liverpool Bay SPA and Menai Strait and Conwy Bay SAC</li> <li>• A rich variety of life on the seabed and high levels of phytoplankton in the water provides important feeding grounds for sea birds, particularly in the southeast. Marine mammals including bottlenose dolphin and grey seal can be sighted</li> <li>• Moderately strong east-west tidal currents. The strongest currents are found in the southwest</li> <li>• A number of wrecks can be found in the MCA, including collisions owing to busy approaches to the Mersey, wartime losses, and losses from mine-laying activity</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Dominant maritime character is one of transit: recreational vessels entering or leaving the Menai Strait/Conwy Bay, or commercial vessels passing east and west to and from the Mersey and Dee</li> <li>• Includes the former Mersey Docks and Harbour Board's spoil dumping ground in the northeast corner</li> <li>• Large fishing boats target demersal fish and scallops offshore with smaller potting boats seen closer to the coast</li> <li>• Gwynt y Môr offshore wind farm dominates the east of the MCA, and to the north – access is restricted around the Douglas Oil Field (marked by a series of lit buoys and shipping lanes depicted on marine charts)</li> <li>• Commercial shipping seen offshore, including large vessels waiting for Liverpool Pilots to guide them safely into port</li> <li>• Recreational boats are a feature particularly in the southeast of the MCA during the warmer months</li> <li>• Several wrecks are visited by recreational divers and diving clubs, including the HMS Derbent, Cartagena, Kincorth, Delfina, Cork and Vigsnes. The wreck of the Resurgam is a designated wreck</li> <li>• The landward view changes considerably throughout the MCA, with rocky headlands, islets and large bays found to the west and the large shallow opening of Conwy Bay to the east, with a backdrop of the mountains of Snowdonia.</li> </ul>
<p>MCA 5: North-West Anglesey Open Waters</p>	<ul style="list-style-type: none"> <li>• The seabed drops steeply away from the north coast of Anglesey, with water depth greater than 30m bathymetry, increasing to more than 80m in the northwest</li> <li>• Preserved glacial bedforms found offshore. Fine sediment particles are suspended in the water resulting in a substrate of mostly exposed Precambrian rock and boulders with shallow patches of coarse gravel, pebbles and cobbles</li> <li>• Robust fauna colonising the harsh seabed environment supporting a mixture of demersal fish species. Marine mammals are frequently sited</li> <li>• Sand scour limits the amount of life found on the rocks particularly in the south. In lower energy areas diverse reef communities are found with many filter feeders</li> <li>• Strong/very strong tidal currents and wave climate, particularly to the southwest</li> <li>• A large number of wrecks, including from both World Wars, representing a wealth of seafaring heritage.</li> <li>• Wartime losses include the Apapa which was sunk by a U-boat in 1917, and HMS Westphalia which was also sunk by a U boat</li> <li>• Lobster and crab potting takes place closer to the shore, with whelk potting, trawling and scallop dredging occurring elsewhere</li> <li>• Glimpses of ferries and the Holyhead harbour breakwater are signs of significant human activity in adjacent MCA 24, while commercial shipping can be seen passing further offshore</li> <li>• Recreational boats can also be seen in coastal waters during the warmer months</li> <li>• The Skerries are prominent seascape features viewed from this MCA, with the Isle of Man and Holyhead Mountain also visible in clear conditions</li> <li>• In the south, visual relationships with the adjacent rocky north coast of Anglesey, with small bays and inlets, which contribute to character</li> <li>• The box-like form of Wylfa Power Station forms a prominent man-made feature in views to the coast, standing out against a rugged and open coastal scene</li> </ul>
<p>MCA 6: North Anglesey Coastal Waters</p>	<ul style="list-style-type: none"> <li>• A rocky, high energy north-facing coastline with extensive wave-cut platforms and deeply incised bays</li> <li>• Marine processes of long-shore drift creating crescent-shaped shingle beach at Cemlyn Bay – a dynamic landform</li> <li>• Steeply sloping bathymetry, with deep water of up to 25m coming in close to the shore</li> <li>• Subtidal substrate of bedrock and boulders with some coarse sediment and sand. Exposed rock colonised by marine species including featherstars and sponges</li> <li>• A range of wetland habitats associated with the brackish water of the Cemlyn Bay lagoon (designated as SSSI, SPA and SAC for its importance for bird life – especially terns)</li> <li>• Other SSSIs at Hen Borth and Cae Gwyn notable for geological interest and plant life</li> <li>• Tidal rapids and strong currents visible from land in certain conditions, notably around the rocky reef of Harry Furlong's Rocks and around West Mouse</li> <li>• Despite navigational aids, many ships have been lost on the offshore rocks, especially around the West Mouse</li> <li>• Fishing activity along the rocky coast is mainly potting for crabs and lobsters, and recreational angling. Recreational charter fishing boats also depart from Amlwch port</li> <li>• Evidence of both modern and historic industry visible along the coast including historic brickworks, disused factories and the dominant form of Wylfa Power Station</li> <li>• Until recent years, Amlwch Harbour was used for export of copper ore, as well as supporting industries such as shipbuilding</li> <li>• Coastal headlands including Point Lynas are popular locations for spotting cetaceans. Coast crossed by the Isle of Anglesey Coast Path and large sections are owned by the National Trust</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Popular recreational dive sites include wrecks of Abbotsford near Wylfa Power Station, Deo Gratis on the Archdeacon Rock and Edith Owen and Fawn on Coal Rock</li> <li>• Low-lying coast creates strong visual and physical connection between land and sea. The box-like, bright form of Wylfa Nuclear Power Station, with associated lighting at night, stands out in stark scale contrast</li> <li>• Seascape features include the lighthouse on Point Lynas, the offshore islands of West Mouse, Middle Mouse and East Mouse and expansive views including the Skerries and the Isle of Man on the horizon.</li> </ul>
MCA 7: Holyhead Bay & The Skerries	<ul style="list-style-type: none"> <li>• This MCA encompasses the large-scale Holyhead Bay, backed by an AONB-designated coastline stretching from Carmel Head in the north to Porth Namarch on Holy Island</li> <li>• The rocky islets of the Skerries (with associated rough seas) are found to the north of Carmel Head. The Skerries lighthouse is visible over long distances</li> <li>• Bay fringed to the east by rugged volcanic cliffs punctuating small sandy bays. Shelter is provided to the south by the rising mass of Holyhead Mountain</li> <li>• The seabed substrate follows the energy gradient, with exposed rock in the north and areas of coarse sediment in the south</li> <li>• The Skerries designated as SPA, SSSI and Important Bird Area, managed as a reserve by the RSPB. The islets are important for Arctic terns and as a seal haul site</li> <li>• Nationally important geology exposed in the cliffs – some of the oldest rocks in Wales. Cliffs topped by wind-pruned maritime grasslands and heath, supporting important sea bird colonies (including within the Holy Island Coast SPA and SAC)</li> <li>• Extensive SSSI covering intertidal areas, including the Afon Alaw estuary, as well as the seagrass beds, sand and rock found in Beddmanarch Bay</li> <li>• Very strong tidal currents and wave climate around the Skerries in the north, with a more sheltered region of water within Holyhead Harbour to the south</li> <li>• Many wrecks, including the protected wreck of the 17th century Royal Yacht Mary and the dangerous wreck of the Castilian, which sank in 1943 with live ordnance on board.</li> <li>• Breakwaters, beacons and lit shipping markers mark passage into the 19th century Holyhead Harbour. The Skerries lighthouse is visible over long distances</li> <li>• The wider bay is used by many different types of shipping for transport and trade – a long-standing use, particularly associated with close connections to Ireland</li> <li>• Waters support a range of recreational activities including sailing, boating, diving and fishing/sightseeing charters. The surrounding beaches are popular tourism destinations</li> <li>• Seascape setting dominated by the Skerries to the north, and by Holyhead Mountain to the south</li> <li>• Coastline traversed by the Isle of Anglesey Coastal Path, with large sections under National Trust ownership</li> <li>• A strong contrast between remote seas and coasts and the bustling port and marina at Holyhead</li> <li>• Ferries (Holyhead- Dublin) are features on the seaward horizon. The Wicklow and Mourne Mountains in Ireland can be visible in clear conditions. The Isle of Man is also visible in distant views north from Carmel Head.</li> </ul>
MCA 8: West Anglesey Open Waters	<ul style="list-style-type: none"> <li>• An offshore MCA to the west of Holyhead with a water depth of 40-60m with deeper sections in the far north and in Holyhead Deep</li> <li>• Mostly coarse sediment in deep water with exposed Precambrian schist bedrock in the east</li> <li>• Robust polychaetes, crustaceans and bivalves make up the infaunal community while rocky habitats are colonised by a varied community that includes sponges, ascidians, hydroids and bryozoans among many other taxa</li> <li>• High energy water due to strong tidal currents and wave action, and high turbidity due to suspended particulate matter</li> <li>• A variety of fishing activity with towed mobile gear used offshore</li> <li>• Commercial shipping and ferries seen offshore, with recreational boats more common close to the coast, particularly close to Trearddur</li> <li>• Long history and key role in shipping and trade, comprising the location where the west trade routes of Britain converge. The cargo ship Slieve Bloom was wrecked in 1918 while carrying passengers, cattle and mail from Dublin to Holyhead</li> <li>• The Dublin to Holyhead and Dublin to Liverpool ferry routes pass through the north of this MCA</li> <li>• Holyhead Mountain is a landmark which can be viewed from the south part of the MCA, with the Isle of Man visible from the north part of the MCA in clear conditions.</li> </ul>
MCA 10: Menai Strait	<ul style="list-style-type: none"> <li>• The Menai Strait occupies a glacially-eroded bedrock trough which has subsequently flooded, separating mainland Wales from Anglesey</li> <li>• Very complex tidal patterns with changing conditions in the channel due to geological variation and sediment processes. It includes strong, swirling tidal currents and whirlpools as well as small rocky islets (including the famous Swellies)</li> <li>• The Strait has been the scene of many shipwrecks owing to its challenging navigational conditions, including the Pwll Fanog and the HMS Conway</li> <li>• The tidal-swept bedrock is a mixture of mudstone, sandstone, limestone and slate. Boulders and coarse mobile sediments create a rich and unique marine environment</li> </ul>



Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>Entire strait designated as SAC, representing one of Wales' jewels in terms of marine and coastal biodiversity. These include mudflats, intertidal rocky shores, rare rocky islands and sessile oak woodland</li> <li>Two iconic bridges cross the Menai Strait, providing the first road and rail connections to the Welsh mainland, designed respectively by Thomas Telford and Robert Stephenson</li> <li>Other important historic and cultural features include historic harbours for slate export, disused fish weirs, Bangor pier, and the internationally designated medieval Caernarfon Castle and town walls</li> <li>Further historic landscape influence is strongly associated with the nationally important estate landscapes found on both banks of the Strait</li> <li>Channel used for commercial and recreational shipping. Surrounding land used for estate parkland, farmland and settlement</li> <li>Mussels and Pacific oysters are cultivated in this MCA, and lobster/crab/whelk potting contributes to a thriving traditional seafood industry</li> <li>Waters popular for a range of activities including sailing, recreational angling (from shore and boat-based), kayaking and diving. Plas Dinorwic marina and the Plas Menai National Watersports Centre for Wales serve the area</li> <li>The Llŷn and Isle of Anglesey Coast Paths skirt around the coastline and the Lon Las Menai cycle route runs from Caernarfon to Y Felinheli</li> <li>Views dominated by the ever-changing channel of the Menai Strait and framed by the surrounding wooded landform. Perceptions of tranquillity are interrupted by nearby transport infrastructure and development</li> <li>Spectacular views afforded from elevated points to the Anglesey AONB, and southwards towards the mountains of Eryri National Park (Snowdonia National Park).</li> </ul>

**Local Inshore Seascape Character Areas**

**Anglesey and Snowdonia Seascape Character Assessment**

SCA 1: Conwy Estuary	<ul style="list-style-type: none"> <li>Underlain by relatively soft and easily eroded Silurian grits</li> <li>A wide, flat-bottomed valley which gradually broadens towards its mouth and follows the winding course of the river. Surrounding hills become steeper inland and contain a series of tumbling rivers and streams</li> <li>Channel of tidal Conwy River flows in a series of meanders which increase in size towards the mouth of the river. It is swiftly-flowing, with notable tidal currents up and down river</li> <li>Land uses dominated by valley floor grazing land and reed beds, with fields divided by reens (ditches). Also used as a transport corridor (road and rail) but with little boat traffic on the river itself. Some parkland and woodland on valley sides</li> <li>Extensive wetland habitats, including reed beds, wet grassland, wet woodland and riparian trees</li> <li>Contrast between flat upper part of valley surrounded by steep, wooded rocky slopes, and lower (north) part of the SCA where the widening river estuary meanders between rolling wooded and pasture-covered hills</li> <li>Onshore historic and cultural features include Canovium Roman fort and Roman roads, 14<sup>th</sup> Century St Mary's Church, Maenan Abbey, and buildings and structures associated with the railway</li> <li>Historic and cultural features directly related to the river include a former dock near Caer Rhun Hall, and disused wells and baths to the north of Trefriw</li> <li>Very little settlement within the valley floor, but occasional valley-side villages (near crossing points) and scattered farms. Settlement to the north creates a busier feel</li> <li>Varied textures and colours on valley floor, especially in tidal channels and areas of extensive reedbeds</li> <li>Surrounding hills (including those of Eryri National Park (Snowdonia National Park) to the west) create a distinctive and dramatic landscape setting. They frame views along the river valley and also create a strong sense of enclosure, particularly in the south part of the SCA.</li> </ul>
SCA 2: Conwy Bay	<ul style="list-style-type: none"> <li>Varied underlying geology, including Carboniferous limestone (Great Orme), Ordovician igneous rocks (Conwy Mountain) and softer Ordovician sedimentary rocks forming lower-lying areas</li> <li>Shallow bay ringed by high hills, including Conwy Mountain to the south, and limestone headland of Great Orme to the east. Lower land around Llandudno emphasises height and profile of Great Orme</li> <li>Where the high mountainous topography of Snowdonia meets the sea, tumbling dramatically down to sea level and requiring tunnels through the headlands for coastal transport routes</li> <li>Extensive intertidal area around estuary mouth, with dynamic sediment processes. Great Orme headland exposed to full force of sea, especially in northerly wind conditions</li> <li>Land/sea uses include transport (road, rail and boat), tourism, settlement, coastal heath/grassland, farmland, quarrying, and recreational boating</li> <li>Very extensive intertidal and shallow marine habitats. Also elevated coastal heath (Conwy Mountain) and coastal grassland (Great Orme)</li> <li>Many onshore historic and cultural features reflecting the area's long history of settlement, defence (including Conwy Castle) and 19<sup>th</sup> Century tourism</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>Offshore historic and cultural features include historic harbours/quaysides (e.g. Conwy) and more modern marinas (e.g. Deganwy) and channel beacons</li> <li>A very long history of settlement, including Iron Age and Roman occupation, the Medieval fortified town of Conwy, Victorian seaside development at Llandudno West Shore, and more recent development</li> <li>Visually varied, with contrasting textures and colours of water, intertidal areas, coastal heath/grassland and towns. Area has a busy feel, especially in summer</li> <li>Distinctive hills forming landscape setting provide dramatic backdrop and strong sense of place, as well as sense of enclosure</li> <li>Seascape setting framed by Great Orme to east and Puffin Island in distance to west.</li> </ul>
SCA 3: Traeth Lafan	<ul style="list-style-type: none"> <li>Geology primarily of Ordovician mudstone and siltstone, with an outcrop of harder igneous rock at the east edge of the SCA</li> <li>Relatively low-lying coastal landform (except in the extreme east of the SCA). Shallow bathymetry within Bay, with extensive tidal mud and sand flats (Traeth Lafan)</li> <li>Land uses very varied, including several settlements, harbours, farmland, woodland and parkland. Sea uses include recreation and commercial mussel fishing</li> <li>Extensive intertidal sand and mudflats, with a shoreline of cobbles, boulders and muddy gravels. Woodland and parkland habitats onshore</li> <li>Numerous onshore historic and cultural features reflecting the SCA's long history of settlement, defence, transport and religion, including Beaumaris Castle and Penmon Priory</li> <li>Offshore historic and cultural features the harbour and pier at Beaumaris and the site of the former causeway across Traeth Lafan</li> <li>A settled area, including towns of Beaumaris, and Llanfairfechan, as well as scattered farms and hamlets</li> <li>Views dominated by the open expanse of Conwy Bay, its colours and textures continually changing in response to weather and tidal conditions, and numerous boats</li> <li>Land rises very steeply behind the Study Area in the east part of the SCA. Mountains of Snowdonia form a magnificent landscape setting, particularly when seen across Conwy Bay. Precipitous hill at Penmaenmawr drops steeply into the sea and visually separates this SCA from SCA 2 to the east</li> <li>Puffin island a key feature of the seascape setting in views north, with Great Orme a more distant feature to the east.</li> </ul>
SCA 4: Menai Strait	<ul style="list-style-type: none"> <li>Complex geology along boundaries of Carboniferous limestone, Pre-Cambrian and igneous rocks</li> <li>Menai Strait occupies a glacially-eroded bedrock trough which has subsequently flooded. Surrounding landform slopes up to ridges on either side of the Strait</li> <li>Very complex tidal patterns within the Menai Strait. Changing conditions in channel due to geological variation and sediment processes</li> <li>Channel contains numerous small rocky islands (including the Swellies) associated with treacherous currents, eddies and whirlpools and the scene of many shipwrecks, including the Pwll Fanog</li> <li>A wealth and complexity of habitats: one of Wales' jewels in terms of marine biodiversity. Habitats include mudflats, intertidal rocky shores, rocky islands (nationally rare) and woodland</li> <li>Onshore historic and cultural features include prehistoric burial chambers; Vaynol, Plas Newydd and Penrhyn estates (houses, gardens, parkland, estate buildings, farmland); Nelson's statue, and Bangor cathedral, town and university</li> <li>Offshore historic and cultural features include the Menai bridges, disused fish weirs, Church Island chapel, Bangor pier, historic harbours at Port Dinorwic and Porth Penrhyn</li> <li>Settlement and development dominated by the university town of Bangor and the town of Menai Bridge as well as country houses and associated estates. Linear village of Y Felinheli on east bank contains a marina and the historic Port Dinorwic harbour</li> <li>Channel used for commercial and recreational shipping. Surrounding land used for estate parkland, farmland and settlement</li> <li>An enclosed feel to the central section of the SCA, which is visually dominated by Menai Suspension Bridge and Britannia Bridge</li> <li>From water level, landscape setting restricted to woodlands on valley sides. However, from higher edges of SCA, Snowdonia can be seen</li> <li>Wider seascape setting not generally apparent from the south part of the SCA, but view of Conwy Bay can be seen from north of Telford Bridge.</li> </ul>
SCA 5: Penmon	<ul style="list-style-type: none"> <li>Underlain by Carboniferous limestone geology, creating a grey colour and rough texture to the landscape. The limestone has been extensively quarried</li> <li>Low cliffs at sea level, with landform sloping gently upwards inland. The relatively straight, sloping profile of the landform continues below sea level. In the west of the SCA there is more of a plateau landform</li> <li>Predominantly north-facing coast, with a rocky shoreline and a succession of bays containing pebbly beaches</li> <li>Land uses include former limestone quarries, rough pasture and fish farming. Potting and recreational angling occur along the shoreline</li> <li>Terrestrial habitats include coastal heath (some managed by the National Trust) and rhos pasture. Rocky intertidal areas and cliffs provide habitats for sea birds, seaweeds and seals. Also, valuable sub-tidal limestone habits</li> <li>Onshore historic and cultural features include lighthouse cottages at Penmon Point, quarry buildings and Bwrdd Arthur Iron Age hillfort</li> <li>Offshore historic and cultural features include Penmon lighthouse, monastic remains on Puffin Island and former quarry quays</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Settlement and development limited to scattered farms, lighthouse and coastguard cottages at Penmon Point and infrastructure associated with past limestone quarrying</li> <li>• A strongly textured landscape, with sense of remoteness, tranquillity, wildness and inaccessibility, particularly along the coast</li> <li>• Landscape setting consists of inland farmland. Occasional glimpses of Snowdonia mountains, especially from higher land</li> <li>• Northward seascape setting dominated by Puffin Island, and vessels waiting for the Liverpool pilot. Views southwards over Conwy Bay towards Snowdonia, and eastwards to Great Orme.</li> </ul>
<p>SCA 6: Red Wharf Bay to Moelfre</p>	<ul style="list-style-type: none"> <li>• Largely underlain by Carboniferous limestone, but with some older Ordovician sandstones and mudstones at the east end. Sandstone pipes in the limestone are distinctive features on the foreshores</li> <li>• Landform of wide sandy bays, separated by sloping headlands, and backed by low cliffs and steep hills to landward. Shallow offshore bathymetry, with 'Four Fathom Bank' extending out to sea. Island of Ynys Moelfre separated by Y Swnt</li> <li>• River Nodwydd flows into sea at Red Wharf Bay. Sand deposition at Red Wharf Bay, Benllech Sand and Traeth Bychan, with limited dune formation behind Red Wharf Bay</li> <li>• Land uses include farming (predominantly ancient enclosures/rhos pasture), forestry, settlement and tourism. Coastal and sea uses include bait digging, potting and trawling</li> <li>• Habitats include rhos pasture, woodland, sand dunes, intertidal sands and stretches of intertidal rocks</li> <li>• Onshore historic and cultural features include historic fishing settlements of Moelfre and Red Wharf Bay and Llandonna Standing Stone</li> <li>• Offshore historic and cultural features include the wreck of the Mona, historic harbours/slipways, and the remains of WW2 anti-landing posts</li> <li>• A relatively well-settled SCA, including historic villages of Llandonna, Moelfre and Red Wharf Bay, the more modern village of Benllech, and numerous caravan parks, as well as scattered farms and hamlets</li> <li>• A diverse SCA with strong seasonal changes in its perceptual qualities. In summer it is a busy and colourful tourist area whilst in winter it is much quieter and more muted. The large beaches feel exposed and expansive, whereas the smaller ones feel more enclosed</li> <li>• Gently undulating farmland forms the inland landscape setting. Woodland, farmland and the steep hills up to SCA 5 frame views of the bay</li> <li>• Seascape setting formed by embayment, with views of large vessels waiting for Liverpool Pilot out at sea. North-east aspect is unusual for Wales, with Great Orme prominent in many land-to-sea views and provides shelter from prevailing south-westerly winds.</li> </ul>
<p>SCA 7: Dulas Bay</p>	<ul style="list-style-type: none"> <li>• Varied underlying geology of Carboniferous limestone, Red Devonian sandstone, Ordovician sandstone/mudstone &amp; metamorphic rocks</li> <li>• Landform has relatively smooth profile, and comprises ridges separating deeper valleys (including the Traeth Dulas Estuary). Coastline includes rocky headlands (with wave-cut platforms) and small sandy beaches. Dulas Bay relatively shallow, with Ynys Dulas island lying offshore</li> <li>• River Goch flows into sea at Traeth Dulas, with associated estuarine processes. Sediment deposition and dune formation at Traeth Lligwy and Dulas Bay</li> <li>• Predominant land use is improved farmland, with strong estate influence in its management. Also, woodland and caravan parks (in south of SCA). Sea uses include potting and trawling</li> <li>• Habitats include intertidal areas of reed beds, saltmarshes, mud and sand at Traeth Dulas. Also, deciduous woodland and rocky shores</li> <li>• Onshore historic and cultural features from prehistoric and medieval periods. Landscape dominated by Dulas Estate, with its patchwork of improved fields, stone walls and estate buildings</li> <li>• Offshore historic and cultural features include the daymark tower on Ynys Dulas, which forms a focal point for this SCA</li> <li>• Settlement and development largely limited to Dulas village and estate, although the south part of the SCA contains several caravan parks</li> <li>• A relatively open, smooth landscape with a rolling landform and designed quality, particularly in the north of the SCA</li> <li>• Northward landscape setting formed by the hills to the east of Penysarn. Inland, the farmland continues and forms a backdrop</li> <li>• Seascape setting dominated by Ynys Dulas, and by the large vessels waiting out at sea for the Liverpool Pilot.</li> </ul>
<p>SCA 8: Amlwch &amp; Cemaes</p>	<ul style="list-style-type: none"> <li>• A geologically-varied stretch of coast, including Ordovician, Precambrian and possibly Cambrian sedimentary rocks, with igneous tuffs and rhyolites west of Amlwch</li> <li>• A relatively low coastal plateau with occasional hills, particularly in the west of the SCA. Steeply sloping bathymetry, with deep water coming in close to the shore</li> <li>• North-facing coast comprising low, rocky headlands (including Point Lynas and Wylfa Head) and deeply incised pebbly bays</li> <li>• An exposed and high-energy north-facing coast with active erosive processes</li> <li>• An historic and continuing tradition of industrial land uses, including mining (specifically copper), mineral working and electricity production. Sea uses include potting and recreational fishing</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• A mosaic of habitats, including rhos pasture, coastal heath, cliffs and rocky intertidal areas</li> <li>• Many onshore historic and cultural features, including harbours (fishing and links to copper industry) industrial and religious sites</li> <li>• A relatively settled area, including the nucleated villages of Amlwch and Cemaes (both with historic harbours) the linear settlement of Llaneilian, and scattered farms</li> <li>• A rough-textured landscape with strong seasonal colour. Despite the long tradition of settlement in the area, parts still feel remote. This SCA has a working quality, with less tourist development than many other SCAs</li> <li>• Landward landscape setting of east part dominated by distinctive outline of Parys Mountain. Extensive wind farms occur inland of the west part of the SCA</li> <li>• Seascape setting includes the lighthouse on Point Lynas, the offshore islands of Middle Mouse and East Mouse and expansive views with the Isle of Man on the horizon.</li> </ul>
SCA 9: Cemlyn Bay	<ul style="list-style-type: none"> <li>• Underlain by Ordovician mudstones, with a band of igneous tuffs and rhyolites to the south of Cemlyn Bay</li> <li>• Low-lying coast dominated inland by the egg-shaped hills of a glacial drumlin field, which can be seen clearly from the sea</li> <li>• A rocky, high energy coastline with extensive wave-cut platforms and deeply incised bays. Surface rocks include West Mouse and Harry Furlough's rocks</li> <li>• Rare coastal brackish lagoon at Cemlyn Bay, separated from the sea by a crescent-shaped shingle beach formed by longshore drift</li> <li>• Land use dominated by pastoral farming, often in regular-shaped fields. Sea uses include potting and recreational angling</li> <li>• Cemlyn Bay contains a variety of wetland habitats and is a bird reserve. Also, extensive areas of rocky intertidal habitats</li> <li>• Onshore historic and cultural features include numerous historic farmsteads, and the lifeboat memorial</li> <li>• Settlement limited to scattered farms. Fields with straight, walled boundaries are superimposed on the rounded drumlin landforms. Tourist infrastructure limited to car parks at Cemlyn Bay</li> <li>• A peaceful, tranquil area with little visible development apart from the large power station to the east (SCA 8). Smooth, rolling landform contrasts with the rocky, incised coastline</li> <li>• Landscape setting of rounded drumlin fields extends for a considerable distance inland</li> <li>• Low-lying coast creates strong visual and physical connection between land and seascape. Seascape includes West Mouse Island, views westwards towards the Skerries, and northwards towards the Isle of Man.</li> </ul>
SCA 10: Carmel Had to Penrhyn	<ul style="list-style-type: none"> <li>• Carmel Head underlain by Ordovician mudstones and sandstones with igneous intrusions and evidence of faulting. Geology of remainder of SCA comprises Ordovician mudstones, with occasional igneous tuffs and rhyolites</li> <li>• Low cliffs with occasional sandy bays and deep wave-cut platforms/reefs. Bathymetry is relatively shallow, and marine energy high-moderate. Other coastal features include caves and natural arch</li> <li>• Inland, the land rises gradually away from the coast, with distinctive egg-shaped drumlins forming the horizon when viewed from the sea</li> <li>• Carmel Head and the Skerries are the turning point for the coastline of North-west Wales. The majority of the SCA is a West-facing coast but sheltered from the south by Holy Island and Holyhead Bay</li> <li>• Land uses includes agriculture, open grazing on coastal heath, forestry and tourism. Sea uses include trawling, netting and potting</li> <li>• Extensive rocky and sandy intertidal habitats. Also, rocky cliffs, coastal heath and woodland</li> <li>• Onshore historic and cultural features include the chimney and beacons on Carmel Head, and the windmill above church bay which was a landmark for shipping.</li> <li>• Offshore historic and cultural features include the Skerries lighthouse, and shipping markers</li> <li>• Settlement limited to hamlet at Swtan (Church Bay) and scattered farms. Some tourist development/caravan site in south of SCA, and beaches popular with tourists</li> <li>• A relatively large scale and open landscape and seascape, although headlands provide some sense of containment to bays. Rough texture of rocky shoreline contrasts with the smooth profile of farmland</li> <li>• Rugged profile of Mynydd Y Garn dominates the landward setting in the north of the SCA. Elsewhere, farming continues inland. Views south dominated by Holyhead Mountain and harbour</li> <li>• Seascape setting dominated by the Skerries to the north, and by Holyhead Mountain and Bay to the south. Ferries (Holyhead- Dublin) are features to seaward. Isle of Man is visible on the horizon in views north from Carmel Head.</li> </ul>
SCA 28: Northeast of Anglesey	<ul style="list-style-type: none"> <li>• Mostly coarse sediment overlying sedimentary rock, with finer sand in the southeast</li> <li>• Depth increases gradually from approximately 15m below chart datum near Conwy Bay to over 50m in the northwest</li> <li>• Moderately strong tidal currents and wave height, greatest in the west</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• A rich variety of life on the seabed provides important feeding grounds for sea birds, particularly in the southeast</li> <li>• High levels of phytoplankton</li> <li>• Marine mammals including bottlenose dolphin and grey seal can be sighted</li> <li>• Commercial shipping seen offshore, including large vessels waiting for Liverpool Pilots</li> <li>• Large fishing boats target demersal fish and scallops offshore with smaller potting boats seen closer to the coast</li> <li>• Recreational boats seen particularly in the southeast of the SCA during the warmer months</li> <li>• A number of wrecks can be found in the SCA, including wartime losses</li> <li>• The landscape view changes considerably throughout the SCA, with rocky headlands, islets and large bays found to the west and the large shallow opening of Conwy Bay to the east, with a backdrop of the mountains of Snowdonia. Further out to sea the land becomes barely visible but commercial ships are a common sight.</li> </ul>
SCA 29	<ul style="list-style-type: none"> <li>• Mobile coarse sediment overlying sedimentary rock</li> <li>• Water depth of 30 – 80m below chart datum</li> <li>• Preserved glacial bedforms found offshore</li> <li>• Strong tidal currents particularly to the southwest</li> <li>• Robust infauna colonise the harsh seabed environment supporting a mixture of demersal fish species. Marine mammals can be sighted on the surface</li> <li>• A large number of wrecks can be found in this SCA (including WW1 and WW2 losses) which represent a wealth of seafaring heritage</li> <li>• Potting takes place close to the shore with trawling and scallop dredging occurring further out</li> <li>• Commercial shipping lanes offshore, recreational boats can be seen close to the shore in the warmer months</li> <li>• In the south the SCA boundary comes close to the land with views of the rocky north coast of Anglesey with small bays and inlets</li> <li>• The Skerries are a prominent feature to the southwest of this SCA. Further offshore the coastline becomes less distinctive and on clear days the Isle of Man can be seen to the north</li> <li>• Evidence of both modern and historic industry visible along the coast.</li> </ul>

**Offshore Region Seascape Character Assessment**

**Landscape Character: Isle of Man**

LCA A1: North Uplands	<ul style="list-style-type: none"> <li>• Open exposed moorland underlain by the Manx Group rocks</li> <li>• Rounded smooth peaks and spurs</li> <li>• Narrow steep sided V-shaped upland burns /streams with low vegetation</li> <li>• Large coniferous plantations with abrupt edges</li> <li>• Combination of moorland vegetation and rough pasture</li> <li>• Upland Hill farming on lower slopes and sheep grazing</li> <li>• Busy A-roads, with distinctive road markings and viewing platforms created for the TT races</li> <li>• Largely devoid of built structures except isolated white-washed farmhouses and scattered dwellings</li> <li>• Fragmented historic field patterns and abandoned dwellings</li> <li>• Various historic features: sites such as stone circles, scattered over the area</li> <li>• Smooth and uninterrupted skyline, except for visually prominent telecommunication towers on top of Snaefell forming an Island-wide landmark</li> <li>• Tranquil and remote character away from the roads with evocative abandoned 'intact' farms in the area</li> <li>• Extensive and panoramic views of surrounding peaks and over the whole Island.</li> </ul>
LCA B5: Glen Roy	<ul style="list-style-type: none"> <li>• Three deeply cut valleys join, forming the V-shaped Glen Roy</li> <li>• Numerous scattered farms and outbuildings surrounded by trees provide a settled character</li> <li>• Deciduous woodland along the valley bottom and fragmented tree blocks alongside Manx hedgerows</li> <li>• Regular field pattern of medium to large rectangular fields is faint at slope tops and strengthens down the valley</li> <li>• Small fords and bridges where the sunken narrow winding and often enclosed roads cross the numerous vegetated tributaries</li> <li>• Roads edged in places by Manx hedges with grassed banks</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Tranquil valley with varied and interesting textures and a rural character</li> <li>• Opened and channelled views up to the surrounding uplands</li> <li>• An evocative sense of abandoned fields on the upper slopes.</li> </ul>
LCA C3: Union Mills, Glen Vine & Crosby	<ul style="list-style-type: none"> <li>• A well treed and settled rural valley with a strong sense of enclosure along the River Dhoo valley floor near the roads and the river</li> <li>• Wide flat bottomed river valley with historic terraces on the more undulating north valley side</li> <li>• Settled character with the three notable settlements of Union Mills, Glen Vine and Crosby</li> <li>• Lush riparian vegetation and deciduous woodland surrounds the River Dhoo and relatively steep and pronounced south valley side</li> <li>• Deeply cut and densely wooded valleys of River Glass and River Dhoo</li> <li>• Mixed field pattern of predominantly rectilinear fields in a variety of sizes along the flatter valley floor becomes more elongated and rectangular fields of rough pasture on the lower slopes of the north upland</li> <li>• Sense of tranquillity on the upper areas of the slopes</li> <li>• Presence of Manx Milestones.</li> </ul>
LCA D1: Ballajora & Ballaglass	<ul style="list-style-type: none"> <li>• A tranquil, rural landscape of predominantly arable fields</li> <li>• Scattered settlement consisting of small, isolated farmsteads and hamlets, but also with several clusters of housing (e.g. at Port Lawaigue, Ballajora etc.</li> <li>• Topography slopes upwards to the west, to meet the base of the Uplands and falls (quite steeply in places) towards the sea to the east</li> <li>• Relatively steep and incised paths of Ballaglass Glen and the south section of Glen Mona dissect the area</li> <li>• Distinct, relatively small-scale, irregular field pattern but with medium-scale, more regular fields in north part of area</li> <li>• Field boundaries generally delineated by low, mature Manx hedgerows, with occasional single mature trees visible</li> <li>• Several large patches of mixed semi-natural woodland (containing many mature oak, beech, larch and pine trees) provide a strong sense of enclosure within Ballaglass Glen</li> <li>• Network of minor rural roads, which are characteristically single track, sometimes sunken and crossed by fords</li> <li>• Dramatic, dominant rising uplands to the west, provide a strong sense of enclosure in parts</li> <li>• Generally strong sense of tranquillity, but much diminished in vicinity of Dreemskerry Quarry and Dhoon Quarry</li> <li>• B19 and A15 Roads</li> <li>• Manx Electric Railway.</li> </ul>
LCA D2: Laxey	<ul style="list-style-type: none"> <li>• Strongly sloping topography</li> <li>• Encompasses the wooded lower course of Laxey Glen</li> <li>• Small, traditional Manx settlement village of Laxey with its woodland backdrop</li> <li>• Small-scale, relatively regular field pattern is apparent to the north of Laxey</li> <li>• Distinctive red and white appearance of 'Lady Isabella Water Wheel' (Laxey Wheel) provides an instantly recognisable landmark, on approaches to the area</li> <li>• Quaint character of the tramlines and the instantly recognisable hoot of the tram horn (Manx Electric Railway), contribute to a unique character and sense of place</li> <li>• Settlement pattern consists of series of isolated farmsteads scattered throughout the area</li> <li>• Strong sense of enclosure within Laxey, provided by the steep wooded sides of the glen and valley</li> <li>• Dramatic views to an Upland backdrop to the north and west</li> <li>• Visual dominance of the sea, which contrasts with the coastal landform.</li> </ul>
LCA D3: Conrhenny & Groudle	<ul style="list-style-type: none"> <li>• Gently rolling topography, which is cut by a series of rivers</li> <li>• Contain the relatively narrow corridors of the Groudle and Ballacottier Rivers</li> <li>• Patchwork of organised pasture and arable fields delineated by a combination of hedgerows, Manx banks and visible drainage ditches</li> <li>• Patches of regular coniferous woodland plantations as visible landmarks with the surrounding landscape</li> <li>• Distinctive black and white Manx milestones lining the A2 road corridor</li> <li>• Series of scattered, isolated farmsteads (several of which have associated modern farm buildings)</li> <li>• Sense of enclosure provided by Uplands to the northwest</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Open views to visually harsh red roofs of modern housing developments at the edge of Onchan dominate views southwards</li> <li>• Dramatic, panoramic views eastwards across the ever-changing colour and nature of the sea and sky, contribute to strongly recognisable sense of place.</li> </ul>
LCA D10: Braaid	<ul style="list-style-type: none"> <li>• Gently undulating land sloping down south-eastwards towards the coast with numerous notable rounded hill tops</li> <li>• Rough heathland vegetation</li> <li>• Coniferous Chibbanagh Plantation on hill tops and higher exposed areas</li> <li>• Large open predominantly pastoral fields with low Manx hedges and gorse spreading from hedgerows into more elevated fields in numerous places creating a semi-upland character</li> <li>• Sparsely settled area with some scattered farmhouses surrounded by trees in an otherwise open and treeless area</li> <li>• Numerous historic settlements and elements such as long and round houses at Braaid and remains of Broogh Fort</li> <li>• Small gullies containing burns and low vegetation cut across the fields</li> <li>• Mount Murray Golf course and associated buildings near the small linear settlement of Newtown, extending along the A5</li> <li>• Sunken lanes enclosed by grassed Manx hedges with some gorse and thorn bushes growing on the top enclosing the road corridor.</li> </ul>
LCA D12: Douglas Head	<ul style="list-style-type: none"> <li>• Prominent gently rounded hill overlooking the coast with some steeper undulations in the north and south</li> <li>• Open and windswept with large scale predominantly rectilinear fields over the majority of the area and some patches of heath on the seaward and north areas as well as on the summit around Upper Howe Farm</li> <li>• Carnane Communications mast forms a distinctive landmark on skyline</li> <li>• Former Douglas Head Hotel and surrounding buildings are highly visible surrounded by cut amenity grass on gently slopes</li> <li>• Panoramic views inland and out to sea</li> <li>• Scattered farmsteads, typically surrounded by trees</li> <li>• Strong sense of tranquillity in south and east parts, reduced elsewhere by views towards Douglas</li> <li>• Open and expansive views from most of the area out to sea, along the coast, over Douglas Bay and inland over the incised plateau up to the north uplands</li> <li>• Lighthouse and camera obscura at east tip of Douglas Head.</li> </ul>
LCA D13: Santon	<ul style="list-style-type: none"> <li>• A predominantly rural landscape, dissected by A5 and A25 roads</li> <li>• Densely wooded valley bottoms amongst undulating rolling land with large rectilinear arable and pastoral fields on the gently sloping hill sides and rounded tops</li> <li>• Steep sided densely wooded Victorian pleasure Glens of Glen Grenaugh and Port Soderick Glen lead down to the coast</li> <li>• Victorian electric railway line and stations runs through the area at the bottom of Crogga Glen</li> <li>• Fragmented woodland along field boundaries and along tracks that access the scattered farmhouses centred around Quine's Hill (along the A25) and small settlements of Santon and Ballaveare</li> <li>• Sea-facing hill slopes with large open fields running along the cliff tops with gorse, heather and bracken along the cliff top periphery</li> <li>• Incinerator chimney forms notable landmark in the immediate area</li> <li>• Presence of Manx Milestones</li> <li>• Abrupt linear south built edge to Douglas, comprising residential and industrial development with minor localised extension of industrial character into character area south of Cooil Road</li> <li>• Pulrose Golf Course on edge of Douglas</li> </ul>
LCA D14: Ballamodha & St Mark's	<ul style="list-style-type: none"> <li>• Land slopes down from the south uplands towards the coast</li> <li>• Numerous deeply incised wooded river valleys and glens cut down into the landscape forming ribbons of fragmented woodland</li> <li>• National Glens at Silverdale and Colby</li> <li>• Settled farmland character with some large, nucleated settlements along the A7, small villages and a variety of scattered dwellings and farms</li> <li>• Smaller predominantly rectangular pastoral fields with Manx hedges topped with gorse on the upland slopes to the north</li> <li>• Patches of gorse, bracken and heather in fields on the upper slopes</li> <li>• Larger rectilinear pastoral and arable fields with large deciduous trees growing on Manx hedges on the more gently sloping south slopes</li> <li>• Around the various settlements and farms there are smaller rectangular arable and pastoral fields with Manx hedgerows containing numerous trees and some stone walls</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Network of tracks, small lanes and larger roads enclosed by substantial hedgerows containing deciduous trees all growing on grass covered Manx hedges</li> <li>• Numerous small reservoirs and water bodies associated with water courses</li> <li>• Some small churches with spires as well as various standing stones and other visible archaeological sites</li> <li>• Presence of Manx Milestones</li> <li>• Quarries at Turkeyland and at Ballown.</li> </ul>
LCA E1: Port Grenaugh	<ul style="list-style-type: none"> <li>• Sheltered coves of Port Grenaugh and Port Soldrick with shelving shale beach</li> <li>• Low rocky jagged sea cliffs</li> <li>• Inter-tidal rock pools on rocky platforms in the litoral zone</li> <li>• Steeply shelving grassy slopes abutting large flat pastoral and arable fields at cliff tops</li> <li>• Remains of numerous Promontory Forts along the coastal footpath</li> <li>• Strong sense of tranquillity</li> <li>• Open and expansive views</li> <li>• Colour and movement of the sea contrasts with the coastal landforms and combine to create a dramatic landscape.</li> </ul>
LCA E2: Port Soderick	<ul style="list-style-type: none"> <li>• Rocky indented coast with various small coves and a graded shale beach at Port Soderick</li> <li>• Shelving grassy slopes with some heath land vegetation abutting irregular shaped pastoral fields, abut high jagged rocky cliffs</li> <li>• Rocky foreshore with banded Manx group slates and shales form rock pools with numerous offshore rocky outcrops</li> <li>• Victorian pleasure drive of Marine Drive, with its crenellated entry arch (Registered Building), runs along the cliff edge with painted iron railings in places</li> <li>• Relatively strong sense of tranquillity</li> <li>• Open and expansive views from Marine Drive</li> <li>• Colour and movement of the sea contrasts with the coastal landforms and combine to create a dramatic landscape.</li> </ul>
LCA E3: Douglas Bay	<ul style="list-style-type: none"> <li>• Built-up areas of Douglas and Onchan form dominating back-drop to the area</li> <li>• Gently graded sandy beach is contained by two prominent rocky headlands with jagged sea cliffs</li> <li>• Victorian esplanade with metal railings forms a promenade along the beach's edge marking the edge of the area</li> <li>• Settlement of Onchan perches on the cliff tops with development spreading to cliff edge path</li> <li>• Concrete piers and break waters of Douglas harbour</li> <li>• Views along the coast constrained by the two large headlands that enclose the area</li> <li>• Little tranquillity in the area but an interesting character resulting from the urban back drop</li> <li>• Strong visual contrast between sea and urban areas</li> <li>• Colour and movement of the sea contrasts with the coastal landforms and combine to create a dramatic landscape.</li> </ul>
LCA E4: Clay Head	<ul style="list-style-type: none"> <li>• Jagged indented rocky coastline with some natural arches</li> <li>• Rocky foreshore with banded bedrock and scattered large offshore rocks</li> <li>• Sheltered cove and graded shale beach at Groudle Glen</li> <li>• Steeply shelving grassy slopes with intermittent heath vegetation surrounding irregular shaped pastoral fields at cliff tops</li> <li>• Groudle Glen railway runs along the cliff edge to reach Sea Lion Cove</li> <li>• Open and exposed headland with medium sense of tranquillity</li> <li>• Colour and movement of the sea contrasts with the coastal landforms and combine to create a dramatic landscape.</li> </ul>
LCA E5: Laxey Bay	<ul style="list-style-type: none"> <li>• Glen Mooar and Glen Roy converge at Laxey and flow out towards the sea (via a relatively steeply incised valley) culminating within the bay</li> <li>• Rugged coastline lined by cliffs that fall steeply, from the Incised Inland Slopes to west, towards the sea</li> <li>• Green and vegetated cliffs provide a relatively strong sense of north-south enclosure within the bay</li> <li>• A cluster of two and three-storey white-washed houses, which overlooking Laxey Bay and climbing the steep enclosing slopes</li> <li>• Houses nestle around the bay and overlook the wide expanse of blue sea to the east</li> <li>• Shallow stony beach marks the transition from sea to shore, lined to the south by a wide promenade and seafront road</li> </ul>



Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• Rigid form of the grey stone harbour wall (housing two small lighthouses), and marking the entrance to a colourful harbour, is dominant within views northwards</li> <li>• A strong sense of enclosure is provided by rising headlands to the east and west, contributing to a sense of remoteness and seclusion</li> <li>• Within the harbour, the masts of yachts provide dominant vertical elements against the strongly wooded headland sides</li> <li>• Little sense of remoteness and relatively low tranquillity due to the influence of Laxey, the railway and the A2</li> <li>• Colour and movement of the sea contrasts with the coastal landforms and combine to create a dramatic landscape.</li> </ul>
LCA E6: Dhoon Bay & Port Cornaa	<ul style="list-style-type: none"> <li>• Three semi-enclosed, rugged coastal bays (Port Cornaa, Dhoon Bay and Bulgham Bay)</li> <li>• Rugged cliffs, which rise steeply from the expansive open sea to the east, to the Incised Inland Slopes to the west</li> <li>• Rugged coastal edges leading to shallow beaches, strongly enclosed by the surrounding topography within the three bays</li> <li>• Strong sense of openness at the top of the cliffs</li> <li>• Narrow, incised course of Ballaglass Glen flows into the sea at Port Cornaa</li> <li>• Strongly wooded path of Dhoon Glen flows meets the sea at Dhoon Bay</li> <li>• Strong sense of remoteness and tranquillity throughout the character area</li> <li>• Lack of settlement pattern or communications (major or minor roads)</li> <li>• Extensive, panoramic views across the sweeping and ever-changing seascape to the east</li> <li>• Colour and movement of the sea contrasts with the coastal landforms and combine to create a dramatic landscape.</li> </ul>
LCA E9: Bay Ny Carrickey	<ul style="list-style-type: none"> <li>• Relatively flat topography, with a gently shelving stony beach, marking the transition between the shore and sea</li> <li>• A series of rugged wave-cut platforms extend into the sea (visible at low tide)</li> <li>• Distant sense of enclosure to the east and west</li> <li>• Relatively strong sense of openness within views across the area</li> <li>• Sense of tranquillity disturbed as a result of proximity to the main coastal (A5) road and Port St. Mary to the west</li> <li>• Terraced housing fronting beaches at Port St. Mary with occasional individual houses or small groups of houses fronting seashore in east part of bay</li> <li>• Colour and movement of the sea contrasts with the coastal landforms and combine to create a dramatic landscape.</li> </ul>
LCA E10: Castletown Bay	<ul style="list-style-type: none"> <li>• Adjacent to the large settlement of Castletown</li> <li>• Castle Rushen, Castletown harbour wall and the lighthouse are all landmark features</li> <li>• Relatively wide, sandy bay is dotted in places by weed-covered rocks and is lined to the north by an expanse of large, jagged boulders</li> <li>• Beach slopes gradually downwards in a south-easterly direction towards the vast expanse of sea</li> <li>• Bay is lined by a colourful array of predominantly modern houses, overlooking the seashore, and by the coastal road, which hugs the line of the shore</li> <li>• Settled character (particularly to the west), with sense of tranquillity generally disturbed by the hustle and bustle associated with Castletown</li> <li>• Extensive open views across the dynamic shoreline and constantly changing, colourful sea</li> <li>• Recognisable sense of place provided by views across the Bay, towards Langness Point to the southeast and rising landscape to the north of Castletown</li> <li>• Colour and movement of the sea contrasts with the coastal landforms and combine to create a dramatic landscape.</li> </ul>
LCA E11: Langness	<ul style="list-style-type: none"> <li>• Relatively narrow peninsula/isthmus of predominantly flat landscape, protruding from the south edge of the Island</li> <li>• East rocky shore of the peninsula is indented with a series of rugged small indentations (gulleys)</li> <li>• St. Michael's Island (a small island connected to the north-east edge of the peninsula) facilitates dramatic views north-eastwards along the coastline</li> <li>• Castletown Golf Course/Links dominates the north end of this landscape character area</li> <li>• Generally lacking in settlement, but with occasional, white-washed buildings visible on the horizon and a concentration of housing at Derbyhaven</li> <li>• Two minor rural roads provide access to the area (Langness Road and Fort Island Road)</li> <li>• Panoramic views across adjacent ever-changing seascape</li> <li>• General sense of openness throughout the area</li> <li>• Sense of tranquillity greatly disturbed at times by proximity to Ronaldsway airport</li> <li>• Colour and movement of the sea contrasts with the coastal landforms and combine to create a dramatic landscape</li> <li>• Lighthouse and Dreswick Point act as dominating landscape features</li> </ul>

Character Area/Type	Key Characteristics
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- Numerous historic features, including the chapel at St. Michael's Island and the lighthouse at Dreswick Point.

**Designated Landscapes and Seascapes: Wales**

**International**

**World Heritage Sites**

**The Slate Landscape of Northwest Wales – Management Plan (Gwynedd Council, 2019)**

Location and Setting - Distinctive Qualities – Essential Setting and Significant Views

**Penrhyn Slate Quarry and Bethesda, and the Ogwen valley to Port Penrhyn**

- Essential Setting:
  - The essential setting of this Component Part is made up of the Ogwen and Cegin valleys, incorporating the entire landscape of slate production and distribution from the quarry northwards to the port for onward shipment, and from the quarrymen's town of Bethesda to the parkland and neo-Norman castle of the owning family, from the steep sided slopes of the Carneddau mountains which define the south limit to the Arfon coastal plain and to the Menai Straits adjacent to the castle
- Significant Views:
  - Views within the Quarry convey the immense size of the relict workings. Views from the south part of the relict Quarry take in the settlements associated with it, including Penrhyn Castle, as well as the Menai Straits and Liverpool Bay. The 'moving view' for travellers making their way north on the historic Telford post road (the A5) shows how the giant tips of slate rubble have encroached on the pre-existing farmland of Nant Ffrancon, and for those on the Chester–Holyhead railway and the A55, the Neo-Norman keep of Penrhyn castle dominates the landscape around the north, coastal end. Views towards the quarry from the Castle are for the most part restricted by the trees in the parkland; however, notably the quarry is visible from the 'Slate bedroom', a room with public access, in the castle.

**Dinorwig Slate Quarry mountain landscape**

- Essential Setting:
  - This Component Part is aligned with the topography of the Elidir and Snowdon mountains and the valley floor between, with its two long, narrow lakes, extending north-west to Penllyn bridge. As well as the very evident impact of industry (hydro-power as well as slate-quarrying), the setting is picturesque, with Dolbadarn Castle dominating the spur between the lakes.
  - The upland quarry settlements of Deiniolen, Clwt y Bont and Dinorwic are located on a natural shelf overlooking the Arfon coastal plain. The settlements at Fachwen are wooded, but offer occasional views over Padarn lake.
- Significant Views:
  - The distinctive landform of the quarry is vividly demonstrated by the view across Peris lake from the A4086 road, as well as by the prospect afforded to people climbing Snowdon on foot or by train. A public viewpoint within the Council-owned part of the quarry offers views over the entire Component Part as well as of Snowdon and the Arfon coastal plain to the Menai Straits and to Anglesey. It also demonstrates the distinctive geology of the Cambrian slate vein. The view from Penllyn bridge, on the outflow from Padarn lake, towards to the south-east encompasses the Snowdon and Elidir peaks as well as Dolbadarn castle as a picturesque landscape, and illustrates Padarn lake's role as a transport axis. These can be seen more clearly, after a short climb, from Craig yr Undeb.
  - The industrial landscape is evident from the main station at Gilfach Ddu on the Llanberis Lake Railway; the lake-shore route takes in vistas of Snowdon.
  - The areas immediately upslope from Deiniolen, Clwt y Bont and Dinorwic offer views which illustrate the distinctive nature of these self-contained quarry villages and scattered small- holdings, set in a bowl on the hillside.

**Nantlle Valley Slate Quarry Landscape**

- Essential Setting
  - This Component Part is aligned with the east-west ridges of the Nantlle Valley, closed off at its east limit by the mountain pass of Drws y Coed but opening out to the west into a lowland landscape. Some of the quarries are enclosed by tips of slate rubble and by woodland, others, particularly on the upper slopes, look out over the valley.
- Significant Views
  - The road running on the rubble tips of Cilgwyn Slate Quarry, near the north limit of the Component Part, offers views which encompass the summit of Snowdon to the east, the Nantlle ridge to the south, and, to the west, the sea extending down the Llŷn peninsula. On a clear day, Ireland is visible, the historic destination for much Cilgwyn slate. This also provides a vantage point for the quarries themselves, illustrating their characteristic geology and technology.
  - Locations on the lower valley sides and valley floor are more enclosed, and an important characteristic of this landscape is the way in which wooded areas and fields from before the period of quarrying survive, where it is occasionally possible to avoid views of industrial activity and experience an earlier period of the valley's history. The village of Nantlle is dominated by tips of waste rock. The vista along the course of the railway into Dorothea quarry, with its distinctive double arches, is striking. The flooded pits themselves offer spectacular views.

**Character Area/Type** **Key Characteristics**

- Dorothea Quarry is an enclosed landscape-within-a-landscape, surrounded by tips of waste rock. Tree-growth since the closure of the quarry in 1970 partially obscures the way that the Cornish beam engine stands on a ridge between the two pits it once pumped.
- The most famous view of the Nantlle valley, depicted by Richard Wilson in 1765-6, is much changed due to the development of quarrying, though the vista it depicts, looking eastwards towards the summit of Snowdon, can be enjoyed from where the B4418 road crosses the outlet of Nantlle lake

**The Castles and Town walls of King Edward I in North - west Wales - Management Plan 2018-28**

Location and Setting - Distinctive Qualities – Essential Setting and Significant Views

- Beaumaris castle**
- Essential Setting
    - The castle has a close relationship with the sea, with the main entrance next to the castle's tidal dock. The waterside location would have given continued access to both supplies and defences.
  - Significant Views
    - From the castle — landward views of Baron Hill relate the castle to the rural landscape, but the most magnificent views are in an arc of more than 180 degrees from Puffin Island to the Menai Strait, taking in the Great Orme and Snowdonia.
    - Into the castle — because the walls and towers were not raised to their intended maximum height, the castle makes the greatest impression from distant viewpoints that are low on the coast or on the water.
    - Closer views from Baron Hill, the streets of the historic town (particularly Castle Street) and The Green on the seafront are important
- Conwy Castle and Town Walls**
- Essential Setting
    - The entirety of the conservation area is included within the essential setting, taking in the walled town. Areas of the essential setting that fall outside the protection of the Conwy Conservation Area are:
    - Bodlondeb Park and woods, and associated buildings, which provide a large public open space just outside the town walls. Differences in topography make this a sensitive area for new development that may affect views of and from the north range of town walls. The open areas of the Gyffin Valley to the south of the town walls — development here could adversely affect views of and to the south range of town walls.
  - Significant Views
    - From the castle and town walls — the River Conwy, the bridges, the cob and Deganwy Castle, as well as the view towards the mountains to the west. The height of the castle towers and the extent of the town walls provide many viewpoints. Views from the westmost tower of the town wall (the watchtower) are particularly extensive and provide 360 degree vistas.
    - Into the castle and town walls — many views from the River Conwy, Deganwy, including its castle and the mountains (J. M. W. Turner painted the view from the Benarth foreshore), a fine view down the Gyffin Valley (painted by Paul Sandby, 1731–1809) and a variety of views from within the walled town

**National**

**Snowdonia National Park (Eryri Local Development Plan, Snowdonia National Park, 2016)**

Special Qualities

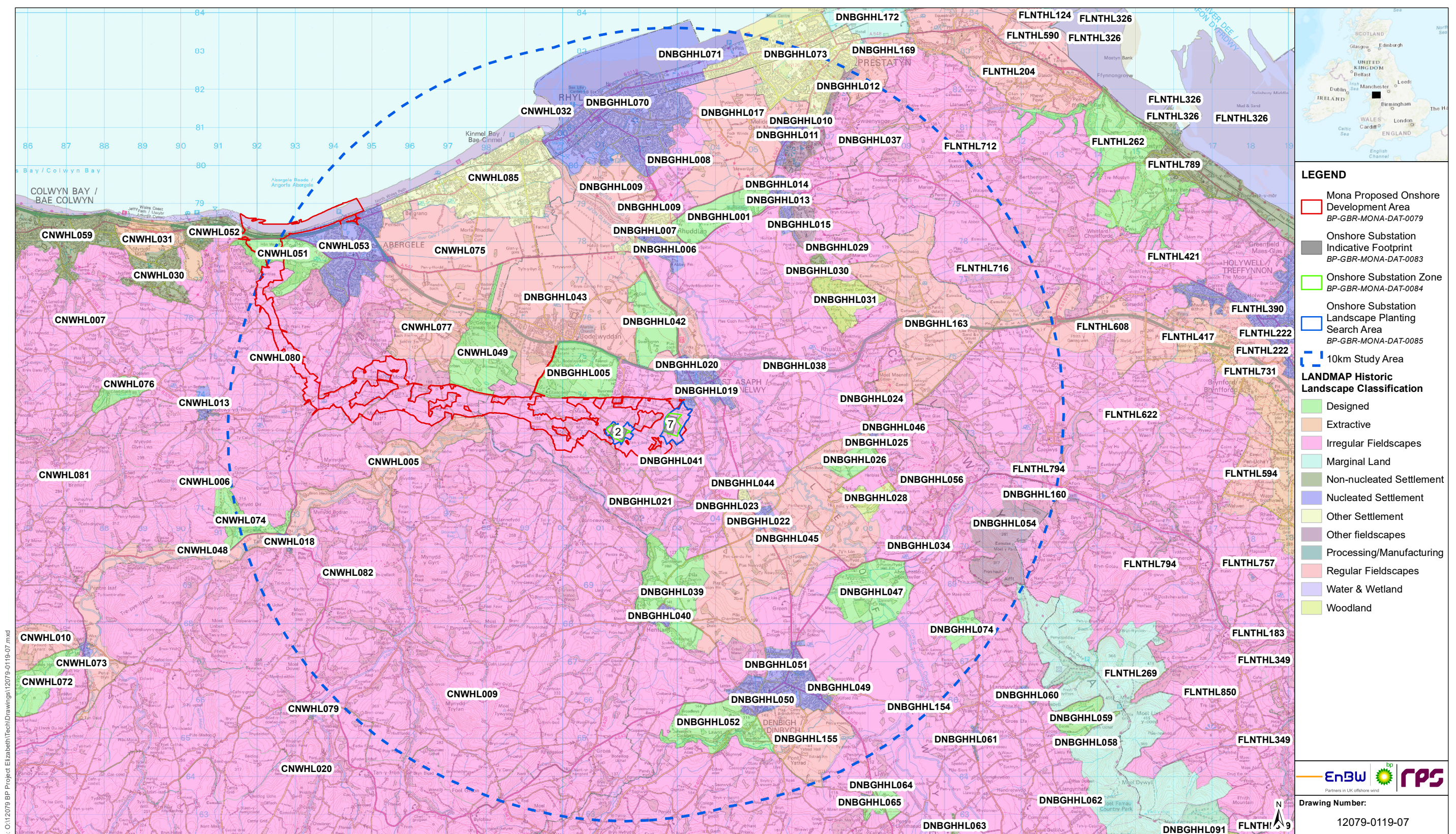
- The diversity of high-quality landscapes and coastal areas within a small geographic area – ranging from coast to rolling uplands to the rugged mountains for which Snowdonia is famed
- The robust sense of community cohesion, belonging and vibrancy which combine to give a strong 'sense of place'
- Continuing vibrancy of the Welsh language as the primary language in social and professional environments. This aspect is evident in local place names that reflect the area's cultural heritage
- An area which has inspired some of the nation's most notable culture, folklore, art, literature and music, which continues to inspire to the present day
- The opportunity for people to understand and enjoy the National Park actively, whilst maintaining areas of tranquillity and solitude, thus promoting aspects of health and wellbeing
- Landscapes and townscapes which chart human impact over centuries, from Neolithic times to the present day. This is evident in archaeological remains, place and field names, oral and written history and present-day land management practices. Its architectural heritage is reflected in the density of Listed Buildings and the wider historic environment
- Complex, varied and renowned geology, vital in influencing the disciplines of geology and geography internationally
- Varied biodiversity reflecting Snowdonia's landscapes, geology, land management practices and climate. Some notable species and habitats are of national and international significance, for example species which are remnants of the last ice age, providing a glimpse of semi-Arctic habitats. Snowdonia is the most southerly point in the UK for many such species
- Extensive opportunities for recreation, leisure and learning for people of all ages and ability combined with areas of tranquillity.

**Anglesey Area of Outstanding Natural Beauty (Anglesey AONB Management Plan, Isle of Anglesey County Council, 2015)**

Character Area/Type	Key Characteristics
Special Qualities	<ul style="list-style-type: none"> <li>• Expansive Views/Seascapes</li> <li>• Peace and Tranquillity</li> <li>• Islands around Anglesey</li> <li>• Broadleaved Woodlands</li> <li>• Lowland Coastal Heath</li> <li>• Species Rich Roadside Verges</li> <li>• Ecologically Important Coastal and Wetland habitats (including rocky shores, mudflats and estuaries, saltmarshes, beaches and dunes)</li> <li>• Built Environment including Conservation Areas and Listed Buildings</li> <li>• Archaeology and Ancient Monuments/Historic Landscapes, Parks and Gardens</li> <li>• Rural Agricultural/Coastal Communities</li> <li>• Welsh Language</li> <li>• Soil, Air and Water Quality</li> <li>• Public Rights of Way Network</li> <li>• Accessible Land and Water.</li> </ul>
<b>Clwydian Range and Dee Valley AONB (Clwydian Range and Dee Valley AONB Management Plan, 2016)</b>	
Special Qualities	<ul style="list-style-type: none"> <li>• Tranquillity - tranquillity is associated with an atmosphere of calm and stillness; peace and quiet; and with dark night skies</li> <li>• Remoteness and Wildness, Space and Freedom - remoteness and wildness is associated with a feeling of trepidation and sometimes even danger. The sublime. Space and freedom are related to access to the landscape and the uninterrupted and extensive views from the high places within it. Bro and the link between communities and their landscape. A sense of belonging and attachment to the landscape</li> <li>• Heather Moorland and Rolling ridges - the dramatic moorland ridges of the central Clwydian Range, expansive Llandegla and Ruabon Moors, Llantysilio and North Berwyn</li> <li>• Broadleaved woodlands and Veteran trees – Bishops Wood, Cwm and Wheeler Valley. Ash dominated Alyn Valley woods and the small copses of the upper Alyn and upland oak woods of the Dee Valley</li> <li>• River Valleys and the River Dee – the dramatic and powerful river Dee contrasted with the small twisting and winding River Alyn and River Wheeler</li> <li>• Limestone grasslands, cliffs and screes – Graig Fawr, Loggerheads and Bryn Alyn – Llanarmon yn Iâl and the spectacular Eglwyseg Escapement</li> <li>• Historic Settlement and Archaeology – historic settlement patterns and conservation areas. The diverse patters and features in the landscape left by previous generations</li> <li>• Industrial Features and the World Heritage Site – limestone quarrying and lead mining, slate quarries and associated tramway and workings – the Pontcysyllte Aqueduct and canal, Horseshoe Falls</li> <li>• Historic Defence Features – the dramatic chain of Iron Age Hillforts of the Clwydian Range, Castel Dinas Bran and Chirk Castle and medieval Motte and Baileys at Tomen y Rhodwydd, Tomen y Fadre and Glyndŵr’s Mount, Carrog</li> <li>• Small historic features – often unlisted or scheduled a rich mixture of small historic features that are an important part of the rich cultural layer of the landscape – wells, village pumps, boundary stones, waymarkers, milk stands and K6 telephone boxes</li> <li>• Traditional boundaries – drystone walls and hedges reflecting traditional skills and craftsmanship and often reflecting local styles and geology</li> <li>• Iconic Visitor and Cultural Attractions – sites that have helped to shape the identity of the AONB as a visitor destination – Loggerheads, Moel Famau, Castell Dinas Bran, Valle Crucis Abbey, the Horseshoe Pass and Pontcysyllte Aqueduct and Horseshoe Falls</li> <li>• The Offa’s Dyke National Trail and Promoted Routes – stretching from Prestatyn Hillside in the north to Llangollen in the South, the National Trail make the AONB particularly accessible. The Dee Valley Way, North Berwyn Way and a network of community paths. Together with extensive areas of Access Land the landscape of the AONB is particularly accessible</li> <li>• The Built Environment – the villages and towns, hamlets and scattered settlements</li> <li>• People and Communities – a rich mix of culture and strong sense of community – the facilities and services that are essential to sustaining rural life.</li> </ul>
<b>Local Authority</b>	
<b>Conwy Special Landscape Areas</b>	
SLA 2 Rhyd Y Foel to Abergele	<ul style="list-style-type: none"> <li>• The area is a locally important landscape and has visual, cultural and landscape habitat characteristics and qualities of such concentration and significance in the local context as to be worthy of identification as an SLA</li> </ul>

Character Area/Type	Key Characteristics
	<ul style="list-style-type: none"> <li>• A locally significant landscape valued for its under-development and proximity to the coastal urban belt</li> <li>• An inland a series of low rolling hills comprise a mosaic of pastoral farmland, small woodland blocks, estate woodlands and historic parklands</li> <li>• The presence of settlement and other man-made features is relatively limited</li> <li>• The landscape in question has a limited capacity for change or further cumulative change without significantly deteriorating in character or quality and therefore is of high local landscape value.</li> </ul>
SLA 3 Elwy and Aled Valleys	<ul style="list-style-type: none"> <li>• The valley areas are unique in the County rich in habitat and geological value</li> <li>• Undeveloped, relatively remote and scenic river valleys with their mosaic of pasture, woodland and scrub impart a high degree of sensitivity</li> <li>• The mosaic of undulating hills and valleys, which are relatively remote, tranquil and sparsely settled are valued for their scenery and for providing low key outdoor recreational opportunities</li> <li>• The area is seen as a line of hills and natural skyline which contains the west edge of the Vale of Clwyd.</li> </ul>

## Appendix B: LANDMAP Aspect Areas



**LEGEND**

- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
- Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
- Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
- Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
- 10km Study Area

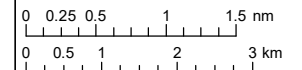
**LANDMAP Historic Landscape Classification**

- Designed
- Extractive
- Irregular Fieldscapes
- Marginal Land
- Non-nucleated Settlement
- Nucleated Settlement
- Other Settlement
- Other fieldscapes
- Processing/Manufacturing
- Regular Fieldscapes
- Water & Wetland
- Woodland

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**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP HISTORIC LANDSCAPE ASPECT AREAS IN  
CONTEXT OF SUBSTATION OPTIONS

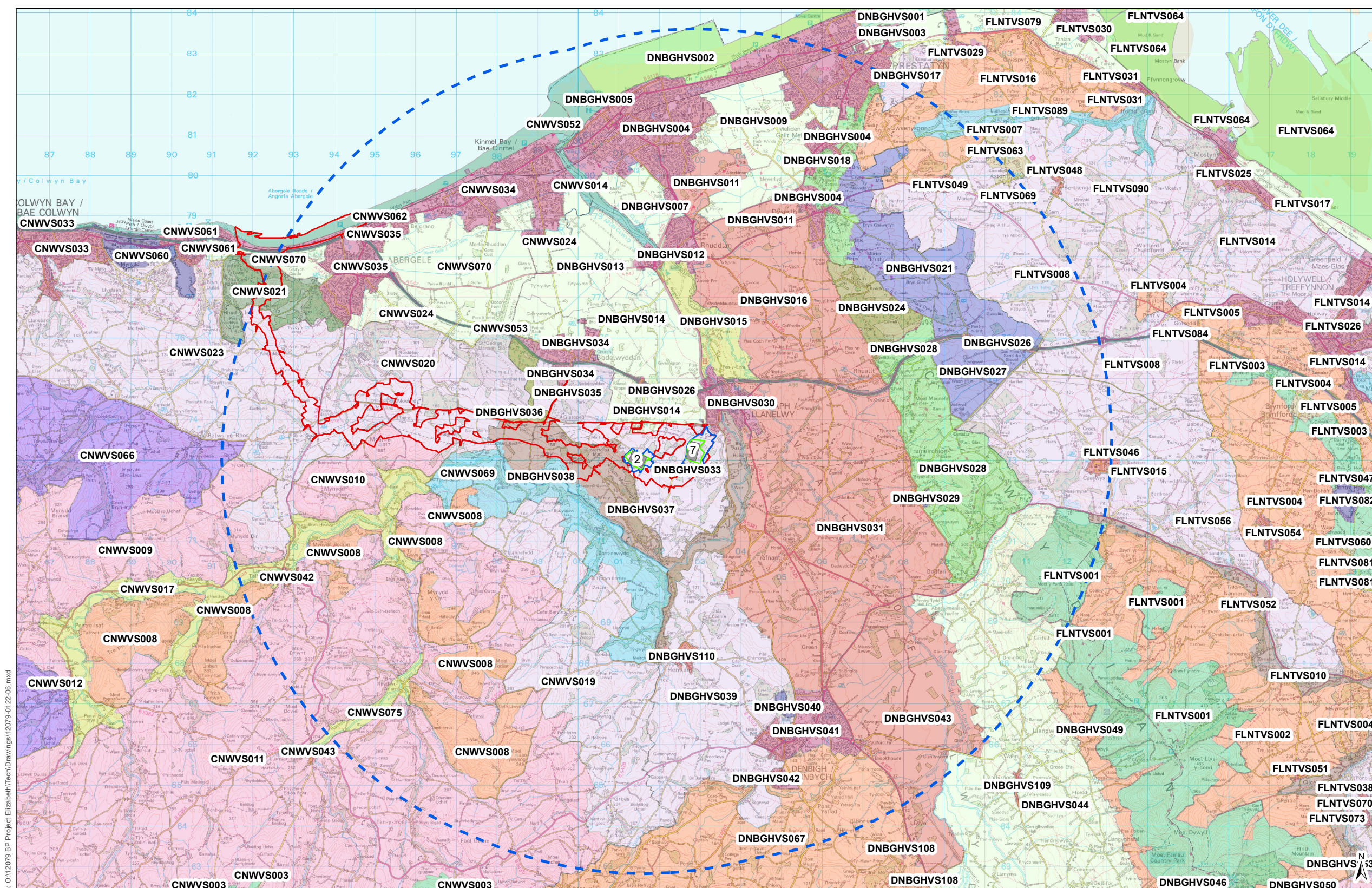


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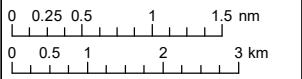


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BP-GBR-MONA-DAT-0083
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  - Onshore Substation
  - Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Study Area
- LANDMAP Visual Sensory by Classification**
- Barren/Rocky Upland
  - Dispersed Settlement
  - Dunes & Dune Slack
  - Estuary
  - Excavation
  - Flat Lowland Mosaic
  - Flat Open Lowland Farmland
  - Hill & Lower Plateau Grazing
  - Hill & Lower Plateau Mosaic
  - Hillside & Scarp Slopes Grazing
  - Hillside & Scarp Slopes Mosaic
  - Intertidal
  - Lowland Wetland
  - Mosaic Lowland Valleys
  - Mosaic Rolling Lowland
  - Open Lowland Valleys
  - Open Rolling Lowland
  - Road Corridor
  - Upland Moorland
  - Urban
  - Village
  - Wooded Hillside & Scarp Slopes
  - Wooded Lowland Valleys
  - Wooded Rolling Lowland

Project Name:  
MONA OFFSHORE WIND PROJECT

Drawing Title:  
VISUAL AND SENSORY ASPECT AREAS IN CONTEXT OF SUBSTATION OPTIONS



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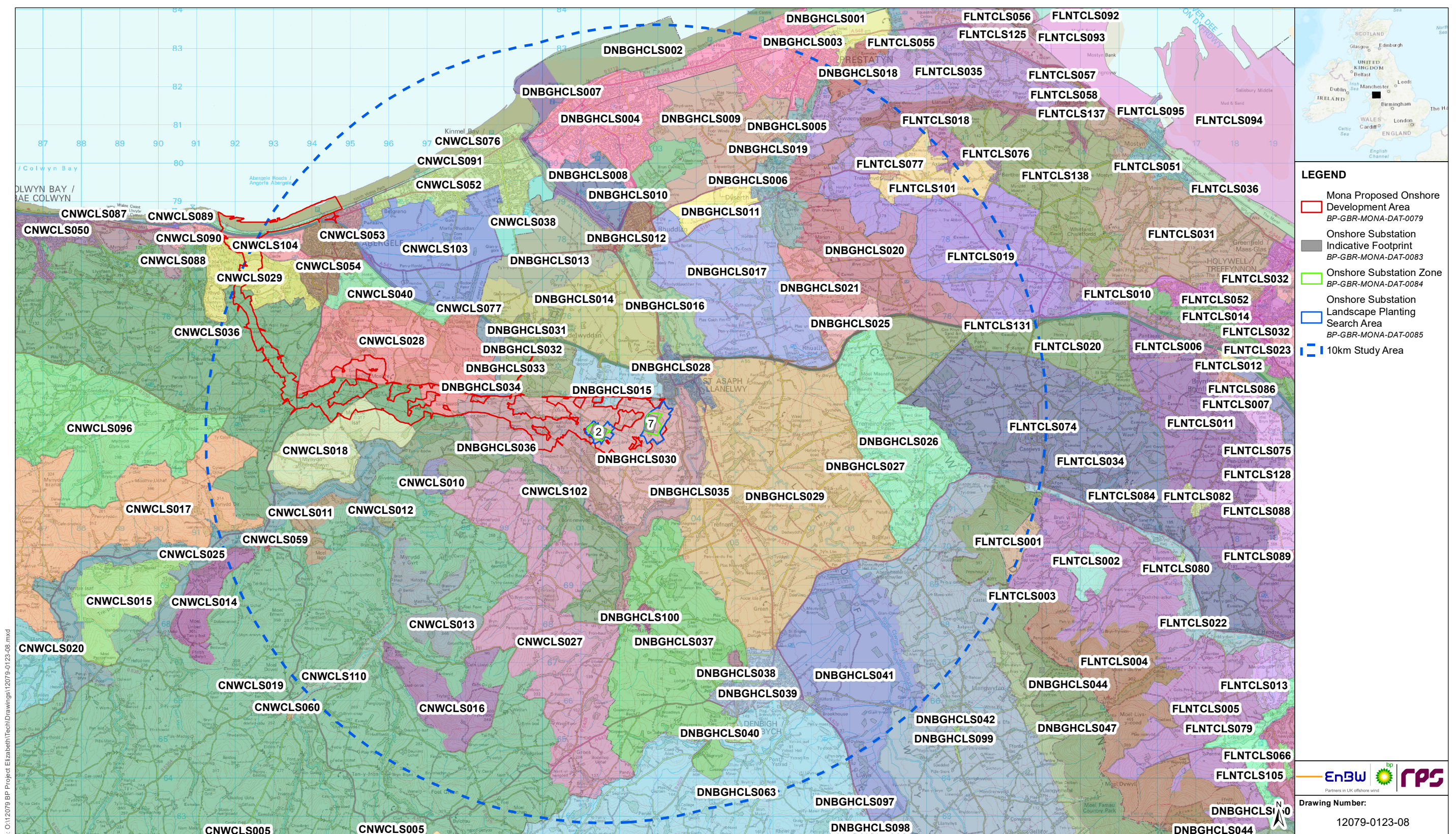
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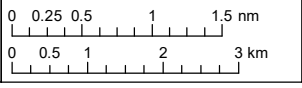
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BP-GBR-MONA-DAT-0079
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- Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
- Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
- 10km Study Area

**Drawing Number:**  
12079-0123-08

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**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP CULTURAL LANDSCAPE SERVICES AREAS  
IN CONTEXT OF SUBSTATION OPTIONS

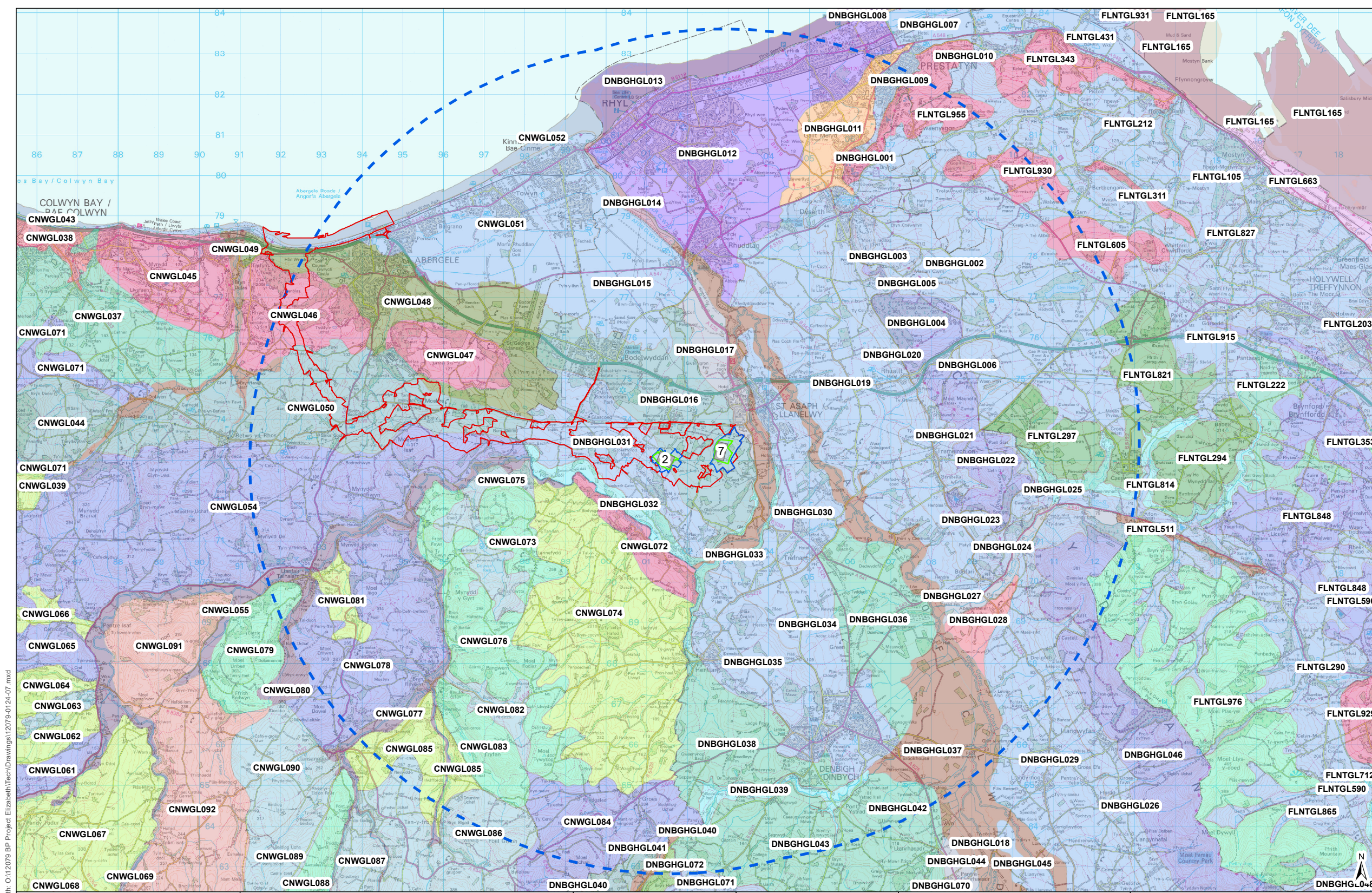


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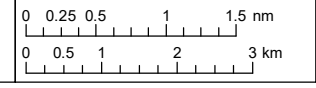
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- LEGEND**
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BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Study Area
- LANDMAP Geological Landscape Classification**
- Active lowland river-flood plain system
  - Active upland river or stream channel system
  - Ancient lowland river flood plain system
  - Coastal flat
  - Coastal slope
  - Engineered features and reclaimed / infilled land
  - Estuary
  - Lowland dip slope
  - Lowland escarpment
  - Lowland glacial outwash plain / field
  - Lowland plateau
  - Lowland river gorge
  - Lowland till plain / field
  - Lowland valley slope / escarpment
  - Other
  - Sand dune
  - Soft-sediment cliff and shore
  - Undulating lowland hill terrain
  - Undulating upland terrain
  - Upland escarpment
  - Upland plateau
  - Upland till plain / field
  - Upland valley slope

Project Name:  
MONA OFFSHORE WIND PROJECT

Drawing Title:  
LANDMAP GEOLOGICAL ASPECT AREAS IN CONTEXT OF SUBSTATION OPTIONS



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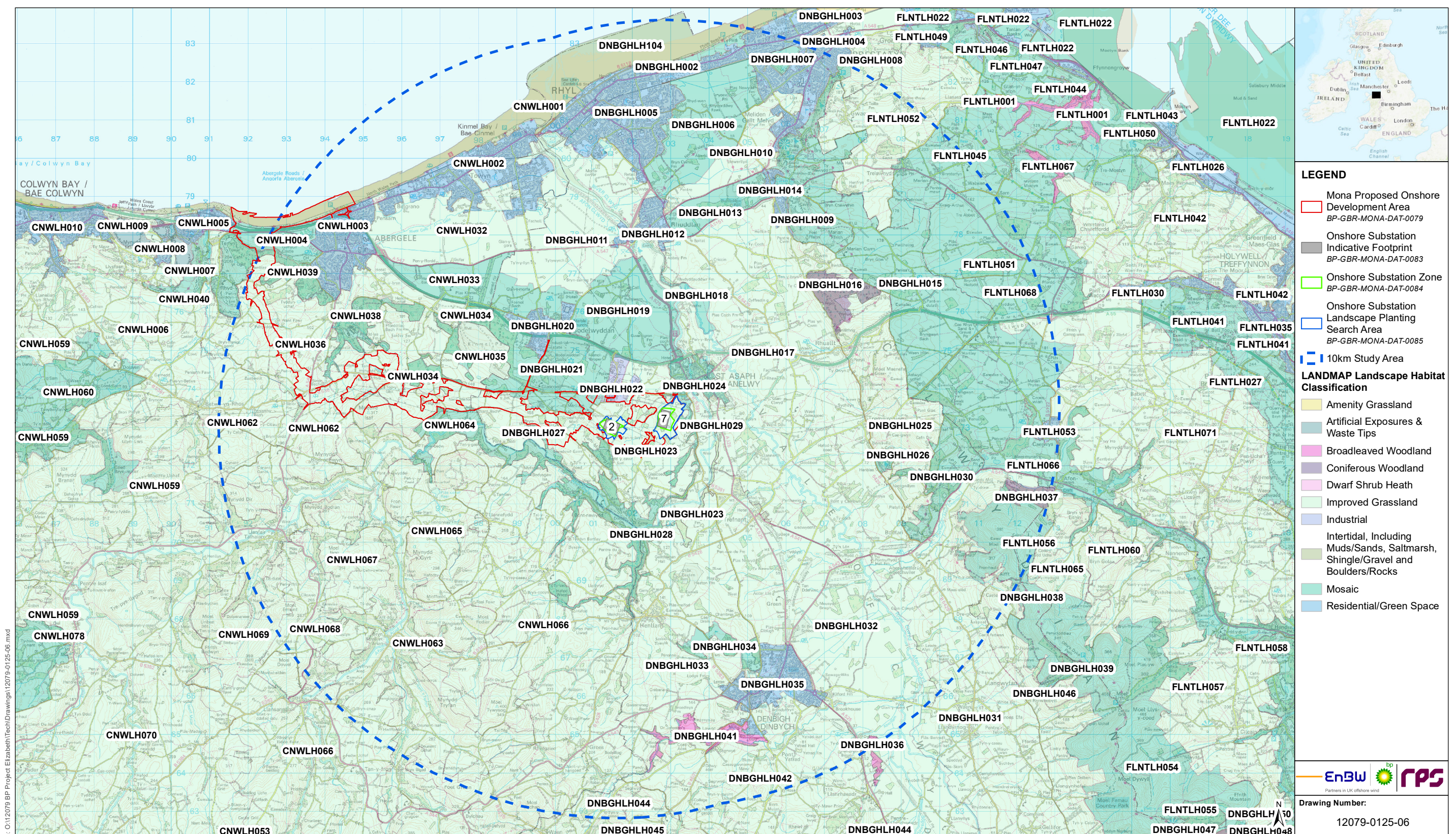
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**LEGEND**

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*BP-GBR-MONA-DAT-0084*
- Onshore Substation Landscape Planting Search Area  
*BP-GBR-MONA-DAT-0085*
- 10km Study Area

**LANDMAP Landscape Habitat Classification**

- Amenity Grassland
- Artificial Exposures & Waste Tips
- Broadleaved Woodland
- Coniferous Woodland
- Dwarf Shrub Heath
- Improved Grassland
- Industrial
- Intertidal, Including Muds/Sands, Saltmarsh, Shingle/Gravel and Boulders/Rocks
- Mosaic
- Residential/Green Space

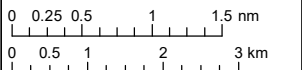


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Project Name: MONA OFFSHORE WIND PROJECT

Drawing Title: LANDMAP HABITAT ASPECT AREAS IN CONTEXT OF SUBSTATION OPTIONS

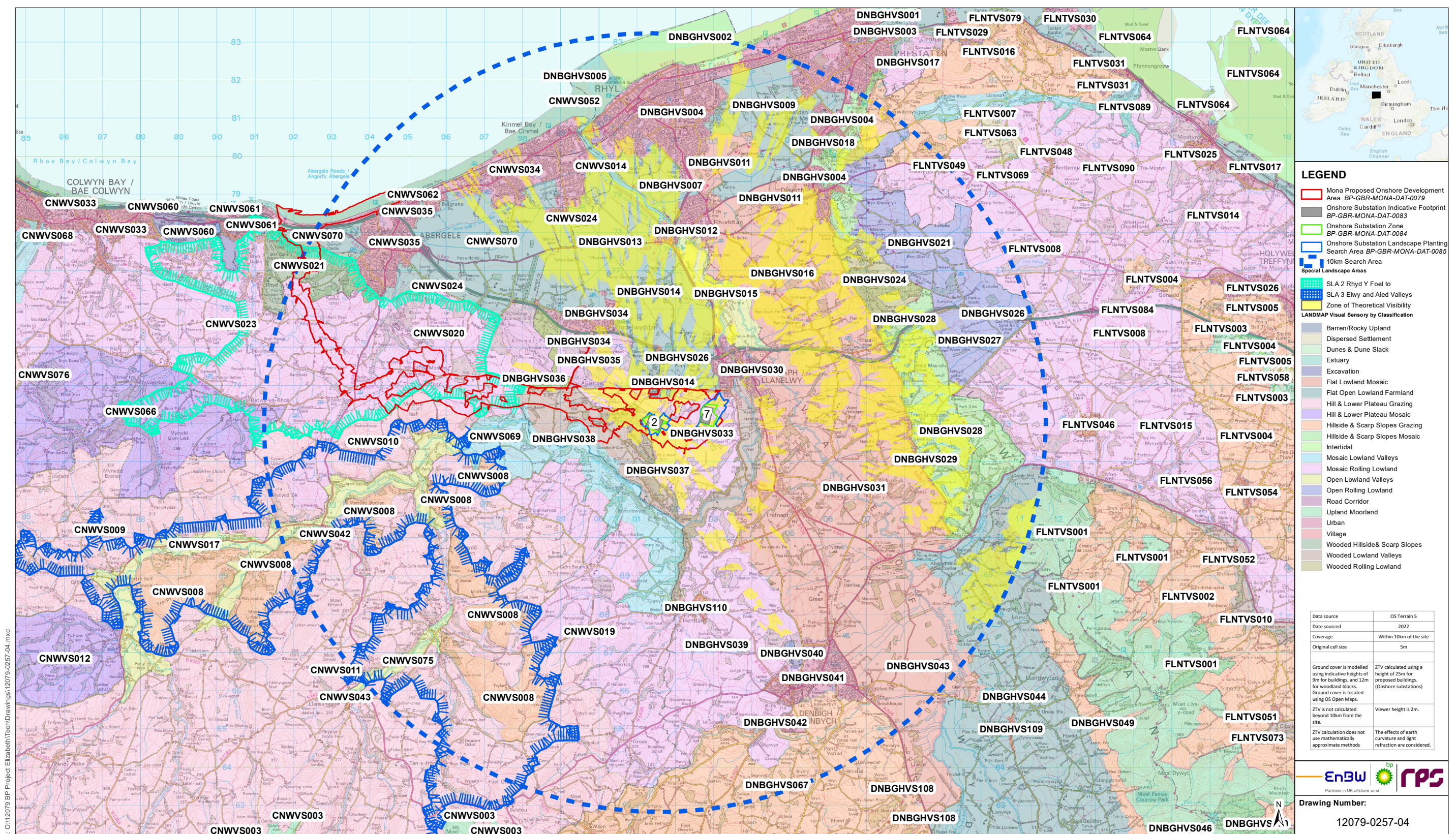


Geodetic Information:  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379m:231mm: 1:100,000

Data Sources: BP One Map, OS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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**LEGEND**

- Mona Proposed Onshore Development Area BP-GBR-MONA-DAT-0079
- Onshore Substation Indicative Footprint BP-GBR-MONA-DAT-0083
- Onshore Substation Zone BP-GBR-MONA-DAT-0084
- Onshore Substation Landscape Planting Search Area BP-GBR-MONA-DAT-0085
- 10km Search Area
- Special Landscape Areas**
- SLA 2 Rhydy Foel to
- SLA 3 Elwy and Aled Valleys
- Zone of Theoretical Visibility
- LANDMAP Visual Sensory by Classification**
- Barren/Rocky Upland
- Dispersed Settlement
- Dunes & Dune Slack
- Estuary
- Excavation
- Flat Lowland Mosaic
- Flat Open Lowland Farmland
- Hill & Lower Plateau Grazing
- Hill & Lower Plateau Mosaic
- Hillside & Scarp Slopes Grazing
- Hillside & Scarp Slopes Mosaic
- Intertidal
- Mosaic Lowland Valleys
- Mosaic Rolling Lowland
- Open Lowland Valleys
- Open Rolling Lowland
- Road Corridor
- Upland Moorland
- Urban
- Village
- Wooded Hillside & Scarp Slopes
- Wooded Lowland Valleys
- Wooded Rolling Lowland

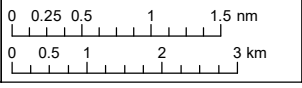
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	The effects of earth curvature and light refraction are considered.



Drawing Number:  
12079-0257-04

Project Name:  
MONA OFFSHORE WIND PROJECT

Drawing Title:  
LANDMAP VISUAL AND SENSORY ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 2

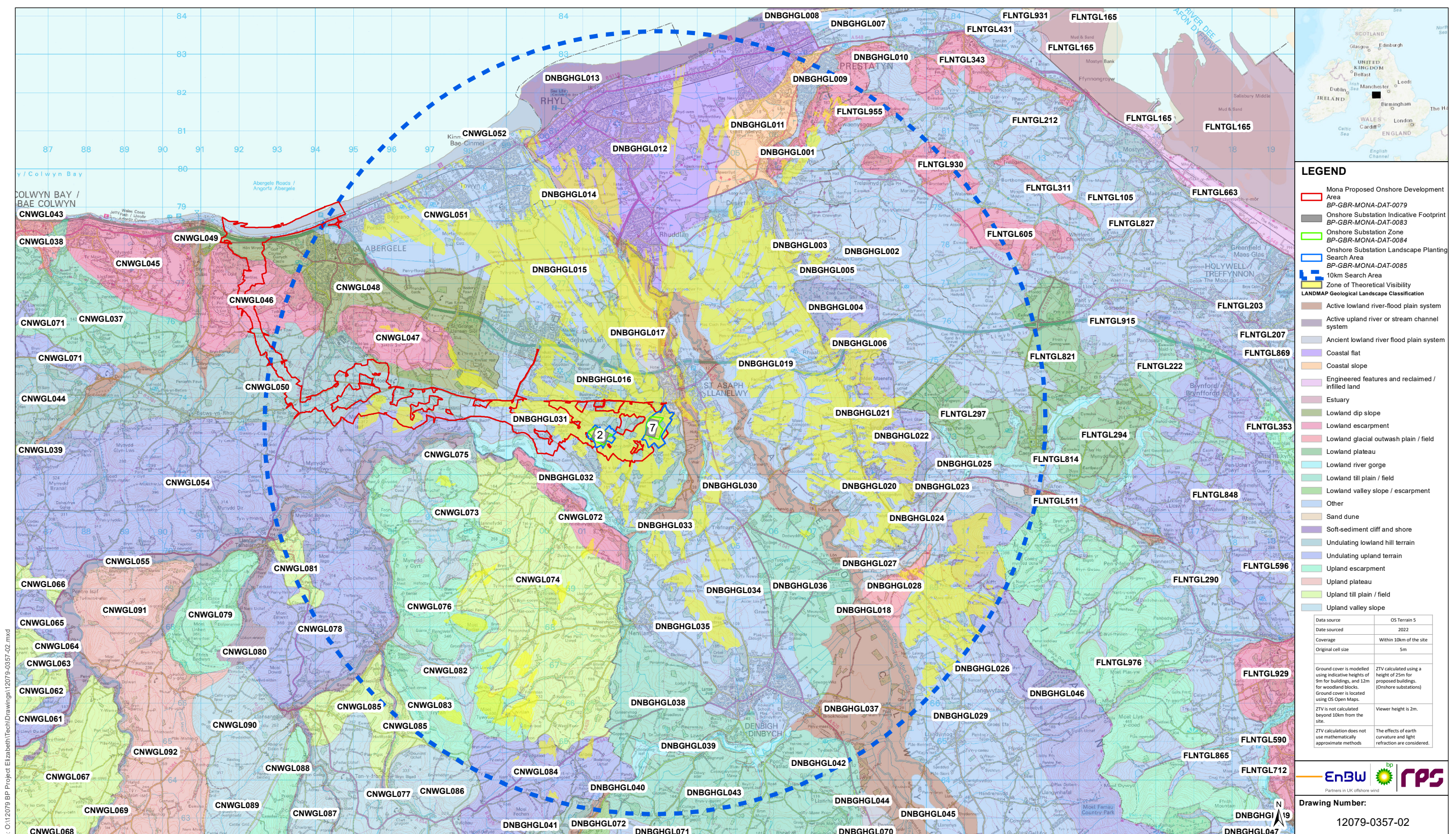


Geodetic Information:  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:100,000

Data Sources: BP One Map, OS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
04	13/03/23	FINAL	JM	CR



**LEGEND**

- ▬ Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
- Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
- Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
- Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
- 10km Search Area
- Zone of Theoretical Visibility
- LANDMAP Geological Landscape Classification**
- Active lowland river-flood plain system
- Active upland river or stream channel system
- Ancient lowland river flood plain system
- Coastal flat
- Coastal slope
- Engineered features and reclaimed / infilled land
- Estuary
- Lowland dip slope
- Lowland escarpment
- Lowland glacial outwash plain / field
- Lowland plateau
- Lowland river gorge
- Lowland till plain / field
- Lowland valley slope / escarpment
- Other
- Sand dune
- Soft-sediment cliff and shore
- Undulating lowland hill terrain
- Undulating upland terrain
- Upland escarpment
- Upland plateau
- Upland till plain / field
- Upland valley slope

Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 5m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematically approximate methods	The effects of earth curvature and light refraction are considered.

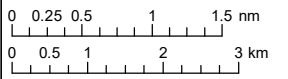
**EnBW** **bp** **rps**

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**Drawing Number:** 12079-0357-02

**Project Name:** MONA OFFSHORE WIND PROJECT

**Drawing Title:** LANDMAP GEOLOGICAL LANDSCAPE ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 7



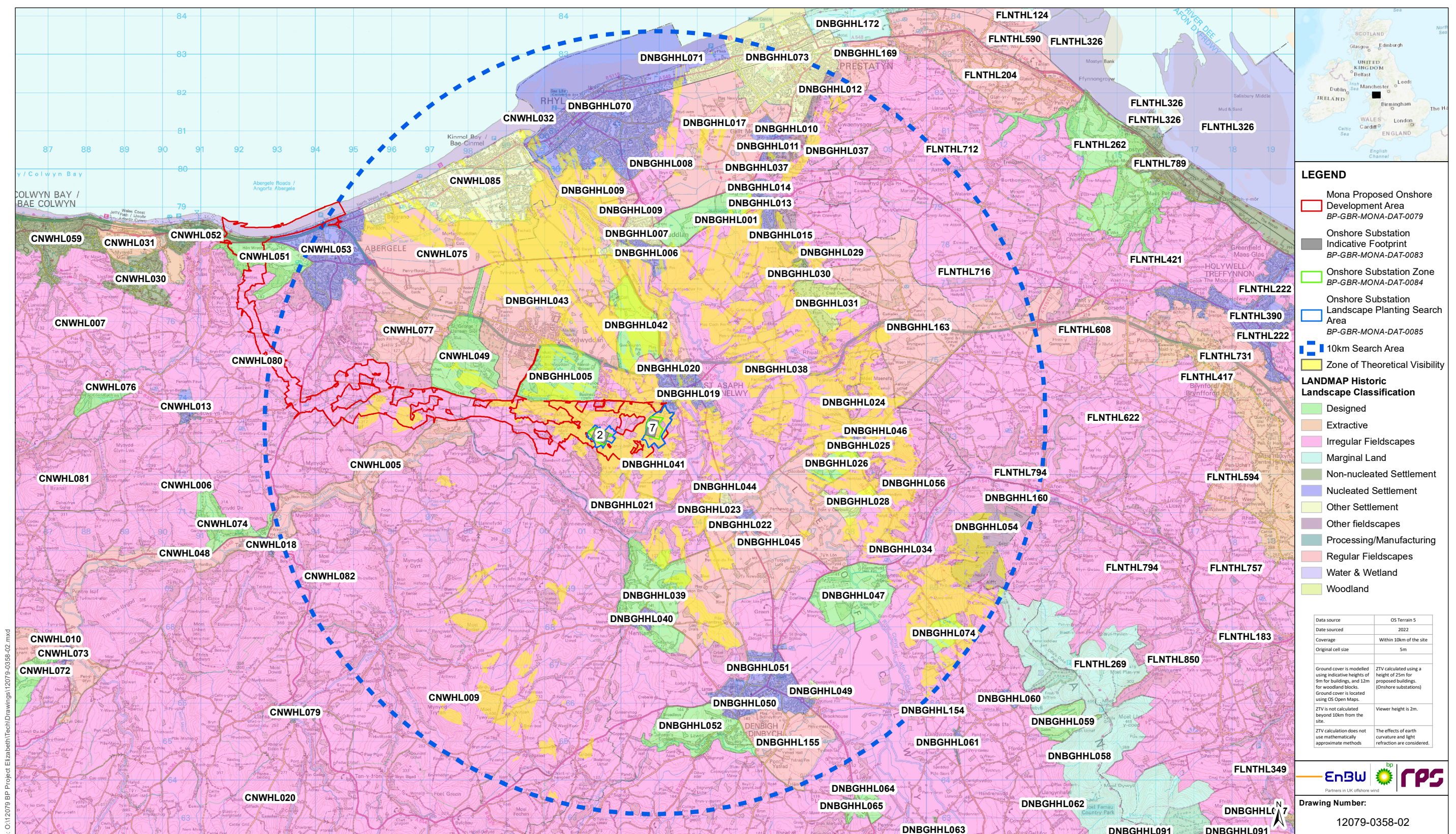
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Datum: OSGB 1936  
Projection: British National Grid  
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**Data Sources:** BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
02	13/03/23	FINAL	JM	CR

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**LEGEND**

- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
- Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
- Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
- Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
- 10km Search Area
- Zone of Theoretical Visibility
- LANDMAP Historic Landscape Classification**
- Designed
- Extractive
- Irregular Fieldsapes
- Marginal Land
- Non-nucleated Settlement
- Nucleated Settlement
- Other Settlement
- Other fieldsapes
- Processing/Manufacturing
- Regular Fieldsapes
- Water & Wetland
- Woodland

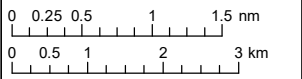
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 5m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	the effects of earth curvature and light refraction are considered.



Drawing Number: 12079-0358-02

Project Name: MONA OFFSHORE WIND PROJECT

Drawing Title: LANDMAP HISTORIC LANDSCAPE ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 7

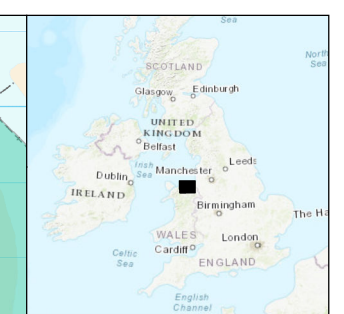
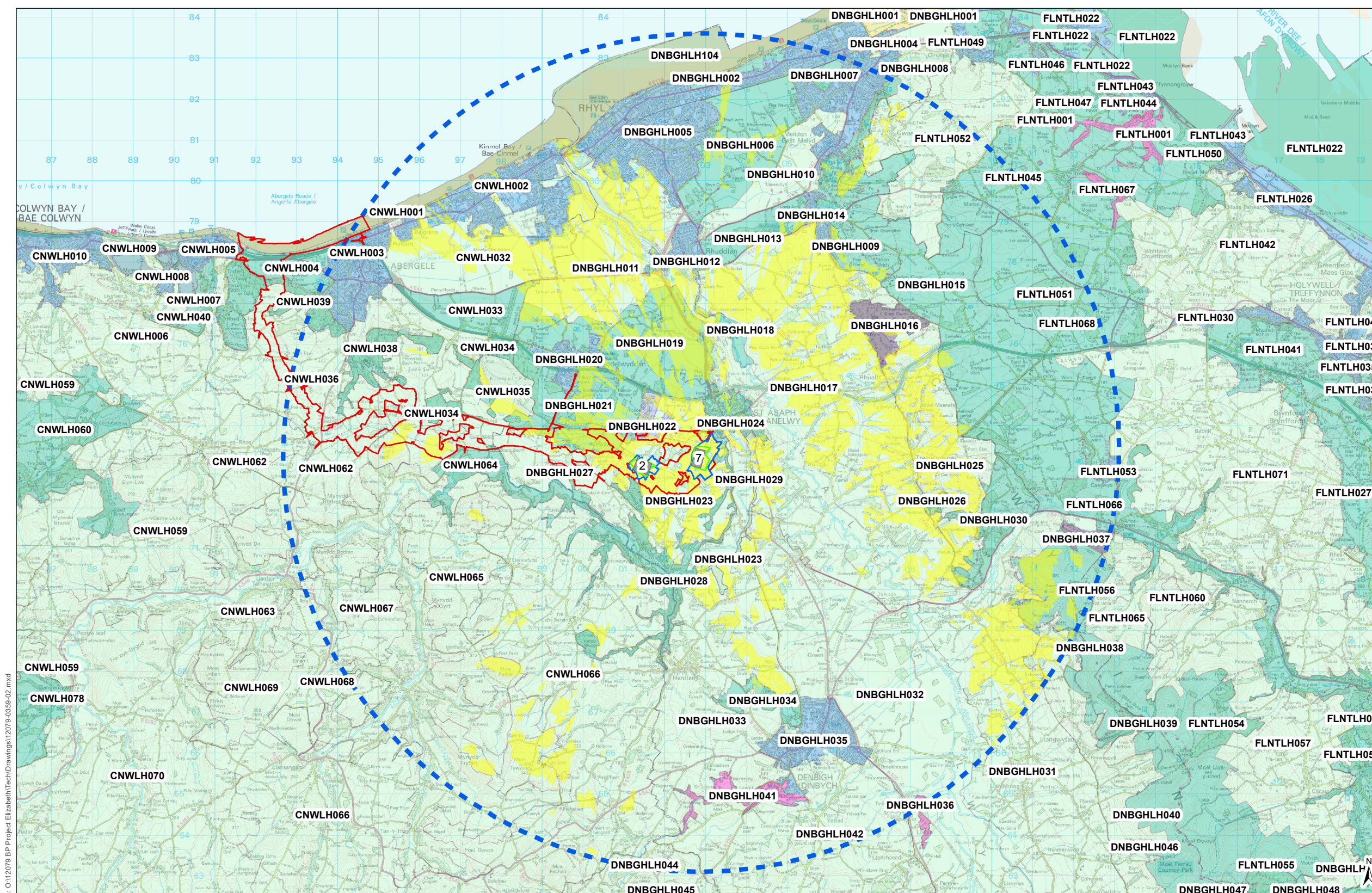


Geodetic Information:  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:100,000

Data Sources: BP One Map, OS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
02	13/03/23	FINAL	JM	CR



**LEGEND**

- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
  - Indicative Footprint  
BP-GBR-MONA-DAT-0083
  - Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Search Area
  - Zone of Theoretical Visibility
- LANDMAP Landscape Habitat Classification**
- Amenity Grassland
  - Artificial Exposures & Waste Tips
  - Broadleaved Woodland
  - Coniferous Woodland
  - Dwarf Shrub Heath
  - Improved Grassland
  - Industrial
  - Intertidal, Including Muds/Sands, Saltmarsh, Shingle/Gravel and Boulders/Rocks
  - Mosaic
  - Residential/ Green Space

Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m

Ground cover is modelled using indicative heights of 5m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	the effects of earth curvature and light refraction are considered.

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**Drawing Number:** 12079-0359-02

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP LANDSCAPE HABITAT ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 7



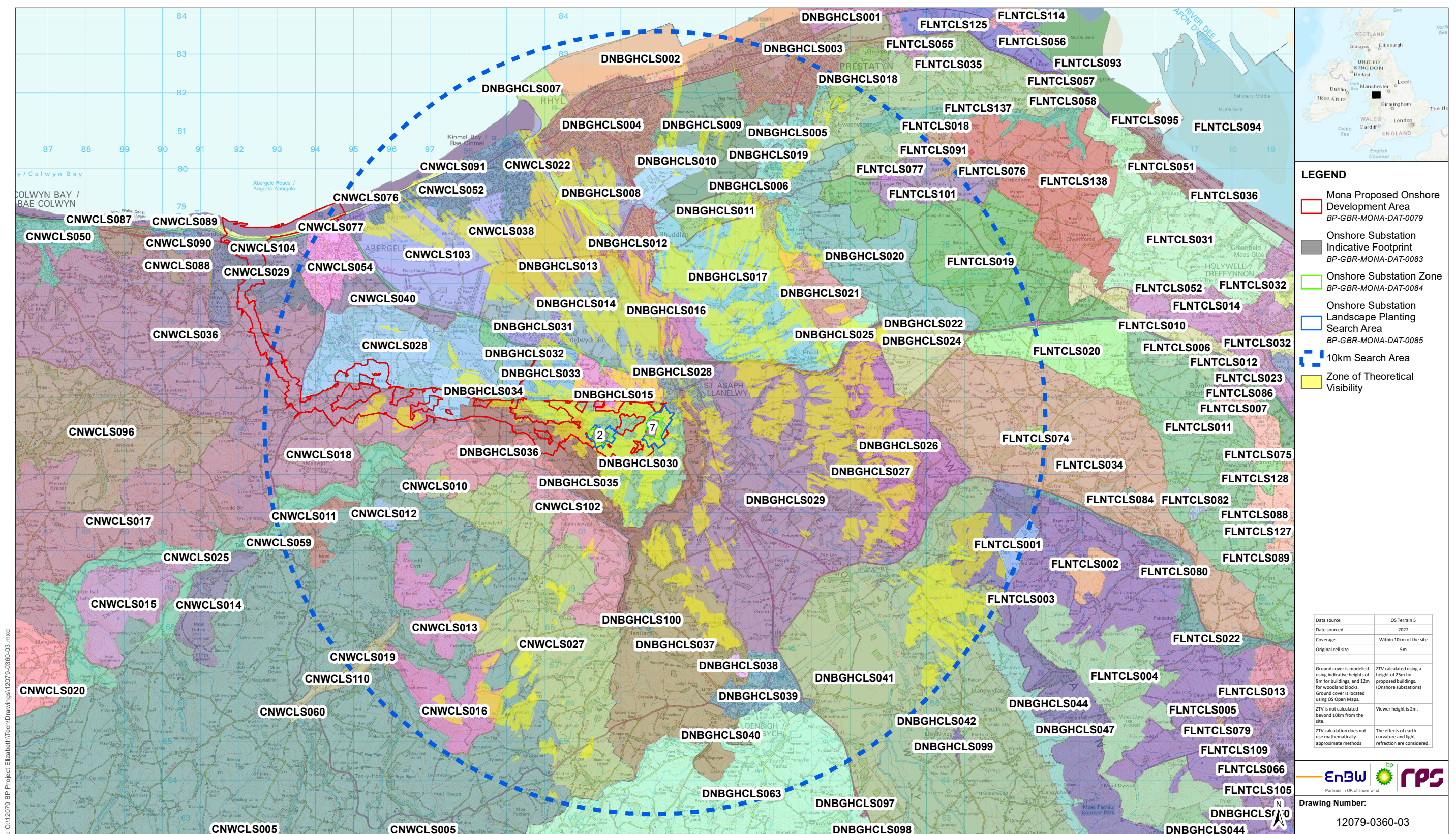
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Datum: OSGB 1936  
Projection: British National Grid  
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**Data Sources:** BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
02	13/03/23	FINAL	JM	CR

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- LEGEND**
- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
  - Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
  - Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Search Area
  - Zone of Theoretical Visibility

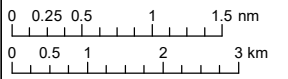
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematically approximate methods	The effects of earth curvature and light refraction are considered.

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Drawing Number: 12079-0360-03

Project Name: MONA OFFSHORE WIND PROJECT

Drawing Title: LANDMAP CULTURAL LANDSCAPE SERVICES AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 7



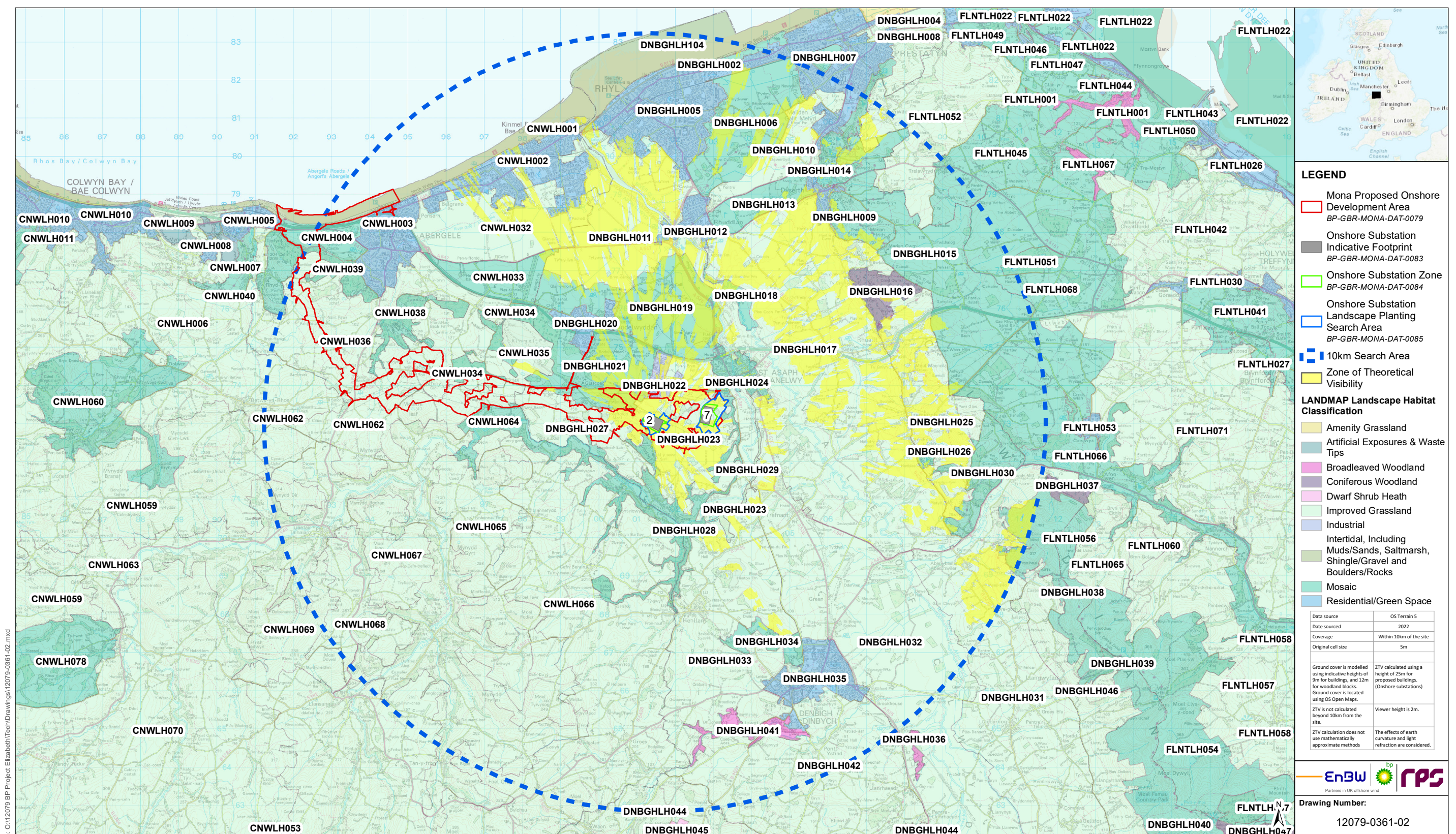
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Data Sources: BP One Map, OS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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03	20/03/23	FINAL	JM	CR





**LEGEND**

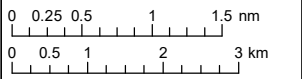
- ▭ Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
  - Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
  - Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Search Area
  - Zone of Theoretical Visibility
- LANDMAP Landscape Habitat Classification**
- Amenity Grassland
  - Artificial Exposures & Waste Tips
  - Broadleaved Woodland
  - Coniferous Woodland
  - Dwarf Shrub Heath
  - Improved Grassland
  - Industrial
  - Intertidal, Including Muds/Sands, Saltmarsh, Shingle/Gravel and Boulders/Rocks
  - Mosaic
  - Residential/Green Space

Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	The effects of earth curvature and light refraction are considered.

**Drawing Number:**  
12079-0361-02

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP LANDSCAPE HABITAT ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 2



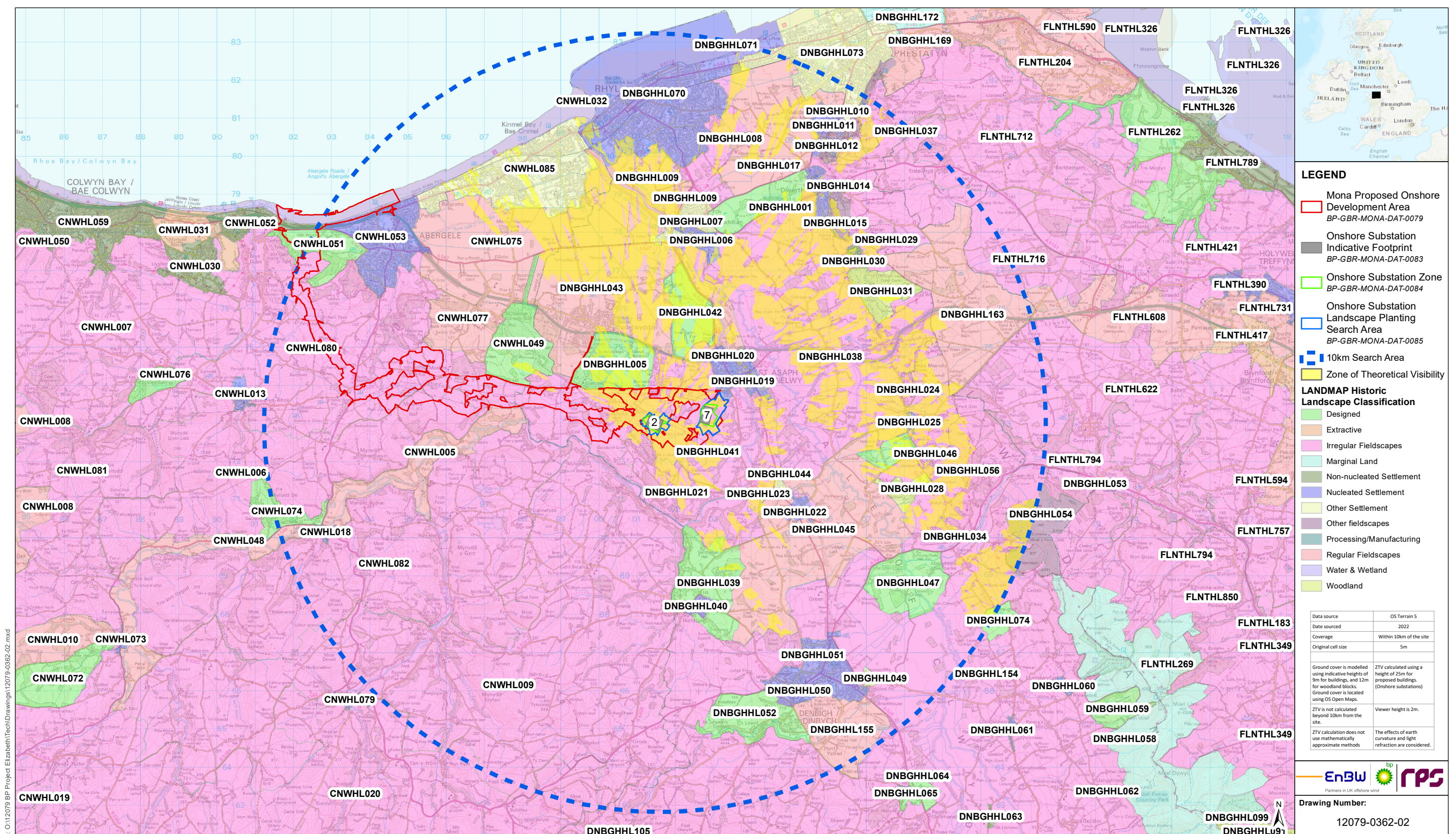
**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:100,000

**Data Sources:**BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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02	13/03/23	FINAL	JM	CR

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**LEGEND**

- Mona Proposed Onshore Development Area  
*BP-GBR-MONA-DAT-0079*
- Onshore Substation Indicative Footprint  
*BP-GBR-MONA-DAT-0083*
- Onshore Substation Zone  
*BP-GBR-MONA-DAT-0084*
- Onshore Substation Landscape Planting Search Area  
*BP-GBR-MONA-DAT-0085*
- 10km Search Area
- Zone of Theoretical Visibility
- LANDMAP Historic Landscape Classification**
- Designed
- Extractive
- Irregular Fieldsapes
- Marginal Land
- Non-nucleated Settlement
- Nucleated Settlement
- Other Settlement
- Other fieldscapes
- Processing/Manufacturing
- Regular Fieldsapes
- Water & Wetland
- Woodland

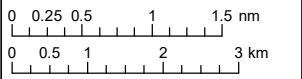
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	The effects of earth curvature and light refraction are considered.



Drawing Number:  
**12079-0362-02**

Project Name:  
**MONA OFFSHORE WIND PROJECT**

Drawing Title:  
**LANDMAP HISTORIC LANDSCAPE ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 2**



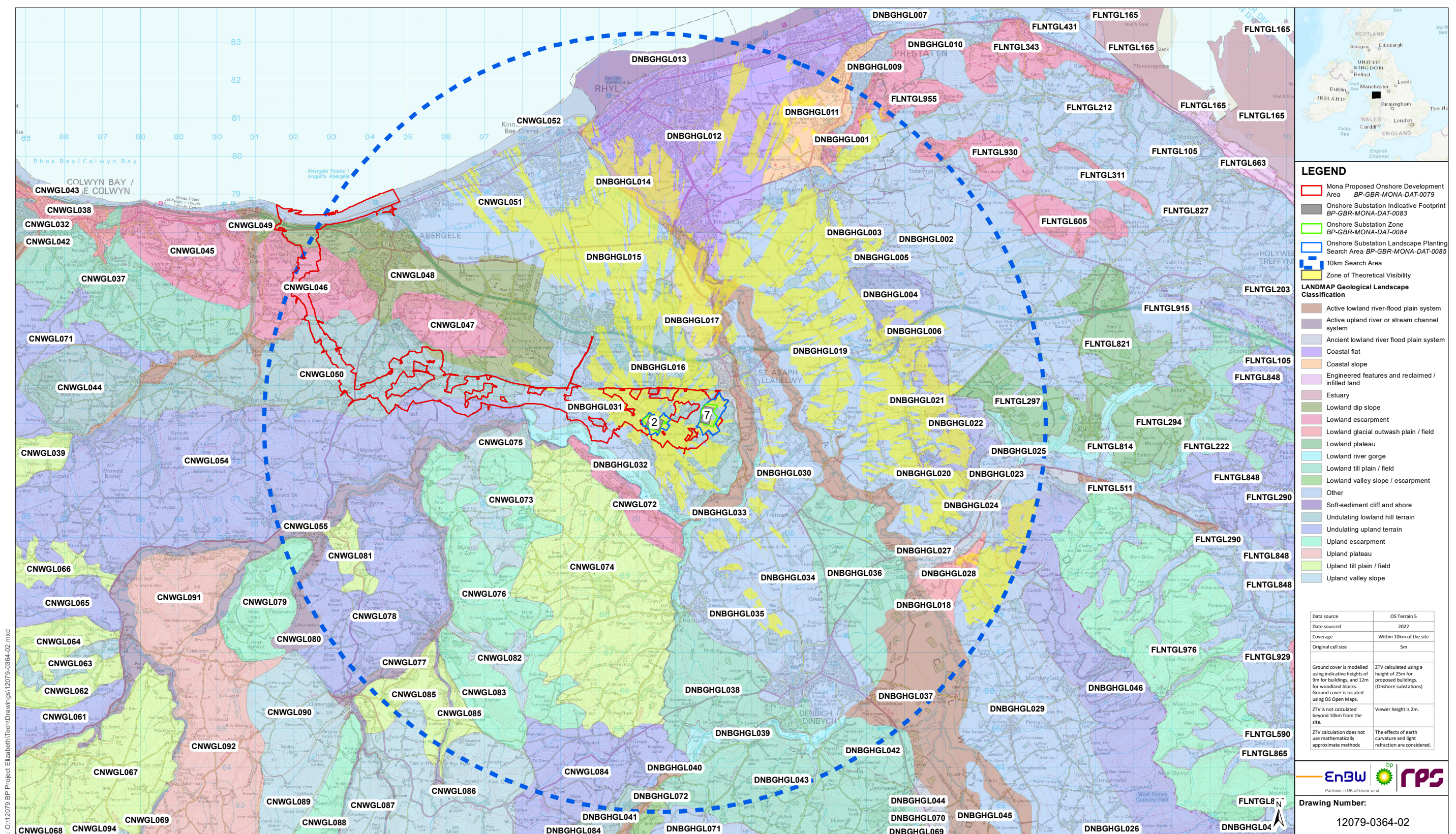
Geodetic Information:  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:100,000

Data Sources: BP One Map, OS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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02	13/03/23	FINAL	JM	CR

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**LEGEND**

- Mona Proposed Onshore Development Area BP-GBR-MONA-DAT-0079
  - Onshore Substation Indicative Footprint BP-GBR-MONA-DAT-0083
  - Onshore Substation Zone BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area BP-GBR-MONA-DAT-0085
  - 10km Search Area
  - Zone of Theoretical Visibility
- LANDMAP Geological Landscape Classification**
- Active lowland river-flood plain system
  - Active upland river or stream channel system
  - Ancient lowland river flood plain system
  - Coastal flat
  - Coastal slope
  - Engineered features and reclaimed / infilled land
  - Estuary
  - Lowland dip slope
  - Lowland escarpment
  - Lowland glacial outwash plain / field
  - Lowland plateau
  - Lowland river gorge
  - Lowland till plain / field
  - Lowland valley slope / escarpment
  - Other
  - Soft-sediment cliff and shore
  - Undulating lowland hill terrain
  - Undulating upland terrain
  - Upland escarpment
  - Upland plateau
  - Upland till plain / field
  - Upland valley slope

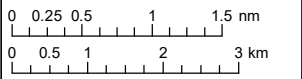
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	The effects of earth curvature and light refraction are considered.



Drawing Number: 12079-0364-02

Project Name: MONA OFFSHORE WIND PROJECT

Drawing Title: LANDMAP GEOLOGICAL LANDSCAPE ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 2



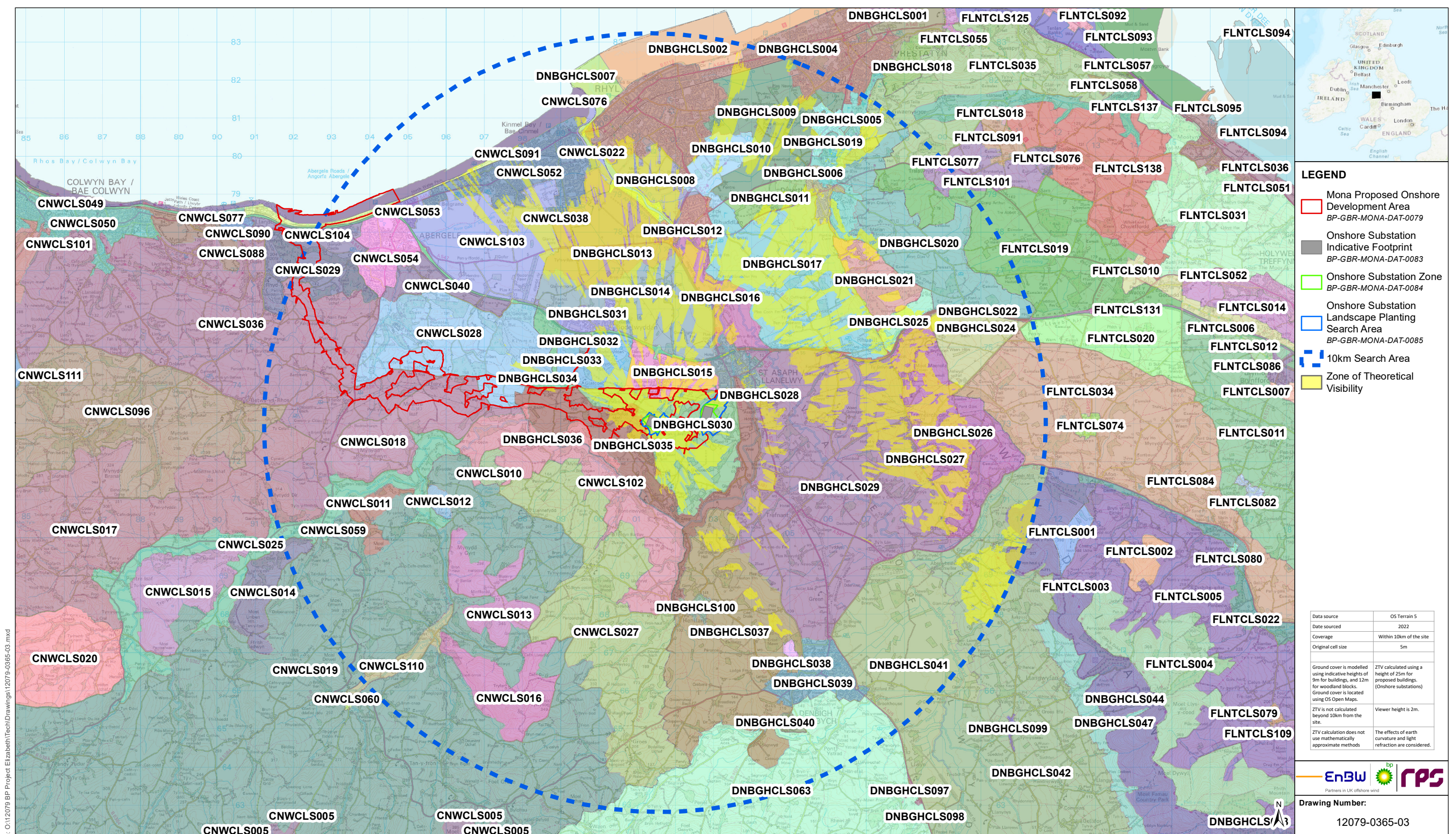
Geodetic Information:  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:100,000

Data Sources: BP One Map, OS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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02	13/03/23	FINAL	JM	CR

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- LEGEND**
- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
  - Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
  - Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Search Area
  - Zone of Theoretical Visibility

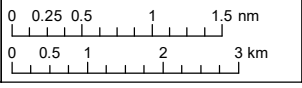
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	The effects of earth curvature and light refraction are considered.



Drawing Number:  
12079-0365-03

Project Name:  
MONA OFFSHORE WIND PROJECT

Drawing Title:  
LANDMAP CULTURAL LANDSCAPE SERVICES AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 2



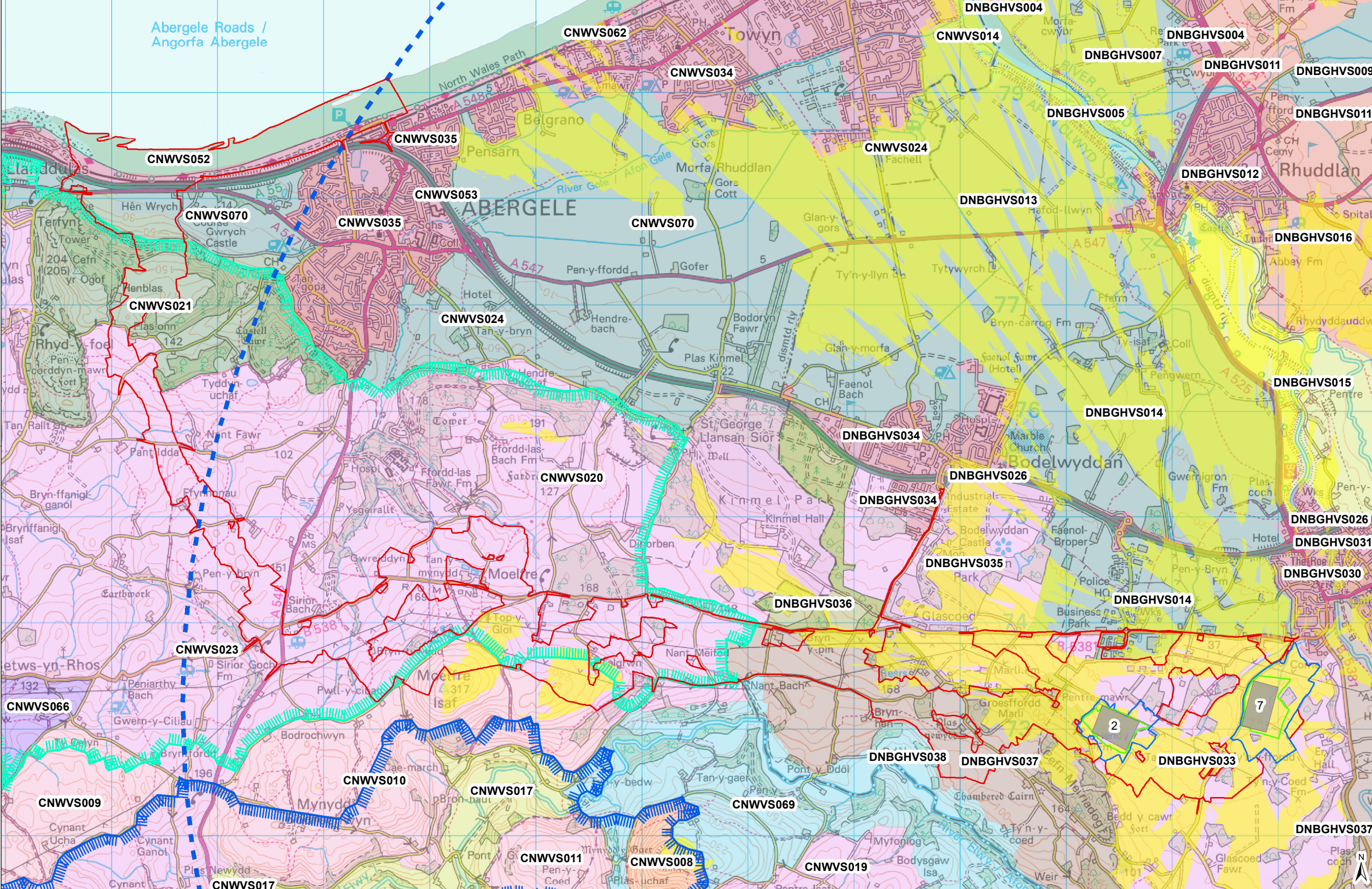
Geodetic Information:  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:100,000

Data Sources: BP One Map, OS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
03	20/03/23	FINAL	JM	CR

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**LEGEND**

- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
- Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
- Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
- Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
- 10km Search Area
- Special Landscape Areas**
- SLA 2 Rhyd Y Foel to
- SLA 3 Elwy and Aled Valleys
- Zone of Theoretical Visibility
- LANDMAP Visual Sensory by Classification**
- Estuary
- Flat Lowland Mosaic
- Flat Open Lowland Farmland
- Hill & Lower Plateau Grazing
- Hill & Lower Plateau Mosaic
- Hillside & Scarp Slopes Grazing
- Mosaic Lowland Valleys
- Mosaic Rolling Lowland
- Open Lowland Valleys
- Road Corridor
- Urban
- Wooded Hillside& Scarp Slopes
- Wooded Lowland Valleys
- Wooded Rolling Lowland

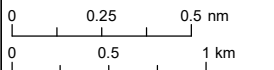
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 5m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	The effects of earth curvature and light refraction are considered.



Drawing Number:  
12079-0258-04

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP VISUAL AND SENSORY ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 7

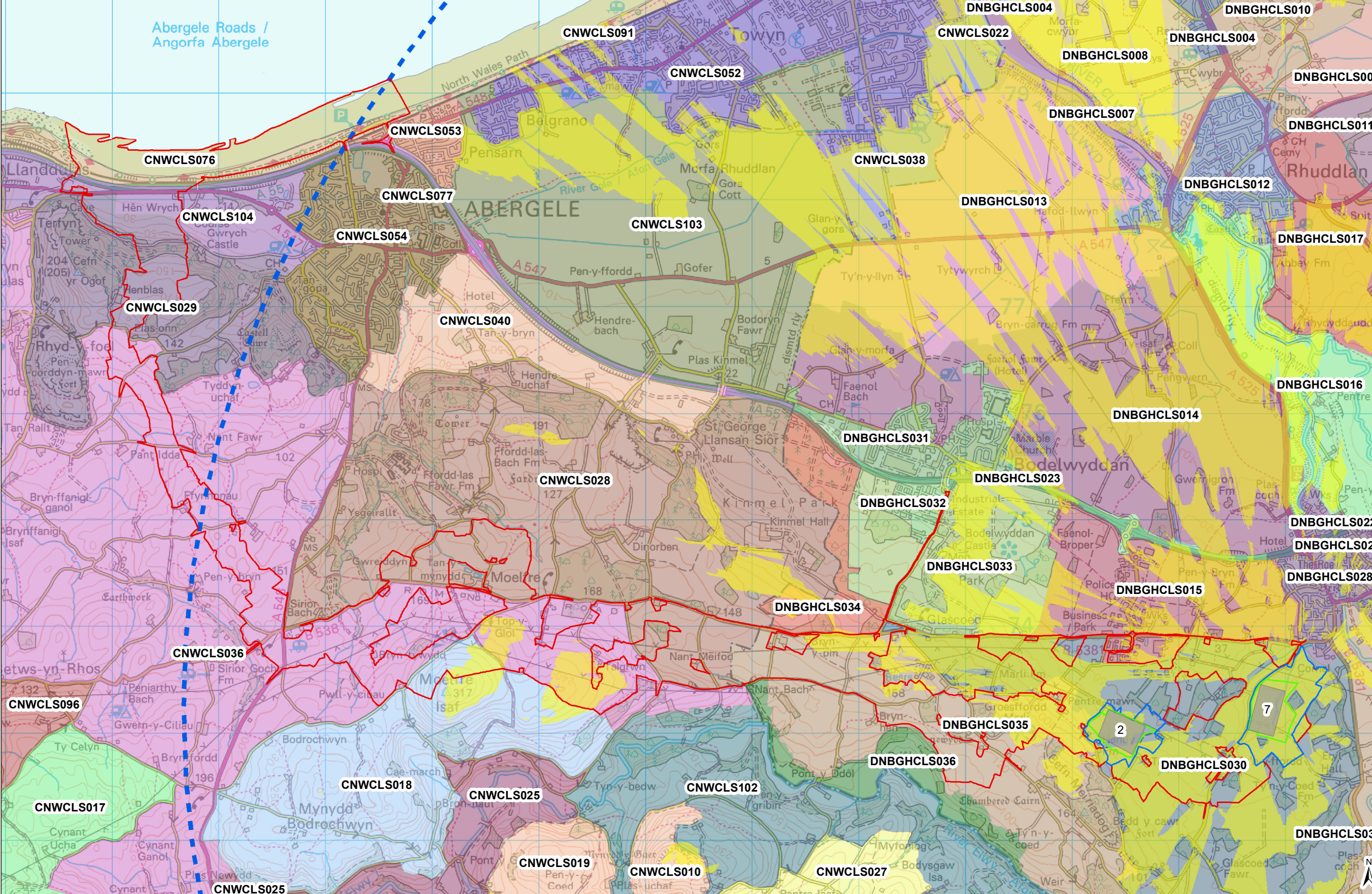


**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:39,000

**Data Sources:** BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
04	13/03/23	FINAL	JM	CR



- LEGEND**
- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
  - Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
  - Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Search Area
  - Zone of Theoretical Visibility

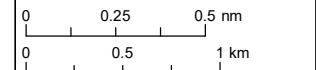
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	The effects of earth curvature and light refraction are considered.



**Drawing Number:**  
12079-0373-03

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP CULTURAL LANDSCAPE SERVICES AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 7



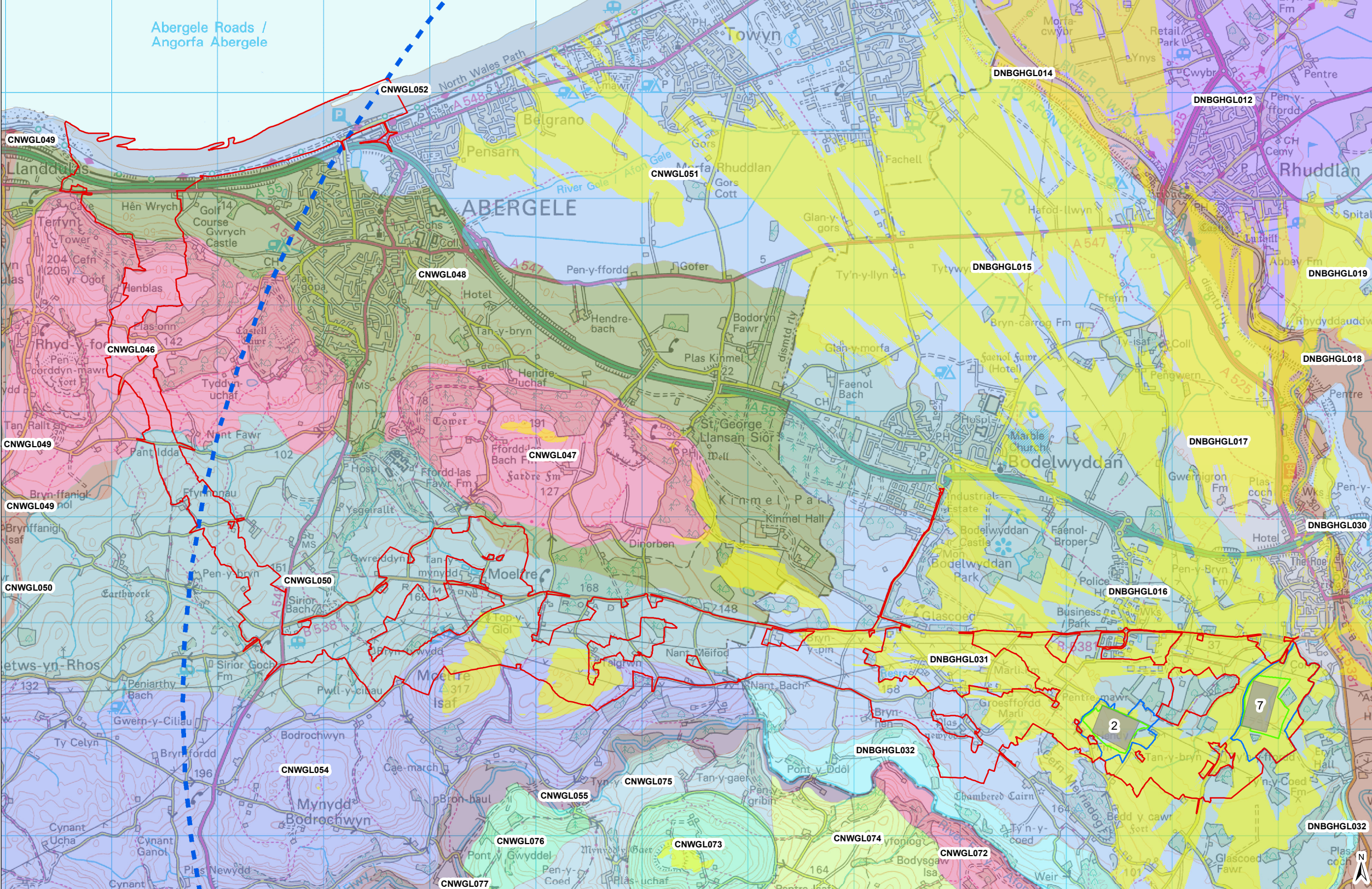
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Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:39,000

**Data Sources:**BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
02	20/03/23	FINAL	JM	CR

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**LEGEND**

- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
  - Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
  - Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Search Area
  - Zone of Theoretical Visibility
- LANDMAP Geological Landscape Classification**
- Active lowland river-flood plain system
  - Active upland river or stream channel system
  - Ancient lowland river flood plain system
  - Coastal flat
  - Estuary
  - Lowland dip slope
  - Lowland escarpment
  - Lowland river gorge
  - Other
  - Undulating lowland hill terrain
  - Undulating upland terrain
  - Upland escarpment
  - Upland till plain / field
  - Upland valley slope

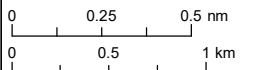
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 5m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	The effects of earth curvature and light refraction are considered.



Drawing Number:  
12079-0374-02

Project Name:  
MONA OFFSHORE WIND PROJECT

Drawing Title:  
LANDMAP GEOLOGICAL LANDSCAPE ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 7



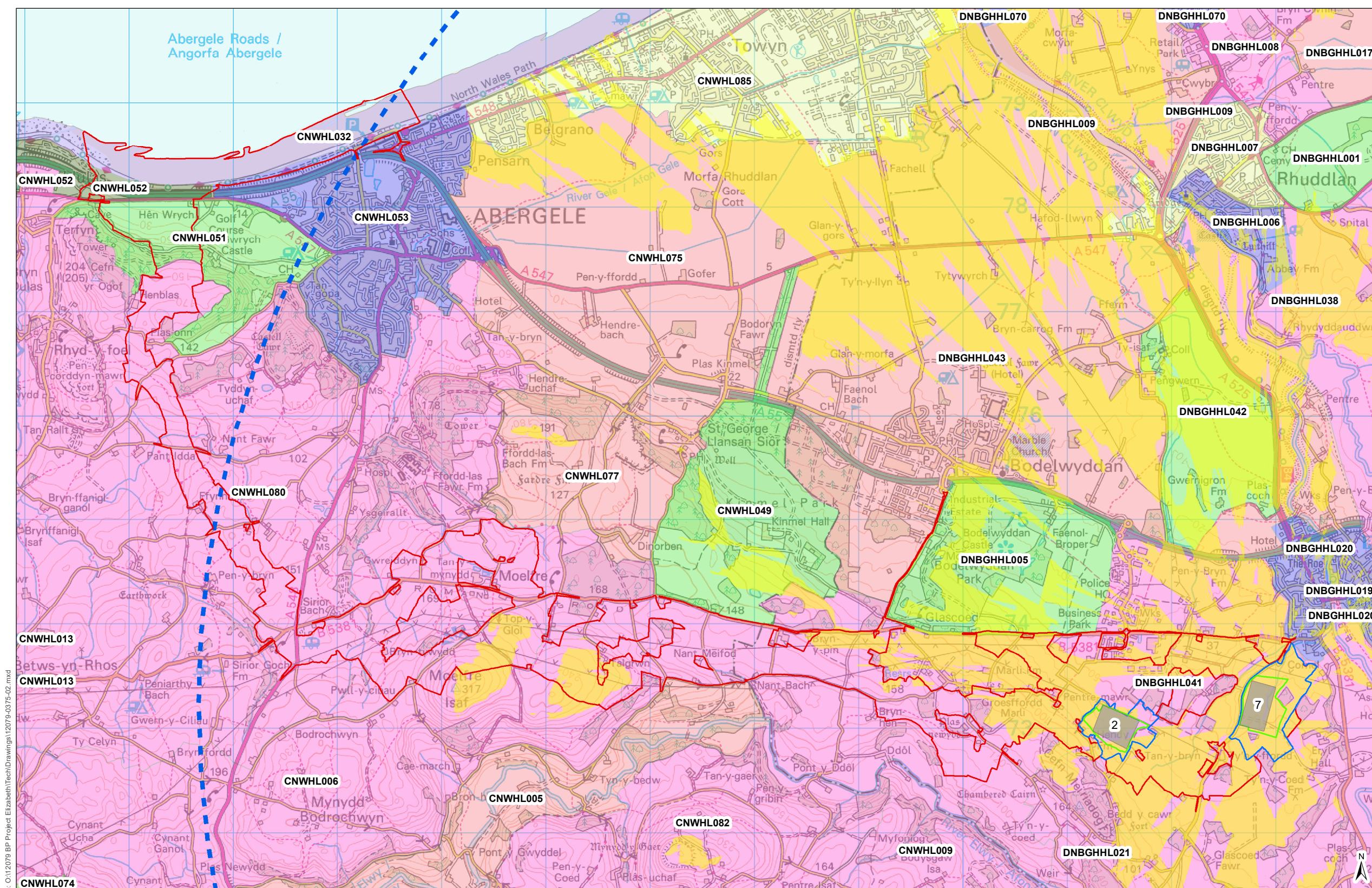
Geodetic Information:  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:39,000

Data Sources: BP One Map, OS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
02	13/03/23	FINAL	JM	CR

Document Path: C:\12079 BP Project\Elizabeth\Tech\Drawings\12079-0374-02.mxd



**LEGEND**

- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
  - Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
  - Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Search Area
  - Zone of Theoretical Visibility
- LANDMAP Historic Landscape Classification**
- Designed
  - Irregular Fieldsapes
  - Non-nucleated Settlement
  - Nucleated Settlement
  - Other Settlement
  - Regular Fieldsapes
  - Water & Wetland

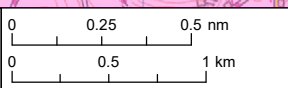
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	The effects of earth curvature and light refraction are considered.



**Drawing Number:**  
12079-0375-02

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP HISTORIC LANDSCAPE ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 7



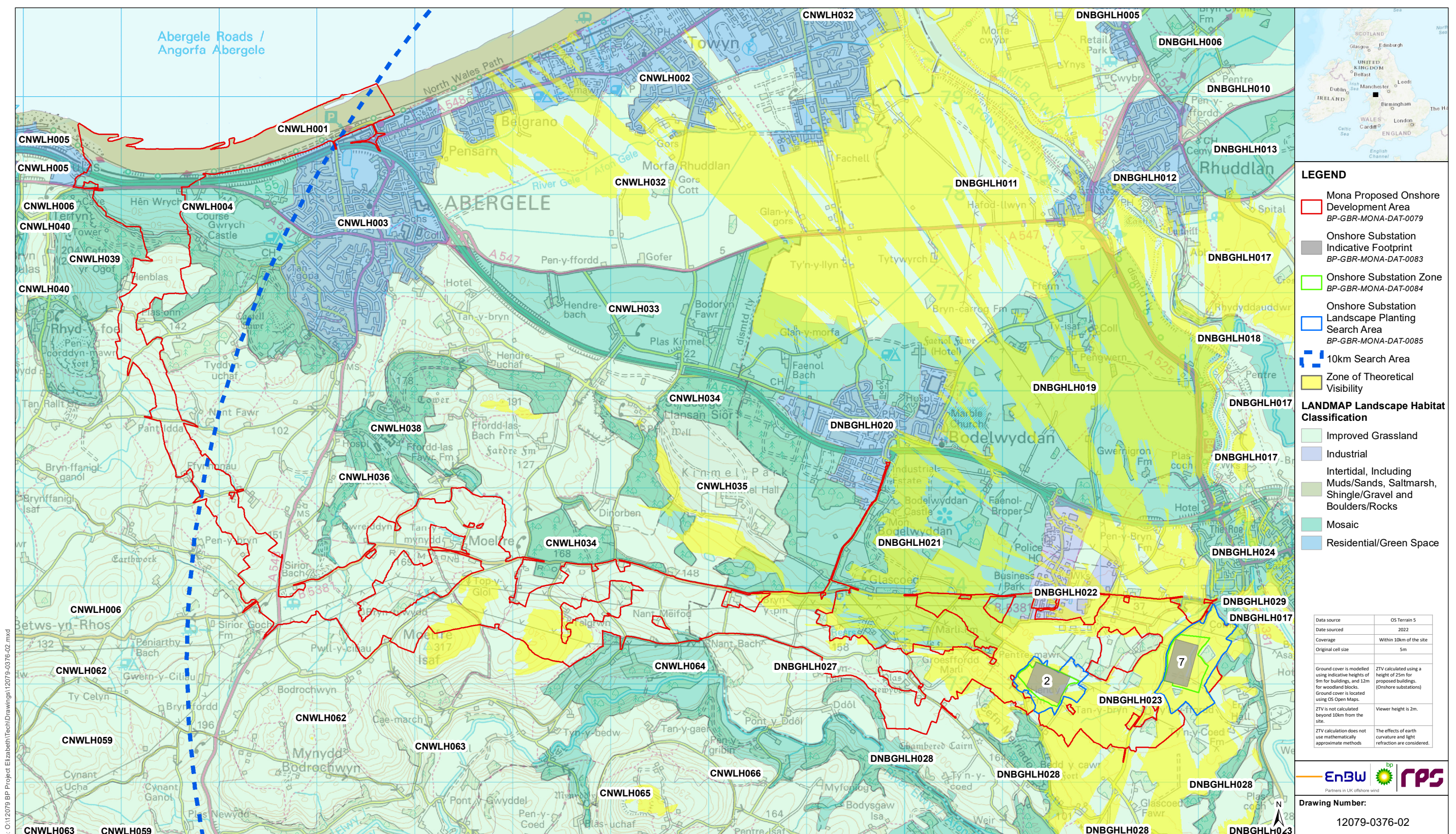
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Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:39,000

**Data Sources:** BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
02	13/03/23	FINAL	JM	CR





**LEGEND**

- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
  - Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
  - Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Search Area
  - Zone of Theoretical Visibility
- LANDMAP Landscape Habitat Classification**
- Improved Grassland
  - Industrial
  - Intertidal, Including Muds/Sands, Saltmarsh, Shingle/Gravel and Boulders/Rocks
  - Mosaic
  - Residential/Green Space

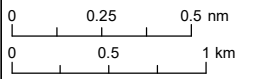
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	The effects of earth curvature and light refraction are considered.



Drawing Number:  
12079-0376-02

Project Name:  
MONA OFFSHORE WIND PROJECT

Drawing Title:  
LANDMAP LANDSCAPE HABITAT ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 7



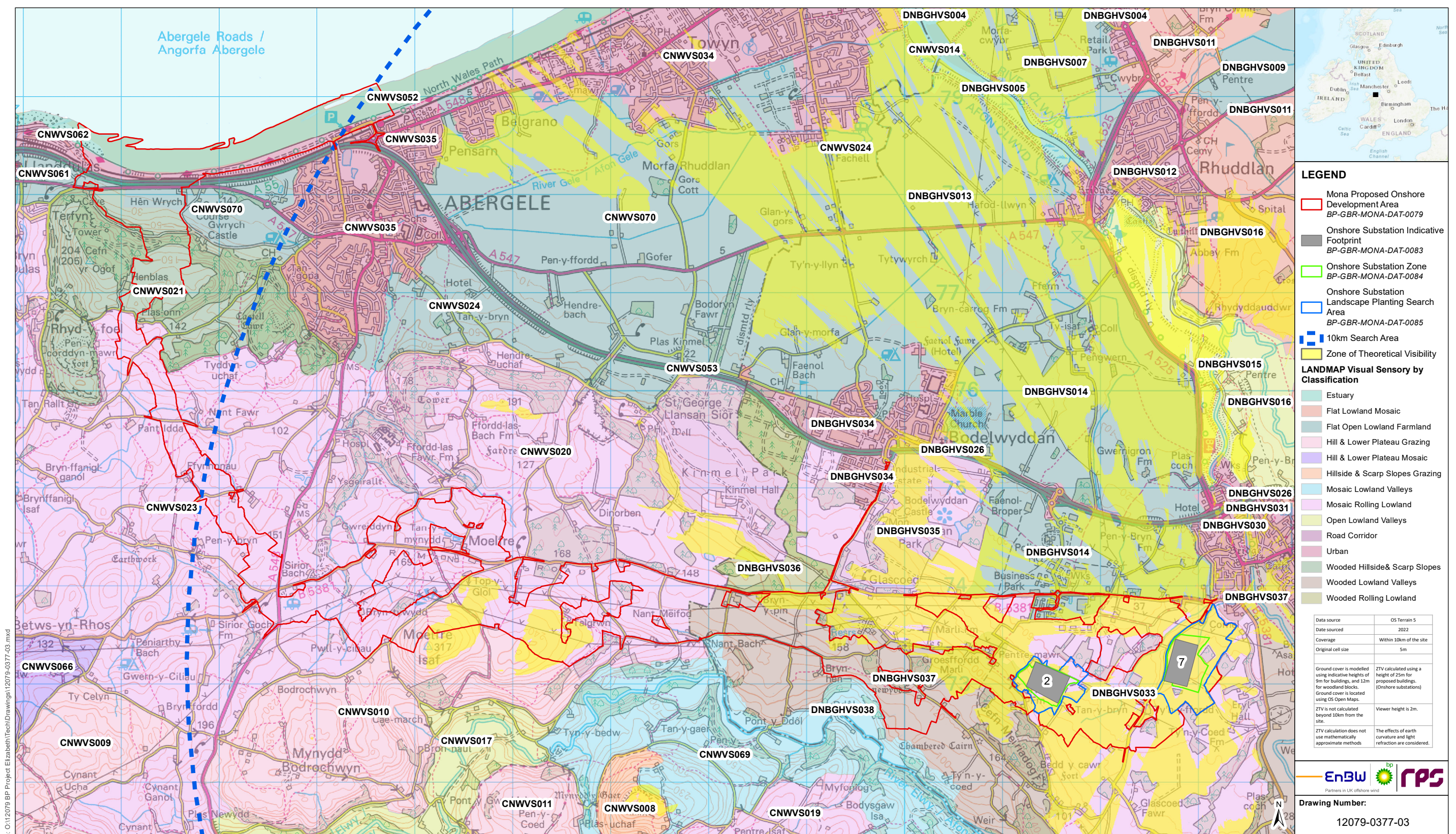
Geodetic Information:  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:39,000

Data Sources: BP One Map, OS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
02	13/03/23	FINAL	JM	CR

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**LEGEND**

- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
  - Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
  - Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Search Area
  - Zone of Theoretical Visibility
- LANDMAP Visual Sensory by Classification**
- Estuary
  - Flat Lowland Mosaic
  - Flat Open Lowland Farmland
  - Hill & Lower Plateau Grazing
  - Hill & Lower Plateau Mosaic
  - Hillside & Scarp Slopes Grazing
  - Mosaic Lowland Valleys
  - Mosaic Rolling Lowland
  - Open Lowland Valleys
  - Road Corridor
  - Urban
  - Wooded Hillside & Scarp Slopes
  - Wooded Lowland Valleys
  - Wooded Rolling Lowland

Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m

Ground cover is modelled using indicative heights of 5m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.

ZTV is not calculated beyond 10km from the site.

ZTV calculation does not use mathematically approximate methods

ZTV calculated using a height of 25m for proposed buildings (Onshore substations)

Viewer height is 2m.

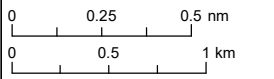
The effects of earth curvature and light refraction are considered.

Partners in UK offshore wind

**Drawing Number:** 12079-0377-03

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP VISUAL AND SENSORY ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 7

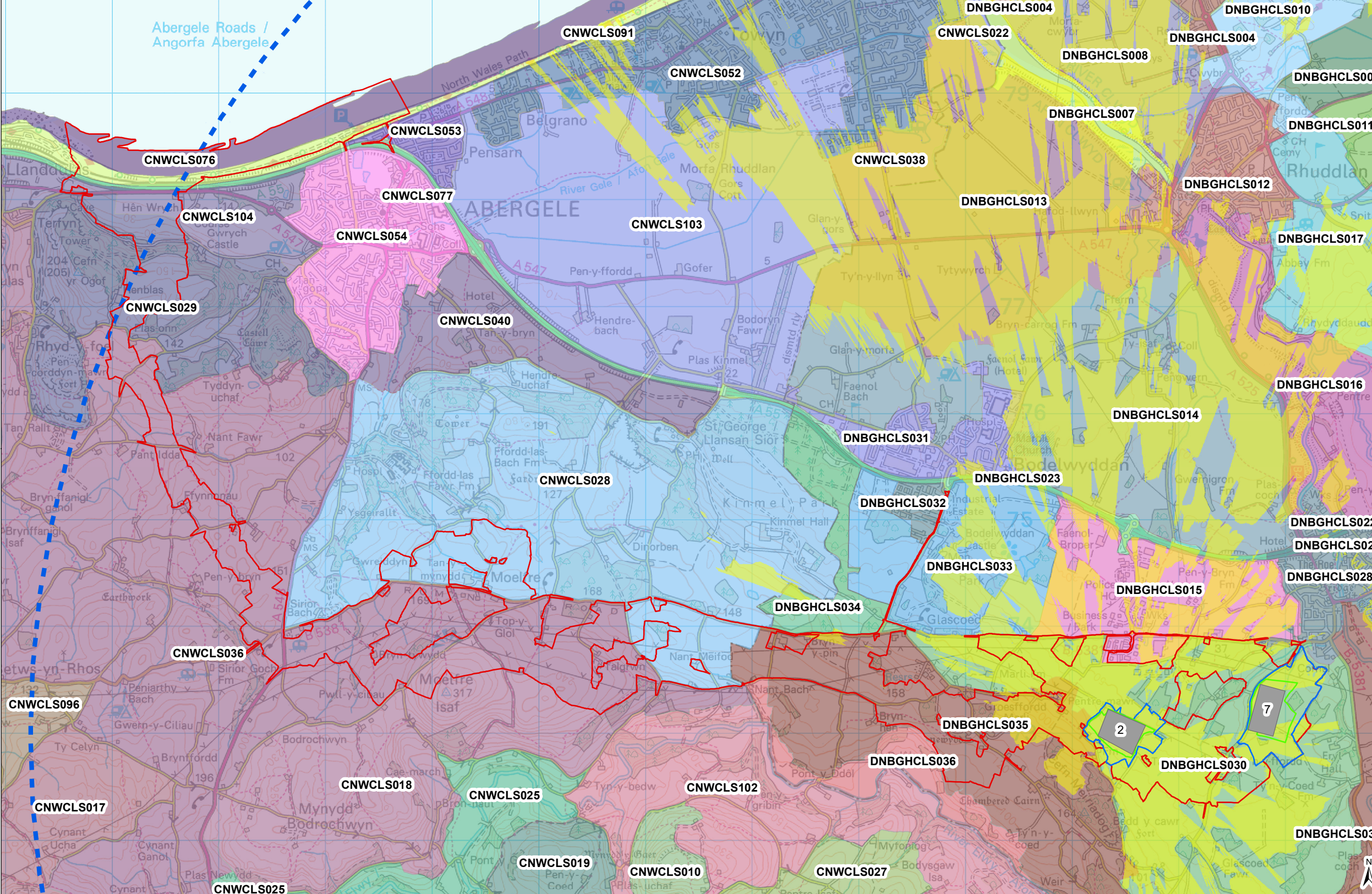


**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:39,000

**Data Sources:** BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
03	13/03/23	FINAL	JM	CR



- LEGEND**
- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
  - Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
  - Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
  - Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
  - 10km Search Area
  - Zone of Theoretical Visibility

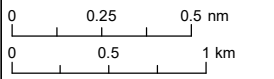
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematical approximate methods	The effects of earth curvature and light refraction are considered.

Partners in UK offshore wind

**Drawing Number:**  
12079-0378-03

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP CULTURAL LANDSCAPE SERVICES AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 2

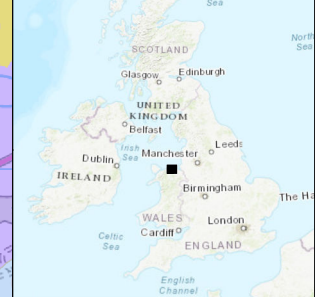
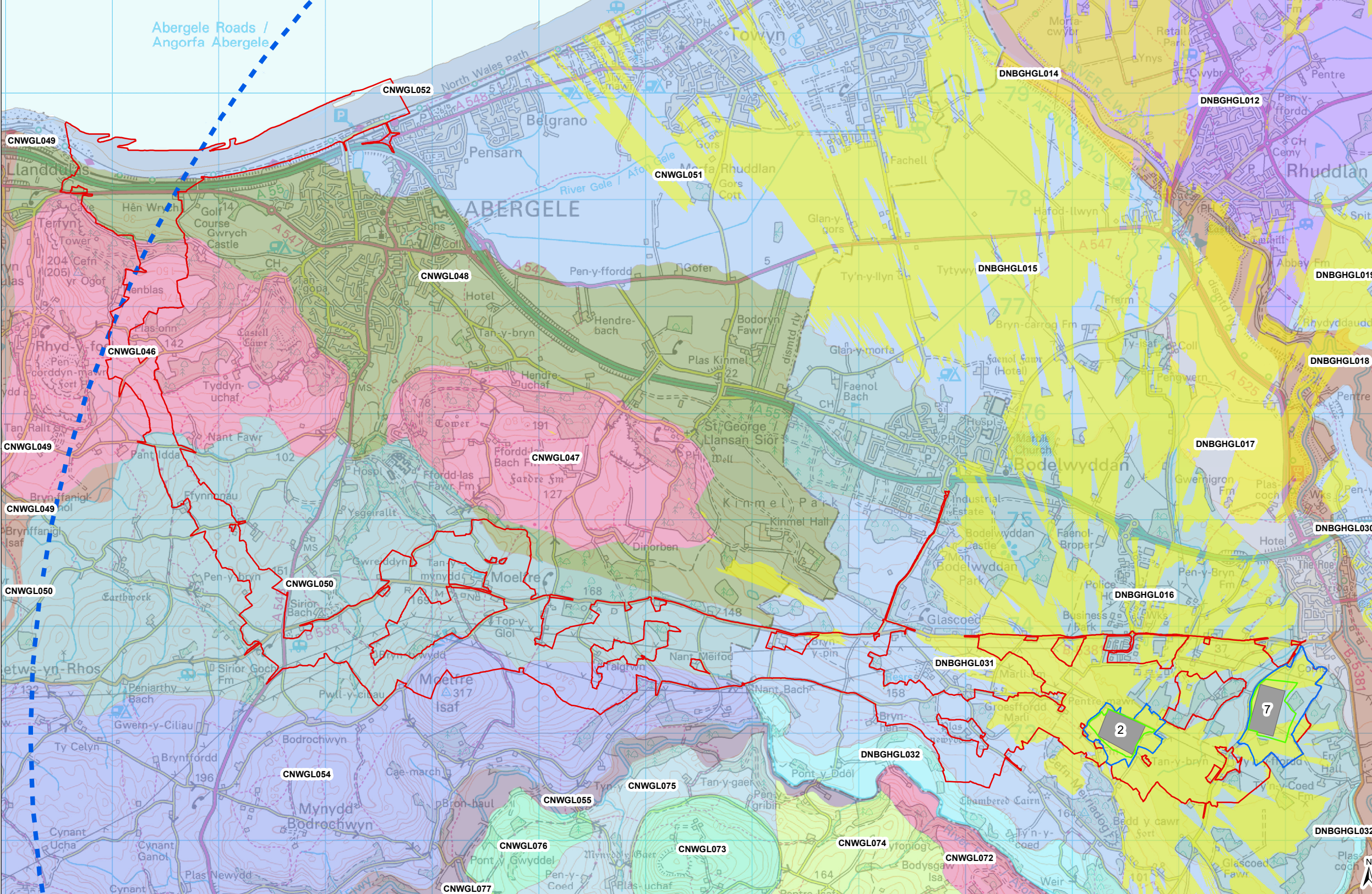


**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:39,000

**Data Sources:**BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
03	20/03/23	FINAL	JM	CR



**LEGEND**

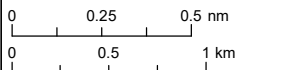
- Mona Proposed Onshore Development Area  
BP-GBR-MONA-DAT-0079
- Onshore Substation Indicative Footprint  
BP-GBR-MONA-DAT-0083
- Onshore Substation Zone  
BP-GBR-MONA-DAT-0084
- Onshore Substation Landscape Planting Search Area  
BP-GBR-MONA-DAT-0085
- 10km Search Area
- Zone of Theoretical Visibility
- LANDMAP Geological Landscape Classification**
- Active lowland river-flood plain system
- Active upland river or stream channel system
- Ancient lowland river flood plain system
- Coastal flat
- Estuary
- Lowland dip slope
- Lowland escarpment
- Lowland river gorge
- Other
- Undulating lowland hill terrain
- Undulating upland terrain
- Upland escarpment
- Upland till plain / field
- Upland valley slope

Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematically approximate methods	The effects of earth curvature and light refraction are considered.

**Drawing Number:**  
12079-0379-02

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP GEOLOGICAL LANDSCAPE ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 2



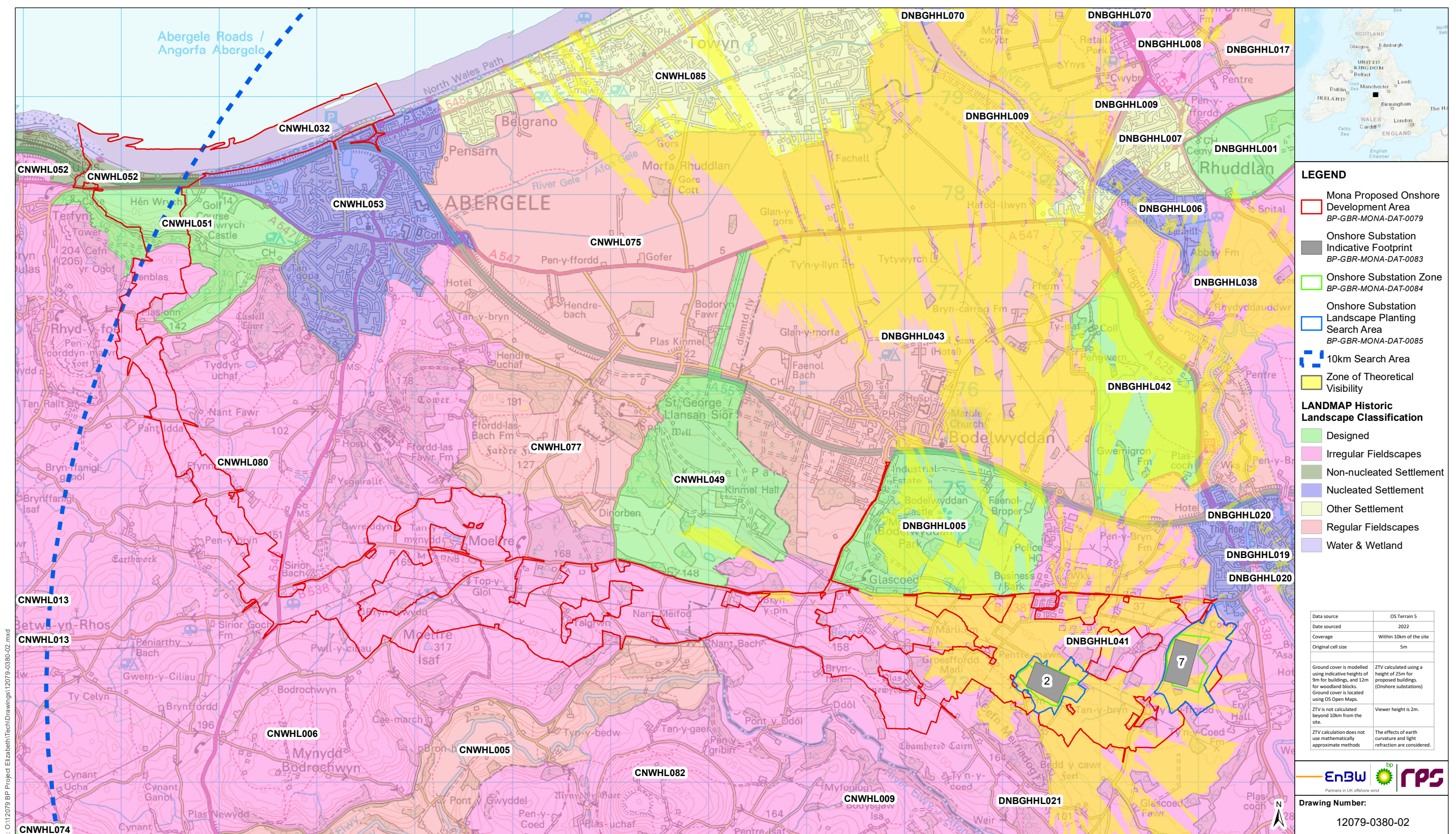
**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:39,000

**Data Sources:** BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
02	13/03/23	FINAL	JM	CR

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**LEGEND**

- Mona Proposed Onshore Development Area  
*BP-GBR-MONA-DAT-0079*
  - Onshore Substation Indicative Footprint  
*BP-GBR-MONA-DAT-0083*
  - Onshore Substation Zone  
*BP-GBR-MONA-DAT-0084*
  - Onshore Substation Landscape Planting Search Area  
*BP-GBR-MONA-DAT-0085*
  - 10km Search Area
  - Zone of Theoretical Visibility
- LANDMAP Historic Landscape Classification**
- Designed
  - Irregular Fieldsapes
  - Non-nucleated Settlement
  - Nucleated Settlement
  - Other Settlement
  - Regular Fieldsapes
  - Water & Wetland

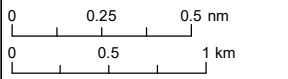
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematically approximate methods	The effects of earth curvature and light refraction are considered.



**Drawing Number:**  
12079-0380-02

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP HISTORIC LANDSCAPE ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 2

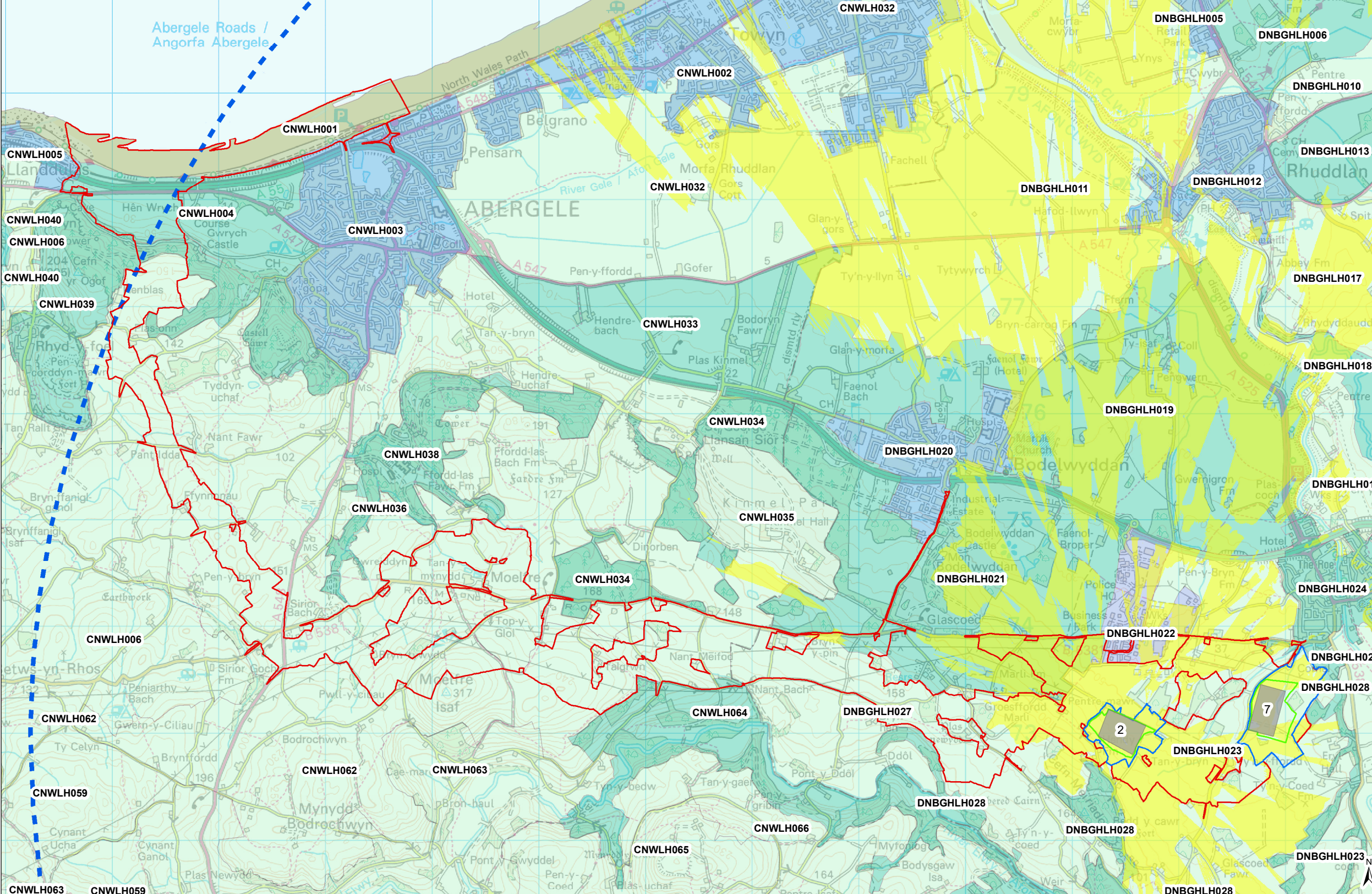


**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:39,000

**Data Sources:**BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
02	13/03/23	FINAL	JM	CR



**LEGEND**

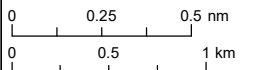
- Mona Proposed Onshore Development Area  
*BP-GBR-MONA-DAT-0079*
  - Onshore Substation Indicative Footprint  
*BP-GBR-MONA-DAT-0083*
  - Onshore Substation Zone  
*BP-GBR-MONA-DAT-0084*
  - Onshore Substation Landscape Planting Search Area  
*BP-GBR-MONA-DAT-0085*
  - 10km Search Area
  - Zone of Theoretical Visibility
- LANDMAP Landscape Habitat Classification**
- Improved Grassland
  - Industrial
  - Intertidal, Including Muds/Sands, Saltmarsh, Shingle/Gravel and Boulders/Rocks
  - Mosaic
  - Residential/Green Space

Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematically approximate methods	The effects of earth curvature and light refraction are considered.

**Drawing Number:**  
12079-0381-02

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP LANDSCAPE HABITAT ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 2



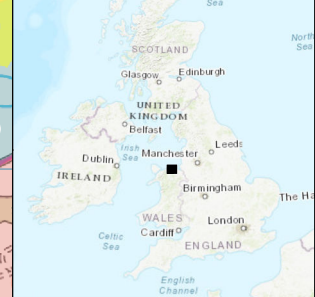
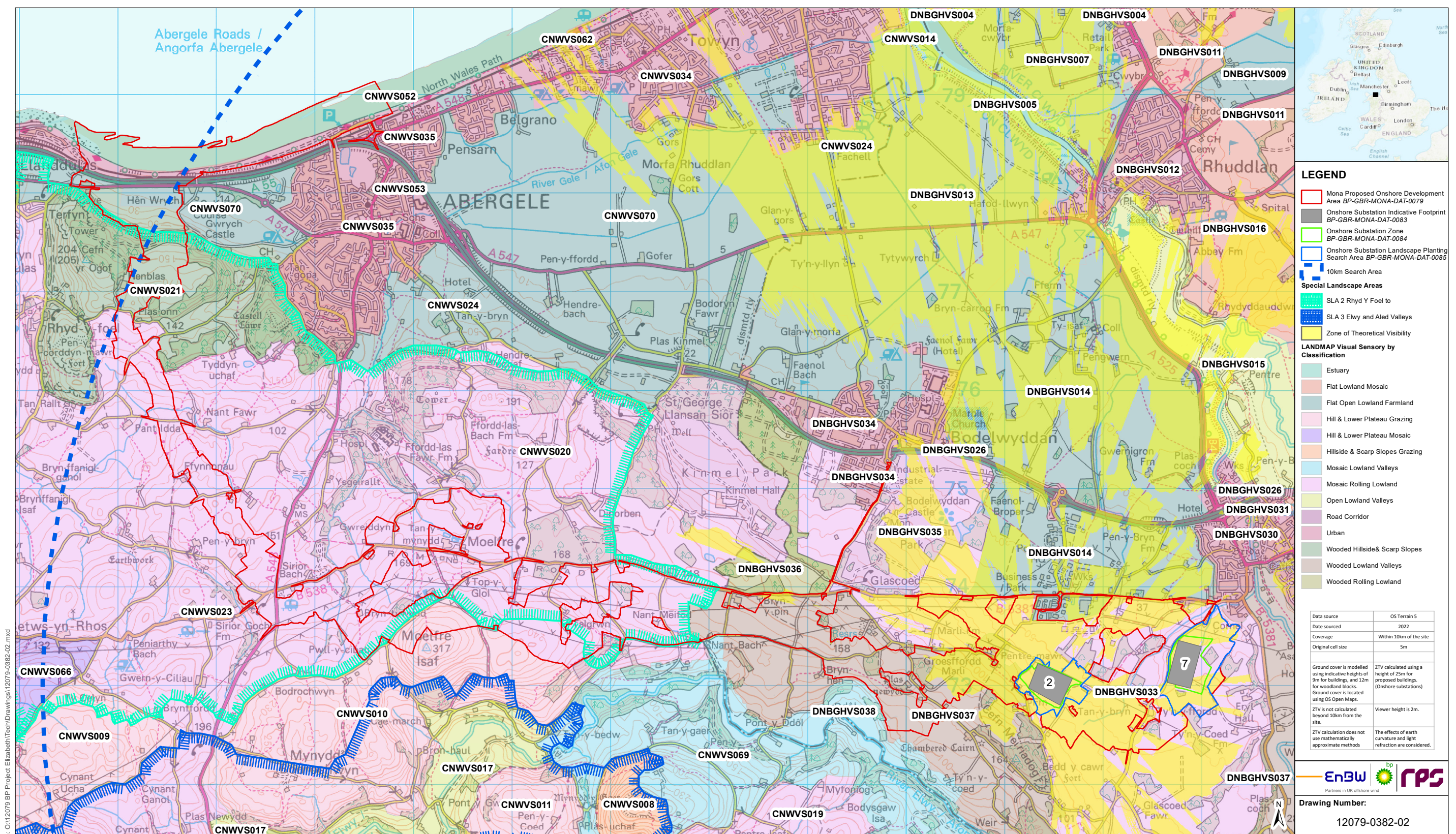
**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:39,000

**Data Sources:** BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
02	13/03/23	FINAL	JM	CR

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**LEGEND**

- Mona Proposed Onshore Development Area BP-GBR-MONA-DAT-0079
- Onshore Substation Indicative Footprint BP-GBR-MONA-DAT-0083
- Onshore Substation Zone BP-GBR-MONA-DAT-0084
- Onshore Substation Landscape Planting Search Area BP-GBR-MONA-DAT-0085
- 10km Search Area
- Special Landscape Areas**
- SLA 2 Rhyd Y Foel to
- SLA 3 Elwy and Aled Valleys
- Zone of Theoretical Visibility
- LANDMAP Visual Sensory by Classification**
- Estuary
- Flat Lowland Mosaic
- Flat Open Lowland Farmland
- Hill & Lower Plateau Grazing
- Hill & Lower Plateau Mosaic
- Hillside & Scarp Slopes Grazing
- Mosaic Lowland Valleys
- Mosaic Rolling Lowland
- Open Lowland Valleys
- Road Corridor
- Urban
- Wooded Hillside & Scarp Slopes
- Wooded Lowland Valleys
- Wooded Rolling Lowland

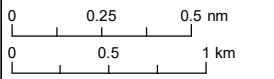
Data source	OS Terrain 5
Date sourced	2022
Coverage	Within 10km of the site
Original cell size	5m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 25m for proposed buildings. (Onshore substations)
ZTV is not calculated beyond 10km from the site.	Viewer height is 2m.
ZTV calculation does not use mathematically approximate methods	The effects of earth curvature and light refraction are considered.

Partners in UK offshore wind

**Drawing Number:** 12079-0382-02

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP VISUAL AND SENSORY ASPECT AREAS IN RELATION TO ZONE OF THEORETICAL VISIBILITY FOR SUBSTATION OPTION 2

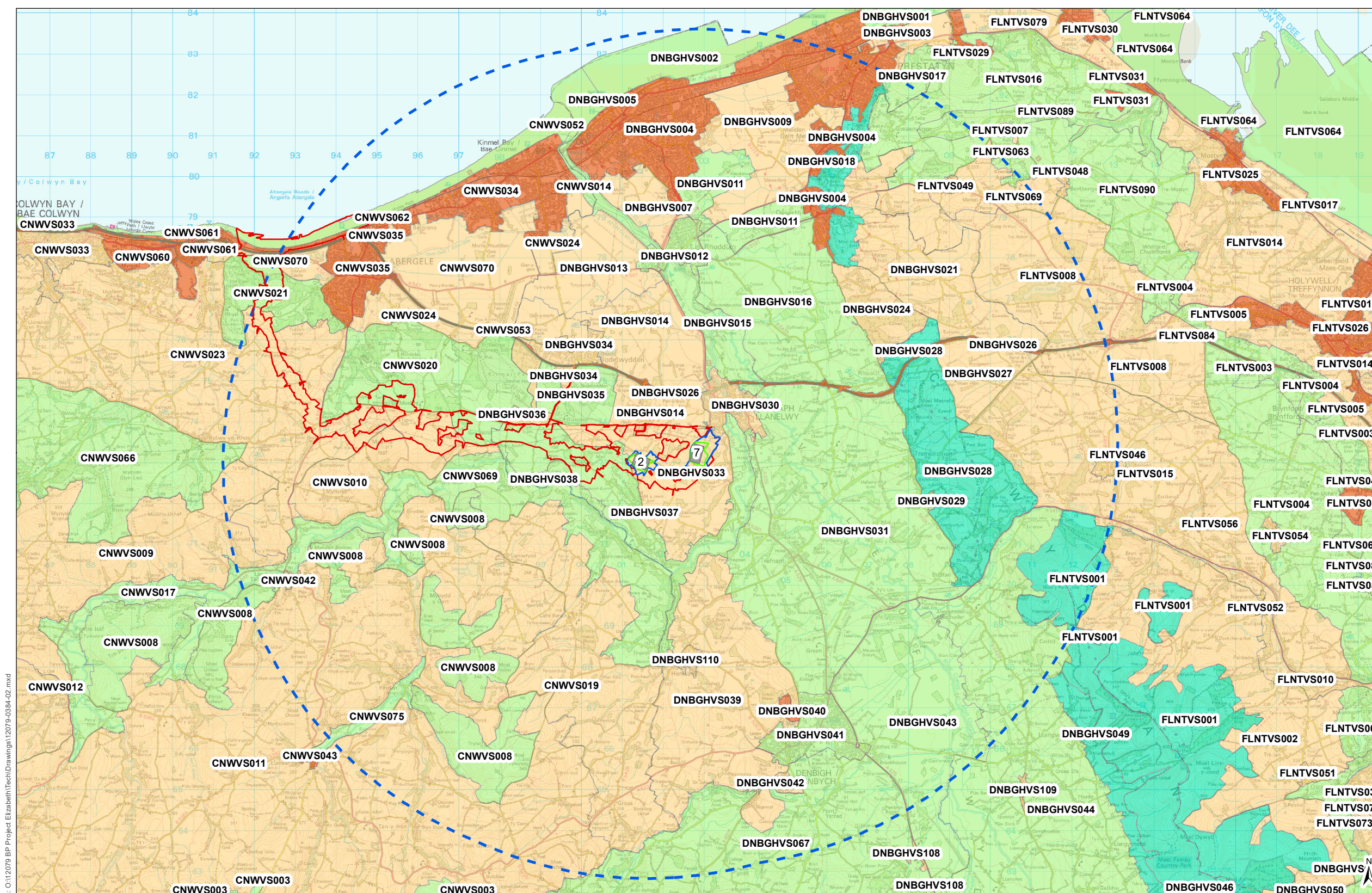


**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:39,000

**Data Sources:** BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

VER	DATE	DETAILS	BY	CHECK
02	13/03/23	FINAL	JM	CR

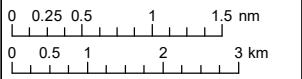


**LEGEND**

- Mona Proposed Onshore Development Area  
*BP-GBR-MONA-DAT-0079*
  - Onshore Substation Indicative Footprint  
*BP-GBR-MONA-DAT-0083*
  - Onshore Substation Zone  
*BP-GBR-MONA-DAT-0084*
  - Onshore Substation Landscape Planting Search Area  
*BP-GBR-MONA-DAT-0085*
  - 10km Study Area
- LANDMAP Visual Sensory Evaluation**
- Outstanding
  - High
  - Moderate
  - Low

Project Name:  
MONA OFFSHORE WIND PROJECT

Drawing Title:  
LANDMAP VISUAL AND SENSORY ASPECT AREA OVERALL EVALUATION IN CONTEXT OF SUBSTATION OPTIONS



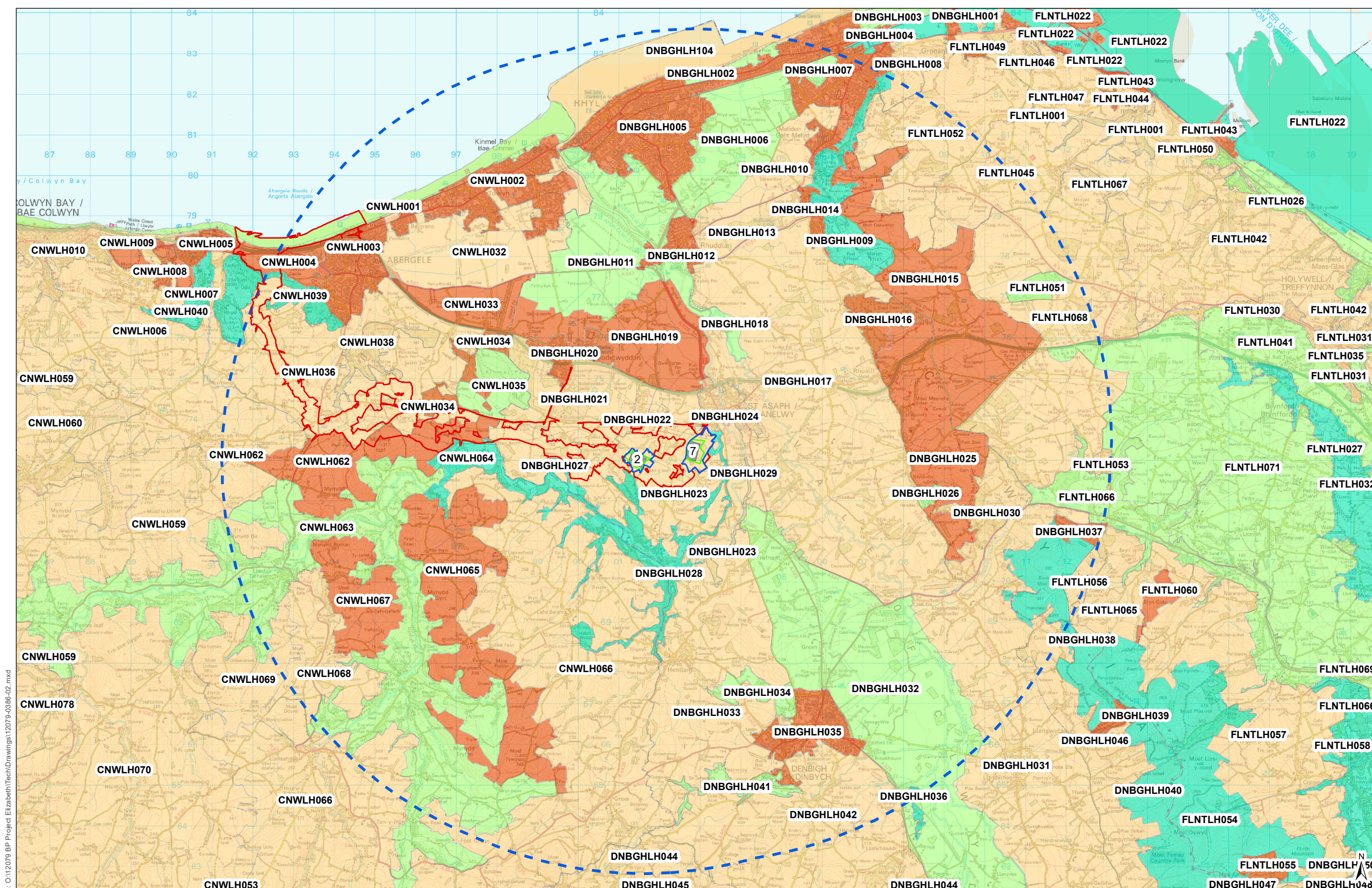
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Datum: OSGB 1936  
Projection: British National Grid  
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Data Sources: BP One Map, OS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Drawing Number: 12079-0384-02				
VER	DATE	DETAILS	BY	CHECK
02	15/03/23	FINAL	JM	CR





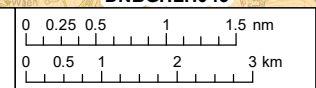
**LEGEND**

- Mona Proposed Onshore Development Area  
*BP-GBR-MONA-DAT-0079*
  - Onshore Substation Indicative Footprint  
*BP-GBR-MONA-DAT-0083*
  - Onshore Substation Zone  
*BP-GBR-MONA-DAT-0084*
  - Onshore Substation Landscape Planting Search Area  
*BP-GBR-MONA-DAT-0085*
  - 10km Study Area
- LANDMAP Landscape Habitat Evaluation**
- Outstanding
  - High
  - Moderate
  - Low

**Drawing Number:**  
12079-0386-02

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP LANDSCAPE HABITATS ASPECT AREA OVERALL EVALUATION IN CONTEXT OF SUBSTATION OPTIONS

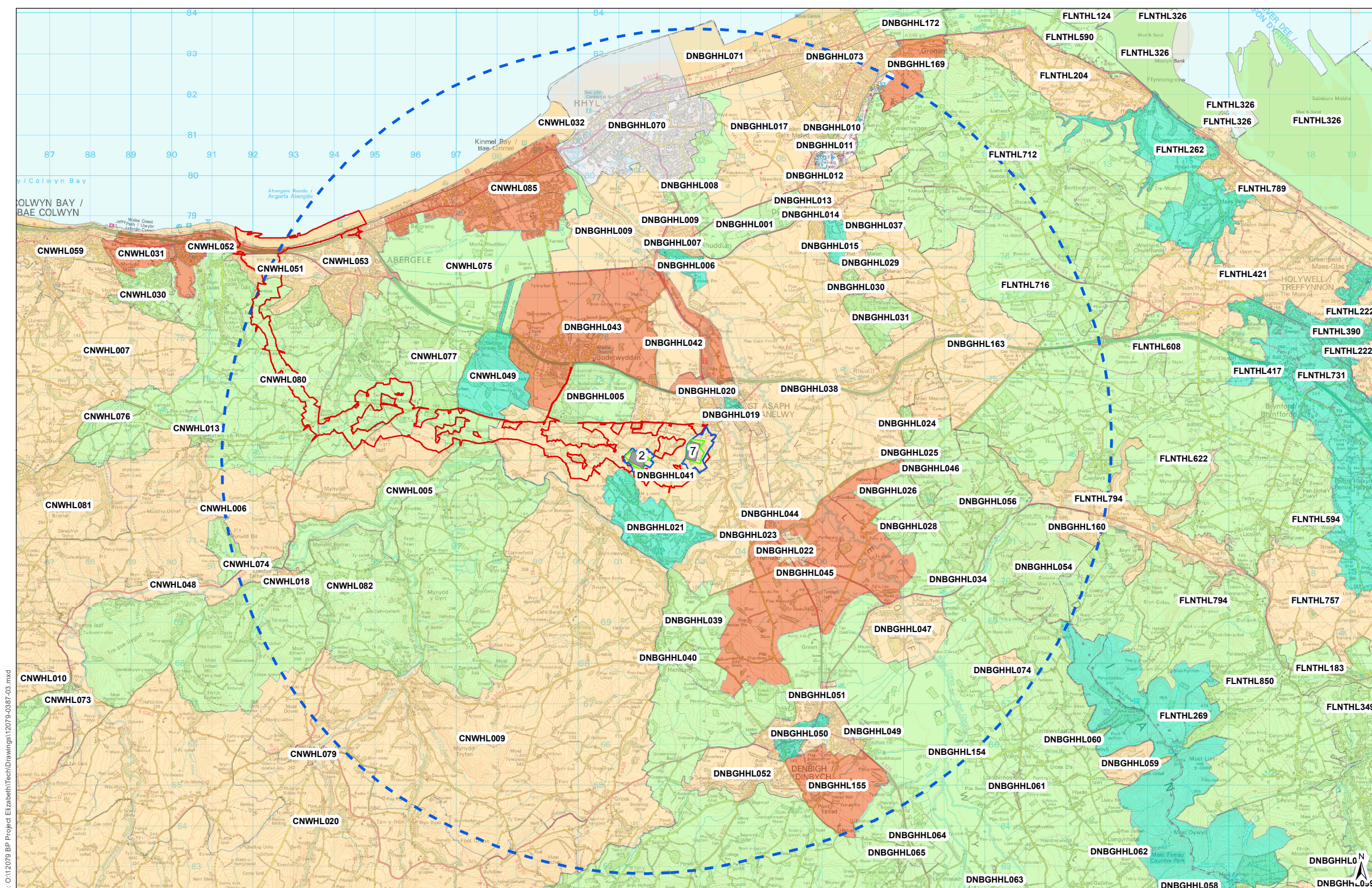


**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:100,000

**Data Sources:** BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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02	15/03/23	FINAL	JM	CR



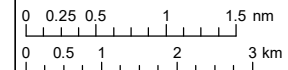
**LEGEND**

- Mona Proposed Onshore Development Area  
*BP-GBR-MONA-DAT-0079*
  - Onshore Substation Indicative Footprint  
*BP-GBR-MONA-DAT-0083*
  - Onshore Substation Zone  
*BP-GBR-MONA-DAT-0084*
  - Onshore Substation Landscape Planting Search Area  
*BP-GBR-MONA-DAT-0085*
  - 10km Study Area
- LANDMAP Historic Landscape Evaluation**
- Outstanding
  - High
  - Moderate
  - Low
  - Unassessed

Document Path: C:\12079 BP Project\Elizabeth\Tech\Drawings\12079-0387-03.mxd

**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP HISTORIC LANDSCAPE ASPECT AREA OVERALL EVALUATION IN CONTEXT OF SUBSTATION OPTIONS



**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:100,000

**Data Sources:** BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

**Drawing Number:**  
12079-0387-03

VER	DATE	DETAILS	BY	CHECK
03	13/03/23	FINAL	JM	CR





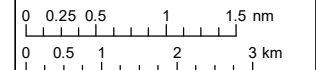
**LEGEND**

- Mona Proposed Onshore Development Area  
*BP-GBR-MONA-DAT-0079*
  - Onshore Substation Indicative Footprint  
*BP-GBR-MONA-DAT-0083*
  - Onshore Substation Zone  
*BP-GBR-MONA-DAT-0084*
  - Onshore Substation Landscape Planting Search Area  
*BP-GBR-MONA-DAT-0085*
  - 10km Study Area
- LANDMAP Geological Landscape Evaluation**
- Outstanding
  - High
  - Moderate
  - Low

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**Project Name:**  
MONA OFFSHORE WIND PROJECT

**Drawing Title:**  
LANDMAP GEOLOGICAL LANDSCAPE ASPECT AREA OVERALL EVALUATION IN CONTEXT OF SUBSTATION OPTIONS



**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:100,000

**Data Sources:** BP One Map, OS

**Service Layer Credits:** Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

<b>Drawing Number:</b> 12079-0388-02				
<b>VER</b>	<b>DATE</b>	<b>DETAILS</b>	<b>BY</b>	<b>CHECK</b>
02	15/03/23	FINAL	JM	CR

