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Morlais Project

Proof of Evidence
Simon Myers – Seascape, Landscape and Visual Impact

Applicant: Menter Môn Morlais Limited

Document Reference: MMC439 Proof of Evidence: Simon Myers – Seascape, Landscape and Visual Impact

Author: Simon Myers, SLR Consulting Limited

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Subject of the Proof of Evidence:
Seascape, landscape and visual impact assessment of the Morlais tidal energy development.

Prepared by:
Simon Myers, Associate Landscape Architect, SLR Consulting Ltd.

Proposed Development:
The Project comprises the offshore and onshore elements of the proposed development. The offshore components of the Project include tidal energy devices with a maximum installed capacity of 240 MW. The seascape, landscape and visual impact assessment (SLVIA) for the offshore elements of the proposed development is based on a design envelope which includes a combination of floating and submerged tidal energy devices, reflecting the range of technologies that are currently available, surface emergent electrical hubs, monitoring platforms, export cables and navigation marks (including cardinal and special marker buoys). The onshore elements of the Project comprise the export cables, transition pits/bays and onshore buried cables, Landfall Substation, Switchgear Building and Grid Connection Substation.

Location:
The offshore elements of the proposed development are positioned within the Morlais Demonstration Zone (MDZ), within the Irish Sea. The MDZ lies between approximately 500 m and 1.5 km from the closest part of the west coast of Holy Island, Anglesey. The landfall cable would be routed to the coastline at Abraham's Bosom and the onshore elements of the Project would be located between this point and the grid connection location at the Orthios site. The Landfall Substation would be located adjacent to South Stack Road to the east of Tŷ-mawr Farm, the Switchgear Building would be located at Parc Cybi employment site and the Grid Connection Substation would be located at the southern end of the Orthios site at Holyhead. Drawings that show these elements of the Project are cross referenced in Section 4 of this Proof of Evidence.

Contents of the Proof of Evidence:

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1. Introduction

1.1 Name, position, qualifications

This Proof of Evidence has been prepared by Simon Myers, Associate Landscape Architect at SLR Consulting Ltd. My qualifications include Master of Landscape Planning and Management (Hons), University of Manchester, and I am an Associate Member of the Landscape Institute.

I have twenty years' experience focused on landscape and visual impact assessment, including a wide range of development projects throughout the UK. My experience covers multiple energy projects (amongst many types of development) including onshore and offshore wind, wave and tidal energy, together with gas fired power stations, energy from waste projects and energy transmission projects. I have provided expert witness support at public inquiry or similar processes for proposed developments, preparation of written representations for appeals and have provided representations at a DCO examination.

This Proof of Evidence represents my true and professional opinion, based on my knowledge and experience in accordance with the guidance of my professional institute.

1.2 Involvement with the Project

I have been involved in the Project since March 2019. I prepared the seascape, landscape and visual impact assessment. I prepared post application responses in 2020. I attended and presented at five Technical Working Group meetings with Mentor Môn, Natural Resources Wales (NRW) and Isle of Anglesey County Council (IoACC). I attended four public consultation events during 2019.

1.3 Topic of evidence

Seascape, landscape and visual impact assessment.

1.4 What the proof deals with principally

The potential effects of the offshore and onshore components of the Project on seascape, landscape and visual receptors.

1.5 Any other witnesses whose evidence should be read in conjunction with this proof

This Proof of Evidence should be read in conjunction with the Proofs of Evidence concerning Planning and Energy Policy, Socio-economics and Project Characteristics.

1.6 What the evidence addresses and confirms in support of the Project

The Proof of Evidence addresses the following points:

- The extensive consultation that has been undertaken with NRW and IoACC, including post application responses;
- The approach taken to mitigate potential seascape, landscape and visual effects; and

- The predicted effects on seascape, landscape and visual receptors.

2. Key Documents in Support of Proof

The following document should be read in conjunction with this Proof of Evidence:

- MDZ/L4 and MDZ/L5 Statement of Common Ground – SLVIA
- MDZ/A28.20 Outline Landscape Management Plan
- MDZ/A25.24 Environmental Statement Volume 1 (Main Report) – Chapter 24 SLVIA
- MDZ/A26.9 Environmental Statement Volume 2 – Figures 21-1-1 to 24-4-3
- MDZ/A27.8 Environmental Statement Volume 3
  - Appendix 24.1 Method used in Assessing Seascape, Landscape and Visual Effects
  - Appendix 24.2 Seascape and Landscape Character Areas within the 15 km Study Area
  - Appendix 24.3 Viewpoint Assessment
  - Appendix 24.4 Night Time Photomontages
  - Appendix 24.5 Appraisal of 40MW Array
- MDZ/A28.19 Seascape Landscape and Visual Impact Assessment – Post Application Consultation Responses

The SLVIA draws on a wide range of published documents. The Core Documents most relevant to this Proof of Evidence comprise:

- MDZ/G1 Guidelines for Landscape and Visual Impact Assessment (GLVIA 3)
- MDZ/G2 Scottish Natural Heritage Visual Representation of Wind Farms
- MDZ/G3 Welsh Government Technical Advice Note 8 Planning for Renewable Energy
- MDZ/G4 Welsh Government Technical Advice Note 12 Design
- MDZ/D52 Anglesey and Gwynedd Joint Local Development Plan
- MDZ/G6 Review of Special Landscape Areas in Gwynedd and Anglesey

- MDZ/G7 Anglesey-Landscape-Strategy-Update-2011
- MDZ/G8 Anglesey Seascape Character Assessment
- MDZ/G9 NRW National Landscape Character Areas
- MDZ/G10 NRW (undated) LANDMAP Information
- MDZ/G11 IALA Marking of Manmade Offshore Structures
- MDZ/G12 IALA Recommendation on Surface Colours used as Visual Signals on Aids to Navigation
- MDZ/G13 Restricted Area Plan

2.1 Project evolution and updated documents

The mitigation incorporated in the proposed development has changed following the preparation of the SLVIA. This has comprised alterations to the colouring and lighting of the tidal energy devices. This change is described in document **MDZ/A28.19 Seascape Landscape and Visual Impact Assessment – Post Application Consultation Responses**. Document **MDZ/A28.19** contains updated daytime photomontages that indicate the alterations to the colouring of the tidal energy devices.

3. Key SLVIA Issues

The scope of the SLVIA is broad and covers a wide range of receptors. However, the key issues, i.e. the effects that are predicted to be significant, are associated with a more limited number of receptors closer to the Project. Therefore, this section has been included to draw attention to the main predicted effects. Further detail is provided in relation to Section 9 of this Proof of Evidence.

Overall, the SLVIA has identified that there would be some adverse effects as result of the offshore elements of the Project. Of the 14 seascape character areas (SCAs) and landscape character areas (LCAs) in the Study Area it is predicted that there will be significant adverse effects on parts of the Holyhead Mountain and Rhoscolyn SCAs. The effects on the Holyhead Mountain and Rhoscolyn SCAs would be particularly associated with locations that are more remote and where the composition of the arrays of tidal devices introducing new man-made elements to the seascape would be apparent. In the context of the wider Study Area, the offshore components of the Project would frequently comprise relatively small elements in the context of key components of the character types/units, and the potential effects on seascape/landscape character are not predicted to be significant.

It is predicted that the onshore components of the Project, would not result in significant adverse effects on seascape or landscape character for any of the 14 SCAs and LCAs identified in the baseline assessment, including the Rhoscolyn and Holyhead SCAs in which the substations would be located.

The nature of the offshore structures associated with the Project and the sensitivity of local visual receptors means that there would be some adverse effects on visual amenity. Significant potential visual effects have been identified for receptors positioned on the closest part of the coastline, between Penrhyn Mawr and South Stack in relation to the offshore components of the Project. These receptors include:

- Residents of dispersed properties;
- People walking the Anglesey Coastal Path/Wales Coast Path; and
- People visiting South Stack Lighthouse, the RSPB reserve visitor centre and Elin's Tower.

In addition, the SLVIA identifies the potential for significant effects on the users of recreational vessels within approximately 2km of the MDZ. At other locations the degree of change and effect would be less, mitigated by the intervening distance, relative scale of the proposed structures, the context in which they would be seen and/or the scale of the view. The Project has an overall lifespan of 37 years and following decommissioning the devices and structures would be removed, reversing the potential effects identified in the SLVIA.

Key viewpoints to be reviewed in the context of the above comprise:

- Viewpoint 01 Summit of Holyhead Mountain;
- Viewpoint 03 Car park at South Stack Light House;
- Viewpoint 04 Ellin's Tower, South Stack;
- Viewpoint 05 Cytiau'r Gwyddelod Scheduled Monument; and
- Viewpoint 06 South Stack Cliffs Nature Reserve/Penrhyn Mawr.

Image 1 below (following Table 1) is an extract from the viewpoint location drawings that form part of the Environmental Statement, and shows the location of the above viewpoints.

Table 1 references the Figures from the Environmental Statement and Further Environmental Information which illustrate the existing and predicted views at each of the above viewpoints.

Table 1 – Viewpoints and Corresponding Figure References

Viewpoint	Document References
Viewpoint 01 Summit of Holyhead Mountain	MDZ/A26.9 (SLVIA ES Figures) Figure 24-3-1a Figure 24-3-1b
Viewpoint 03 Car park at South Stack Light House	MDZ/A26.9 (SLVIA ES Figures) Figure 24-3-1a Figure 24-3-1b

Viewpoint 04 Ellin's Tower, South Stack	MDZ/A26.9 (SLVIA ES Figures) Figure 24-3-1a Figure 24-3-1b
	MDZ/A28.19 (SLVIA Response FEI Figures) Figure 24-4-2a Version 2 Figure 24-4-2b Version 2 Figure 24-4-2c Version 2 Figure 24-4-2d Version 2
Viewpoint 05 Cytiau'r Gwyddelod Scheduled Monument	MDZ/A26.9 (SLVIA ES Figures) Figure 24-3-1a Figure 24-3-1b
Viewpoint 06 South Stack Cliffs Nature Reserve/Penrhyn Mawr	MDZ/A26.9 (SLVIA ES Figures) Figure 24-3-1a Figure 24-3-1b
	MDZ/A28.19 (SLVIA Response FEI Figures) Figure 24-4-3a Version 2 Figure 24-4-3b Version 2 Figure 24-4-3c Version 2 Figure 24-4-3d Version 2

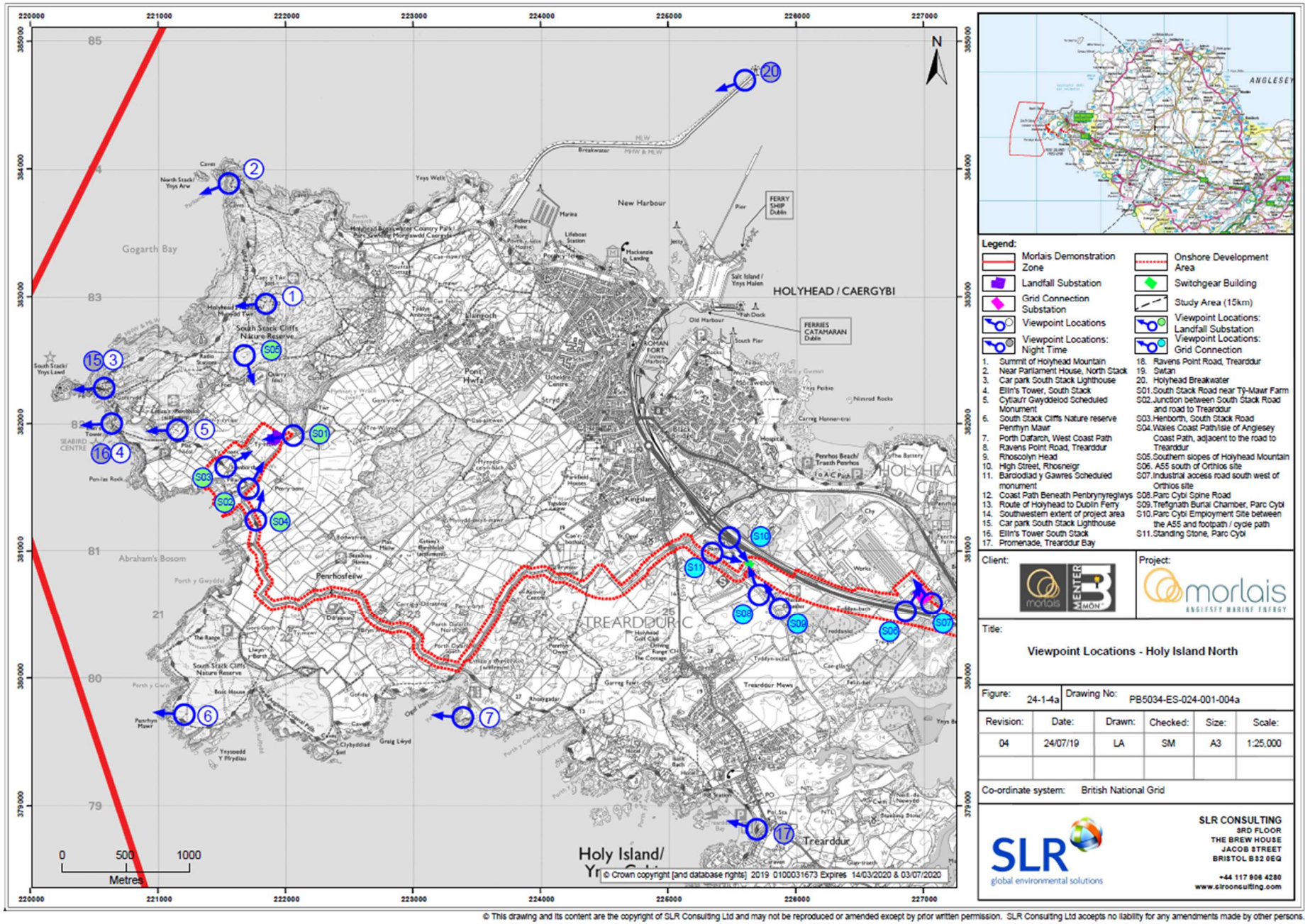

Image 1 – Extract from viewpoint location figures from the Environmental Statement

4. Factual Background

The main operational elements of the Project, with the potential to affect seascape, landscape and visual receptors are summarised as follows:

- Tidal devices (130 surface emergent), deployed in multiple arrays within the MDZ, to a maximum installed capacity of 240 MW;
- Up to eight surface emergent electrical hubs;
- Cardinal and special marker buoys;
- Potential for up to five environmental monitoring platforms within the MDZ

See **Core Document MDZ/A28.53** Figure 4-2 from Chapter 4: Project Description of the Environmental Statement for the locations of the above offshore elements of the Project.

- Inter-array cables within the MDZ;
- Export cables and export cable tails to the transition pits/bays;
- Landfall Substation (see **Core Document MDZ/A21.2 Indicative Site Plan - Landfall Substation** and **Core Document MDZ/A21.8 GA – Landfall Substation**);
- Grid Connection Substation (see **Core Document MDZ/A21.4 Indicative Site Plan - Grid Substation** and **Core Document MDZ/A21.10 GA – Grid Connection Building**);
- Switchgear Building (see **Core Document MDZ/A21.3 Indicative Site Plan - Switchgear Building** and **Core Document MDZ/A21.9 GA – Switchgear Building**); and
- Onshore buried cable installed between the Landfall and Grid Connection Substations (**Core Document MDZ/A21.1 Site Location Plan** provides an overview of the extent of the onshore elements of the Project, including the cable route).

The key driver for the Project location is tidal resource availability. The resource availability and justification for the scale of the Project are described in the Project Characteristics Proof of Evidence prepared by Dr. James Orme. Technical requirements have driven the onshore infrastructure, and also there has been recognition of landscape and visual sensitivities. This is described in more detail in The Project's Response section below (Section 6).

4.1 Device Deployment Protocol

The draft Transport and Works Act Order (TWAO) states that:

"device deployment protocol" means a statement identifying (a) in respect of surface emergent tidal devices and operational hubs in the restricted areas and the remainder of the array area details including dimensions of the tidal device or operational hubs that the undertaker proposes to construct or repower and an updated seascape, landscape and visual assessment undertaken in accordance with the assessment methodology for the environmental statement or any subsequently published best practice guidance of those proposed tidal devices or operational hubs which shall include an assessment of the cumulative impact of the proposed tidal devices and operational hubs with any tidal devices and hubs operational and/or consented (pursuant to an approved device deployment protocol) at the time of its preparation and/or (b) in respect of subsurface tidal devices or operational hubs in the restricted area – UKC 8m with a proposed under keel clearance of less than 8m details of the tidal device or operational hub to be deployed and/or (c) in respect of subsurface tidal devices or operational hubs in the restricted area UKC 20m with a proposed under keel clearance of less than 20m details of the tidal device or operational hub to be deployed, and in each case shall be consistent with the updated navigational risk assessment for the relevant tidal work."

The Device Deployment Protocol will be secured through conditions in the TWAO and Marine Licence. The Device Deployment Protocol is applicable to the arrays of devices and operational hubs throughout the MDZ. It requires:

- All surface emergent deployments to be approved by Welsh Ministers in advance;
- The nature of the devices will need to be described and dimensions provided;
- An updated seascape, landscape and visual assessment needs to be prepared for each surface emergent deployment; and
- Consultation with the Isle of Anglesey County Council.

The purpose of this process is to provide a mechanism to ensure that the devices ultimately proposed for deployment accord with the principles and assessment conclusions established in the Environmental Statement. In particular, there is a commitment within the Environmental Statement to avoid the deployment of visually prominent devices within the restricted areas identified in the TWAO. As different tidal energy devices and hubs have different visual characteristics, the final assessment as to whether a device or the combined effect of the deployment of a particular type or combination of different types is visually prominent can only be undertaken once the characteristics of the devices proposed for deployment are known. The Device Deployment Protocol therefore comprises an important process, involving consultation and approval, to control the deployment of devices and ensure that the proposed deployment remains within the effects assessed in the Environmental Statement.

Undertaking a specific landscape and visual assessment for each surface emergent deployment will ensure information on each such deployment will be effectively communicated. The fact that the construction phase will take place incrementally will also mean that successive

seascape, landscape and visual assessments are required resulting in frequent checks and reviews, effectively monitoring change across the MDZ.

As there will be Device Deployment Protocol conditions in the TWAO and the Marine Licence both the IoACC and NRW will be involved in this process. In the case of the Marine Licence the information required as part of the Device Deployment Protocol will be submitted to NRW, and they will consult with the IoACC. In addition, it will be a specific requirement of the TWAO to ensure the IoACC are consulted as part of the Device Deployment Protocol Process.

5. Legislation and Policy Context

5.1 Introduction

The planning policy context for Project is described in detail in the Planning and Energy Policy Proof of Evidence prepared by Mr David Bell. A review of the planning policy context applicable to the SLVIA was also included in **Core Document MDZ/A25.24 Environmental Statement Volume 1 (Main Report) – Chapter 24 SLVIA**. Therefore, this section focusses on the most relevant part of this policy context, which relates to the Area of Outstanding Natural Beauty (AONB) and Heritage Coast designations.

5.2 Key designations

There are several designations within the Study Area that have relevance to the SLVIA, including:

- The Isle of Anglesey AONB;
- Two sections of Heritage Coast;
- One Special Landscape Area (SLA);
- One Registered Park and Garden; and
- Four Conservation Areas.

Image 2 below shows the location and extent of the above designations (with the exception of Conservation Areas) in relation to the Project. Conservation Areas are not shown in these drawing as they are not located close to any elements of the Project and no significant seascape, landscape or visual effects were predicted in relation these designations.

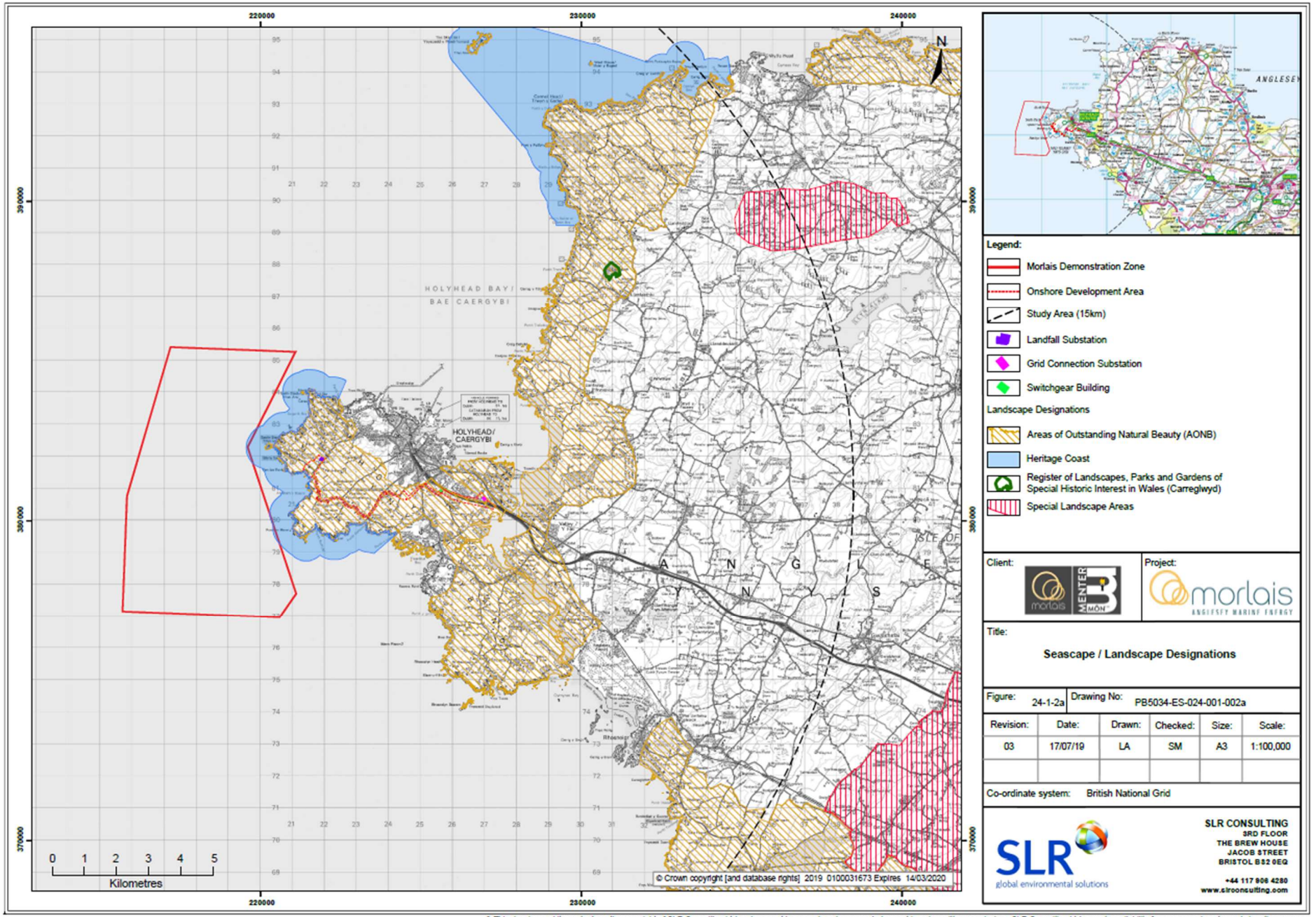

Image 2 – Location and extent of designations in relation to the MDZ

5.3 National policy

A review of the national policy context is included within the SLVIA. The documents referenced include:

- Planning Policy Wales (PPW), Edition 10 (Welsh Government, December 2018);
- Technical Advice Note 8: Planning for Renewable Energy (Welsh Government, July 2005);
- Technical Advice Note 12: Design (Welsh Government, March 2016);
- Overarching National Policy Statement for Energy (EN-1) (Department of Energy and Climate Change, July 2011); and
- National Policy Statement for Renewable Energy Infrastructure (EN-3) (Department of Energy and Climate Change, July 2011).

Key relevant extracts include the following:

Emphasis is made in relation to the protection of nationally designated landscapes, including National Parks and AONBs, identifying (in paragraph 6.3.8 of PPW) that these designations *"must both be afforded the highest status of protection from inappropriate developments"*.

Paragraph 6.5.12 of PPW states *"Development proposals should aim to protect or enhance the natural or historic character and landscape of undeveloped coastlines. The particular landscapes of the coastline should be recognised and protected where they represent significant characteristics of place. Designation as a heritage coast does not directly affect the status of the area in planning terms, however, the features which contributed to the designation of such areas will be important considerations in development plans and in making development management decisions."*

The *"special characteristics of an area should be central to the design of a development"*, with an emphasis placed on the *"layout, form, scale and visual appearance of a proposed development and its relationship to its surroundings"*. The importance of areas that are recognised for their landscape, townscape, cultural or historic character and value is also identified, noting the particular importance of design considerations in such locations.

Paragraph 5.9.17 of PPW states that "*in circumstances where protected landscape, biodiversity and historical designations and buildings are considered in the decision making process, only the direct irreversible impacts on statutorily protected sites and buildings and their settings (where appropriate) should be considered"*.

EN-1 Overarching Energy NPS makes numerous references to landscape and visual impacts. It identifies that the development of new energy infrastructure is likely to have some negative impacts on landscape and visual amenity and cultural heritage. It also states that *"in general, it should be possible to mitigate satisfactorily the most significant potential negative effects"*, also reflecting that *"the impacts on landscape/visual amenity in particular will sometimes be hard to*

mitigate". Paragraph 1.7.11 reinforces this, stating that *"the principal area in which consenting new energy infrastructure...is likely to lead to adverse effects which cannot always be satisfactorily mitigated is in respect of landscape and visual effects"*. It goes on to outline that potential for such development in the most attractive landscapes and townscapes is already severely limited and further restriction would make consents much harder to gain.

5.4 Local policy

The current planning policy framework for Anglesey is set out in the Anglesey and Gwynedd Joint Local Development Plan 2011 – 2026 (adopted 31st July 2017). The Joint Local Development Plan (JLDP) sets out a number of Key Issues (KI), with KIs 34 and 35 having direct relevance to this assessment. KI 34 identifies the need to *"maintain the positive features that contribute towards creating a unique character in various parts of the area"*. KI 35 states the need to protect and improve place, landscape and buildings of historic, cultural and archaeological importance and their setting.

A review of the JLDP is included in the SLVIA. The key recurring principles are for the conservation and enhancement of the landscape, with specific importance placed on the AONB and Heritage Coast in the relevant policies.

Policy AMG1: AONB Management Plans states further that: *"Proposals within or affecting the setting and/ or significant views into and out of the Areas of Outstanding Natural Beauty must, where appropriate, have regard to the relevant AONB Management Plan."*

Policy AMG 4: Coastal Protection is directly relevant to areas designated as Heritage Coast setting out that *"In considering a proposal on the coast, including the Heritage Coast, there will be a need to ensure that the proposal conforms to the following criteria:*

1. The development due to its nature must be located on the coast, or in open estuaries, or nearby, and that there is an overriding economic and social benefit from the development

2. It does not cause unacceptable harm to:…

iii. The built environment, or the landscape, or seascape character…"

The Isle of Anglesey AONB Management Plan Review 2015 – 2020 also includes a number of Management Objectives and associated policies. The following text sets out those that are directly relevant to the Proposed Development and landscape/seascape character within the Study Area. These all relate to the overall aim for enhancing countryside and coastal character; *"the natural beauty, special qualities and distinctiveness of the landscape of the Isle of Anglesey AONB, including its natural, cultural and historical features, will be conserved and enhanced for the benefit of present and future generations"*. The SLVIA also sets out the management objectives and special qualities of the AONB.

The Planning and Energy Policy Proof of Evidence prepared by Mr David Bell evaluates the Project and how it accords with the planning policy context.

5.5 Guidance

The SLVIA methodology follows good-practice guidance and advice on the assessment of the potential effects of development on seascape, landscape and visual resources. A key source of guidance is the Guidelines for Landscape and Visual Impact Assessment (Third Edition, 2013) (GLVIA 3). Other guidance documents, including those specific to photography and visualisation techniques, have also been referred to. These are detailed in Appendix 24.1 (Volume III) of the ES.

6. The Project's Response to the Site Location and Context

The Project Design Envelope has been influenced through the assessment process and consultation with NRW and IoACC. This approach means that the PDE being assessed within the SLVIA does not reflect a theoretical worst case, but incorporates specific measures that would reduce potential seascape, landscape and visual effects. Such measures are particularly applicable to the offshore components of the Project and the Landfall Substation.

The following provides a summary of the measures that were applied when preparing the SLVIA as result of the design iteration (including responding to comments/requests made by NRW and IoACC) to the key components of the Project:

- Offshore elements within the MDZ:
  - In accordance with the device deployment protocol in the consent, no visually prominent tidal energy devices would be placed in the restricted area and the remainder of the array area (as indicated in Image 3 below, **Core Document MDZ/G13 Restricted Area Plan**) to reduce potential landscape and visual effects in relation to seascape/landscape and visual receptors to the north west of Holyhead Mountain;
  - Limiting the number of floating devices in the PDE;
  - A minimum separation distance of 1 km would be applied from the coastline for visually prominent devices, helping to increase the separation distance between such structures from the coastline; and
  - Minimising floating elements elsewhere within sub-zones to help ensure the composition of offshore elements is as simple as possible.

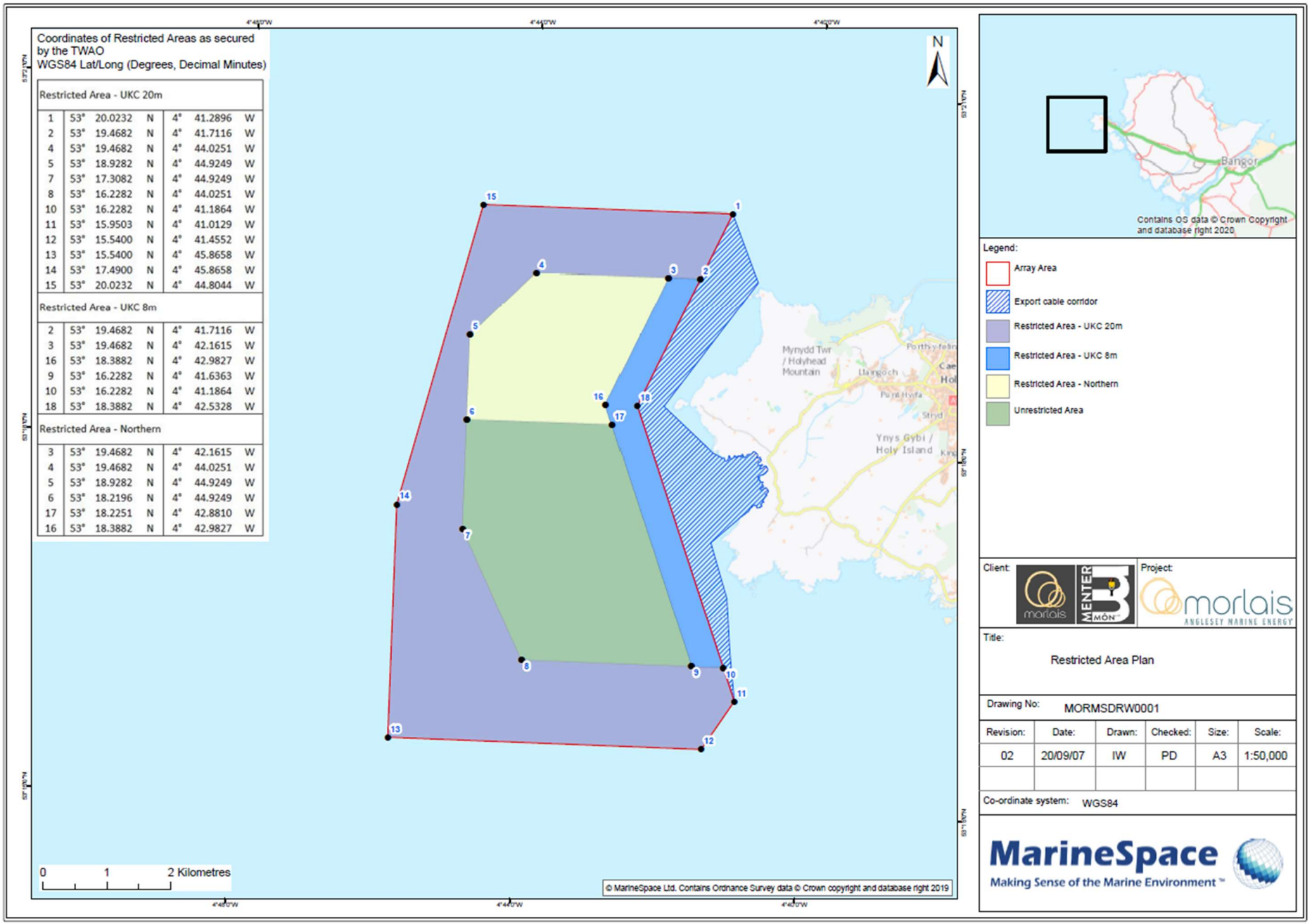

Image 3 – Drawing showing restricted areas within the MDZ

- Landfall Substation:

  – Selecting a recessive location in the landscape, in a relatively low-lying position and using the landform to help integrate the substation (cutting into the valley side rather than building a platform out);

  – Arrangement of plant and equipment within three buildings, resulting in a collection of buildings that break up the scale of the development and create a form and massing that is comparable with local agricultural buildings;

  – Using colours and materials (including natural materials) that are consistent with the vernacular associated with agricultural buildings, and are recessive in the local context;

  – Using the buildings to define the boundaries of the substation, reducing the requirement for security fencing;

  – Using stone walls and stock proof fencing as part of new boundaries;

  – Considering limited application of planting to help integrate the substation, acknowledging the limitations associated with this in the open and exposed coastal landscape; and

  – Minimising the use of external lighting in this rural location.

- Image 4 (**Core Document MDZ/A21.2**) below shows the location of the Landfall Substation. Image 5 (Figure 24-4-4 from **Core Document MDZ/A26.9**), on the following page, comprises a photomontage of the Landfall Substation from South Stack Road, providing an illustration of the mitigation measures described above.

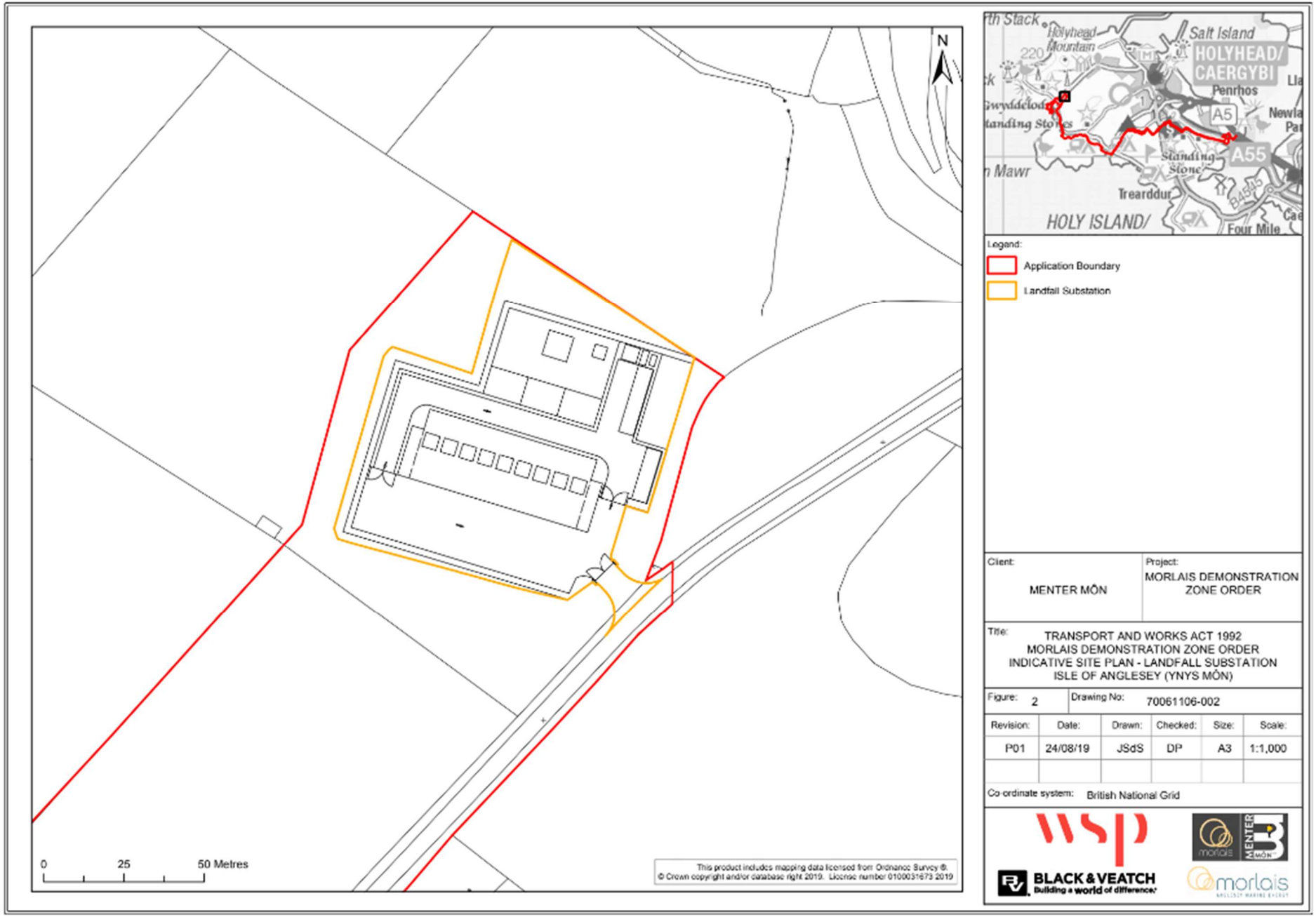

Image 4 – Drawing showing the Landfall Substation location

Viewpoint S01 - South Stack Road near Tŷ-mawr

Figure 24-4-4

This drawing should be printed at A1 and has a principal/viewing distance of 1366mm for the 50mm camera lens used in the photography. The illustrated images are presented in cylindrical projection and should be viewed flat, with the eye moved parallel to the image at a set distance. Alternatively a principal/viewing distance of 911.7mm may be used to illustrate the equivalent of a 75mm lens for the same images. If the drawing is printed at A3 Landscape a principal/viewing distance 683.4mm would be appropriate to match a 50mm camera lens. The horizontal angle of view shown is 53.5 degrees, and the vertical angle 16.9 degrees is used to allow the full context of the view and proposed development to be represented. Full details of the camera settings and viewpoint location are contained in the SLVIA. This drawing was produced by SLR Consulting Limited.

Image 5 – Photomontage of Landfall Substation from South Stack Road

- Grid Connection Substation:
  - Positioning of the substation in a location where industrial structures form an established part of the baseline context, and where established vegetation surrounding the site provides effective visual enclosure.
- Switchgear Building:
  - Positioning of this element within an allocated employment site, adjacent to an existing substation and where surrounding development will be comparable in form, massing and appearance.
- Cable connections:
  - Use of underground cabling to provide the connections between all Project elements, avoiding the need for overhead cables;
  - Routing the underground cable within the local road corridors to minimise potential disruption to field boundaries; and
  - Reinstatement of the ground and landscape features following construction, which would be secured through the detailed Landscape Management Plan (also described below).

In addition to the above measures, the SLVIA sets out that further consideration could be given to mitigation at the detailed design stage, through consultation with IoACC and NRW in relation to the discharge of appropriate conditions on the consent. Such measures could include:

- The colour of the tidal devices;
- The navigational lighting that is required;
- The layout configurations of tidal devices within arrays e.g. curved rows of devices or irregular placement;
- Detailed design and materials selection for the substations;
- Planting proposals around the substation sites; and
- Detailed agreements over landscape measures such as planting, earthworks and the types/design of field boundaries to be instated following the construction phase e.g. stone walls, cloddiau (hedge banks) or hedgerows, which would be secured through the detailed Landscape Management Plan.

As part of post application work, and in response to further comments from NRW and IoACC, it has been possible to incorporate further mitigation to reduce potential seascape, landscape and visual effects, specifically in relation to the colouring and navigation lighting of the surface

emergent structures. These measures are outlined below and described in **Core Document MDZ/A28.19 Seascape Landscape and Visual Impact Assessment – Post Application Consultation Responses**.

Post application consultation has been undertaken with Trinity House, recognising that marine safety is a paramount consideration. The outcome of the consultation is that the colouring on the structures can be altered and the lighting requirement can be reduced compared with those assumed in the SLVIA.

Menter Môn, in line with Trinity House requirements, has been able to commit to marking a 5m band at the ends of each of the devices yellow, or a band 5m high on hubs or similar vertically shaped infrastructure. The detail of the marking required will depend on the design of the specific device or structure. Electrical hubs and tidal devices that include a more cylindrically shaped above water element, e.g. Aquantis type devices, are likely to require a yellow band around the visible part of the structure. The remainder of the devices would be coloured grey, although the exact colour would be agreed with NRW and IoACC, which is described in more detail below. The device colouring would be agreed by Marine Licence Condition.

Also, through consultation with Trinity House, it has also been possible to reduce the navigation lighting requirements compared with the design envelope assumptions applied in the SLVIA. This would mean that navigational markers and floating devices can use lights that are more limited in visibility. On the inshore side of the MDZ the markers can use 2NM lighting, i.e. visible for 2 nautical miles. On the offshore side they would be 5NM lights. In addition, the devices themselves only need to have identification lighting with a visibility of 150 metres.

An Outline Landscape Management Plan was submitted as part of the application. However, as part of post application comments NRW and IoACC requested more detailed information be provided (**Core Document MDZ/A28.19 Seascape Landscape and Visual Impact Assessment – Post Application Consultation Responses**). In response, a more thorough Outline Landscape Management Plan (**Core Document MDZ/A28.20**) has been prepared and submitted, which includes mitigation commitments. This still comprises an outline plan and it will ultimately need to respond to the detailed design of the Project.

In addition to the above, two options are included in the applications for the Cable Landfall. These options are the use of either horizonal directional drilling (HDD) or a trenched cable, with cable protection and above ground cables attached to the cliff face. The preferred method of installation is HDD. It is expected that it will be feasible to use this technique. However, in case it is not, the SLVIA assumes the alternative method of installation.

Should it be necessary to apply the option that comprises a trenched cable and above ground cables attached to the cliff face, additional measures that can be committed to reduce the potential for seascape, landscape and visual effects comprise:

- The J-tubes on the cliff face can be coloured dark grey, with a matt finish, to reduce the contrast with the natural rock and cliff vegetation, and also the potential for glint or glare from reflected sunlight;
- Limiting the disturbance to cliff surface during the construction phase as far as practical;

- Reinstatement of the section of the field boundary affected during the construction phase; and

- Landscape proposals in the vicinity of where the cable chutes rise above the natural landform to reduce their visibility, with more information to be agreed and provided in the detailed Landscape Management Plan (which would be agreed with NRW and IoACC).

In addition to the above measures, **Core Document MDZ/A28.50 Cliff Habitat Design Refinement Note** provides an assessment of the effects of the J-tubes on the cliff face and how the design of this potential element of the Project has been refined to reduce adverse effects.

Table 2 – Summary of Mitigation Measures and Delivery

Proposed measure	**Delivery mechanism**
Embedded mitigation	
Restricted extent and number of surface emergent tidal energy devices	Device Deployment Protocol that is required as part of the TWAO and Marine Licence
Minimum separation distance of 1 km would be applied from the coastline for visually prominent devices	Device Deployment Protocol that is required as part of the TWAO and Marine Licence
The colouring of surface emergent structures	Device Deployment Protocol that is required as part of the TWAO and Marine Licence
Minimising floating elements elsewhere within sub-zones	Conditions on the TWAO and Marine Licence
Positioning and detailed design of the landfall substation, including materials, lighting and boundary treatments	Conditions on the TWAO
Positioning of the Grid Connection Substation	Conditions on the TWAO
Positioning of the Switchgear Building	Conditions on the TWAO
Use of underground cabling	Conditions on the TWAO
Routing the underground cable within the local road corridors where possible	Conditions on the TWAO
Reinstatement of the ground and landscape features following construction	Conditions on the TWAO, Landscape Management Plan
Additional mitigation	
The layout configurations of tidal devices within arrays e.g. curved rows of devices or irregular placement	Device Deployment Protocol that is required as part of the TWAO and Marine Licence, if feasible and desirable

Proposed measure	Delivery mechanism
Planting proposals around the substation sites	Conditions on the TWAO, Landscape Management Plan
Detailed agreements over landscape measures such as planting, earthworks and the types/design of field boundaries to be instated following the construction phase	Conditions on the TWAO, Landscape Management Plan
Measures to reduce the potential seascape, landscape and visual effects associated with a trenched landfall cable and above ground cables attached to the cliff face	Conditions on the TWAO, Landscape Management Plan

7. Relevant Representations

There has been extensive and proactive consultation with NRW and IoACC through the Technical Working Group meetings. The proposed development has evolved proactively where possible in response to the comments made. The Project evolution is described in Section 6 of this Proof of Evidence.

In addition, consultation comments received from NRW and IoACC have been responded to in **Core Document MDZ/A28.19 Seascape Landscape and Visual Impact Assessment – Post Application Consultation Responses**. The comments received related to the following themes.

7.1 NRW Representation

NRW identify that the ES confirms that the offshore development area would introduce significant effects to the seascape setting of the Isle of Anglesey AONB. They welcome the scheme amendments made prior to submitting the application, which means the Project has limited potential effects upon Gogarth Bay through the process of early stage iterative design. However, NRW still has concerns over the significant effects on the setting of South Stack and its lighthouse and the section of coastline southwards to Penrhyn Mawr.

NRW identified two areas where insufficient information was provided:

- The classification of visually prominent emergent devices; and
- The potential use of trenching option and cable tying over exposed rock at the cable landfall.

A Device Deployment Protocol will be an integral part of the consent. This will mean approval is required for the deployment of surface emergent tidal energy devices and operational hubs in the restricted areas and the remainder of the array area, and this would require an updated seascape, landscape and visual assessment. In addition, the process would require consultation with the IoACC prior to approval. As different tidal energy devices and hubs have different visual characteristics, the final assessment as to whether a device or the combined

effect of the deployment of a particular type or combination of different types is visually prominent can only be undertaken once the characteristics of the devices proposed for deployment are known. This would be considered as part of the specific seascape, landscape and visual assessment that is required.

Further clarification on the potential use of open trenching and cable tying at the cable landfall has been provided in **Core Document MDZ/A28.19 Seascape Landscape and Visual Impact Assessment – Post Application Consultation Responses**. It is anticipated that, where possible, suitable mitigation can be agreed and included in the Detailed Landscape Management Plan.

In addition, the representation identifies two areas that have the potential to be resolved easily:

- The description of the effects on the AONB; and
- The level of detail provided in the Outline Landscape Management Plan.

Both these points have been addressed through the post application submission. Comments were received from NRW on drafts of these documents and no further representations have been seen.

7.2 IoACC Representation

IoACC commented on the content of the SLVIA in their representation dated October 2019. In broad terms there was no disagreement with the judgements and conclusions reached in the SLVIA. The comments made did require the provision of supplementary environmental information, which was included in the documents that were submitted in March 2020.

7.3 North Wales Wildlife Trust Representation

The North Wales Wildlife Trust has made several comments specific to the SLVIA. These focus on the photomontages that have been prepared. It is acknowledged that there will be changes in the appearance of the tidal energy devices and their positioning depending on the state of the tide and wave conditions, for example they will move laterally due to the tidal flow. The devices will also move based on the wave conditions. The assessment judgements have been made recognising these factors, however the main considerations relate to the overall scale and extent of the introduction of an array of tidal energy devices in the context of the baseline environment. The SLVIA assumes that the surface emergent devices are seen above water and the assessment was undertaken during periods of clear visibility to ensure a realistic worst-case assessment of this aspect was assessed.

The North Wales Wildlife Trust also highlight the potential visual impact associated with service vessels. The SLVIA takes account of the potential presence of service vessels during the operational phase, noting that this will be in the context of the array of floating tidal energy devices. The assessment focusses on the full deployment of devices throughout the operational phase, although it does consider the construction phase and how this will overlap. The number of construction vessels expected to be present is described in **Core Document MDZ/28.19 Seascape Landscape and Visual Impact Assessment – Post Application Consultation Responses**.

As set out in **Core Document MDZ/28.19**, the main construction and support vessels that would be present during the expected 10 year construction phase are those involved in inter-array cable installation (30.14% of the year), hub installation (49.32% of the year) and tidal device installation (throughout the year, with the potential for two additional vessels for 18% of the year). Therefore, it is expected that up to six vessels would be involved in these activities at any one time, but there is potential for additional vessels to be present at any particular time (an expected maximum of 16 vessels). However, this concentration of vessels would only be present for a short part of the year and is also based on a scenario of the whole 240 MW being installed in one phase. As the construction would be based on a phased development, a lower number of vessels on site at any one time is likely to occur with breaks in activity between phases.

The number of vessel days on site stated in the Environmental Statement is based on 24 hour working. Therefore, the vessel numbers stated above could be applicable at night (with associated lighting) i.e. it is typically expected that up to six vessels would be working at any one time, but there is potential for this to increase to an expected maximum of 16 vessels at certain times. Note that it is possible that fewer vessels (than stated above) would operate at night as safer working conditions would occur during daylight hours. However, it is not possible to be definitive about this as the detailed approach to installation will be developed by specialist contractors much closer to actual offshore works commencing.

7.4 Other Representations

Numerous representations have been made by members of the public in relation to the Project. Many of these state objections to the Project based on the value and scenic quality of the local area, particularly in relation the area around South Stack and Holyhead Mountain. These points are reflected in the SLVIA that has been prepared and the conclusions that have been reached in relation to the predicted effects of the Project.

A key question that has been raised in these representations relates to why surface emergent devices have been removed from the northern part of the MDZ and not from the southern area. The main point being that more people live along and visit the coastline that is closer to the southern part of the MDZ. The approach taken has responded to the comments made by NRW and IoACC in relation to the wilder and more remote landscape associated with Holyhead Mountain in the vicinity of Gogarth Bay, compared with the more settled landscape further south. The Project has responded to these comments by removing surface emergent devices from the northern part of the MDZ, as described in Section 6 of this Proof of Evidence.

8. **Statements of Case**

Statements of Case have been submitted by several parties which identify points relevant to the SLVIA. The relevant points and responses are included in Appendix A to this Proof of Evidence. A summary of the issues raised is provided below.

8.1 NRW Statement of Case

NRW maintain that the Project would have significant adverse effects on the Isle of Anglesey AONB. The SLVIA describes these effects, identifying the potential for significant adverse effects in relation to a range of landscape and visual receptors.

NRW consider that the meaning of prominent surface emergent devices needs to the explained. There is a commitment within the Environmental Statement to avoid the deployment of visually prominent devices within the restricted areas identified in the TWAO. As different tidal energy devices and hubs have different visual characteristics, the final assessment as to whether a device or the combined effect of the deployment of a particular type or combination of different types is visually prominent can only be undertaken once the characteristics of the devices proposed for deployment are known. The Device Deployment Protocol therefore comprises an important process, which will include specific seascape, landscape and visual assessments to be prepared. Both NRW and IoACC will be involved in this process and it will ensure the deployment of devices remains within the effects assessed in the Environmental Statement.

NRW would expect to see effective landscape and ecological integration of the worst-case cable landfall scenario at the cliff top. HDD remains the preferred cable installation method. The Landscape Management Plan prepared to date is an outline document. It will remain a live document that will be added to as detailed design information becomes available. The Landscape Management Plan will evolve to ensure appropriate mitigation is incorporated and this will be agreed through consultation.

NRW expect commitments to combine the offshore development controls and monitor the visual effect of the offshore elements of the Project. The Device Deployment Protocol will form a mechanism to achieve this. The process will include the preparation of a specific seascape, landscape and visual impact assessment for each deployment. This will set out the detail of the mitigation measures that are incorporated. The requirement for consultation prior to deployment will ensure appropriate mitigation is incorporated. The fact that the construction phase will take place incrementally will also mean that successive landscape and visual assessments will mean there are frequent checks and reviews, effectively monitoring change across the MDZ.

Given the predicted significant adverse effects on the Isle of Anglesey AONB NRW require a commitment to a landscape enhancement package. Menter Môn has made a commitment to a landscape compensation package for the AONB. A Section 106 Agreement for securing this is being finalised with IoACC. However, the specific measures are still yet to be determined and these will be agreed with IoACC prior to implementation. NRW could become another party in those discussions post consent.

8.2 IoACC Statement of Case

IoACC considers that there will be significant effects on the Isle of Anglesey AONB and the Holy Mountain Heritage Coast, which is consistent with the conclusions reached in the SLVIA. They agree that all direct mitigation measures which are practical have been identified by Menter Môn. IoACC require a commitment to a landscape compensation package. As described above Menter Môn has made a commitment to a landscape compensation package for the AONB. A Section 106 Agreement for securing this is being finalised with IoACC.

IoACC consider that the Device Deployment Protocol should assess cumulative impacts on seascape, landscape and visual receptors. Undertaking a specific landscape and visual assessment for each surface emergent deployment will ensure that information on each such deployment will be effectively communicated. The fact that the construction phase will take place incrementally will also mean that successive landscape and visual assessments will mean

there are frequent checks and reviews, effectively monitoring change across the MDZ. IoACC has requested to be a named consultee in the Device Deployment Protocol, which has been acknowledged and integrated in the wording of the draft TWAO.

8.3 Royal Yachting Association Statement of Case

The Royal Yachting Association (RYA) set out that Department of Energy and Climate Change (DECC) published an Offshore Energy Strategic Environmental Assessment (OESEA3) in 2016. They include a quote from this document which reference that developments should aim to *"avoid causing significant detriment to tourism, recreation, amenity and wellbeing as a consequence of deterioration in valued attributes such as landscape, tranquillity, biodiversity and hydrographic features"*. The RYA also set out that *"retaining the undisturbed remoteness of some waters will be important in terms of its wilderness and amenity value for recreation"*. The SLVIA presents an assessment of the predicted effects of the project. It also describes the measures that have been incorporated in the Project Design Envelope to mitigate these as far as possible.

The RYA has also provided additional comments in their comments on the Statements of Case. This reflects on the mitigation of the potential effects of the offshore elements of the Project, setting out a need to balance seascape, landscape and visual effects with ensuring maritime safety. This comment is acknowledged, the offshore elements of the Project will be marked and this will be agreed with relevant consultees in relation to navigational risks.

8.4 Snowdonia Canoe Club Statement of Case

Snowdonia Canoe Club raise concerns about the lack of consideration given to kayakers in the SLVIA. They also query a specific statement made in the SLVIA that: "*The tidal energy devices would not become a defining feature of seascape or landscape character and would comprise small components within the open views that can be seen over the Irish Sea"*. However, this quote is a selective extract from the SLVIA which does not reflect the relevant conclusions reached. Importantly Section 24.6.5.5.5.5.6 of the SLVIA identified the potential for significant effects on the users of recreational vessels within approximately 2km of the MDZ. Therefore, significant visual effects could apply to the users of any recreational vessels between the coastline and the MDZ, including kayakers.

Snowdonia Canoe Club raise points in relation to the perceived wildness of the seascape and the negative effects on this, together with the negative visual effects on the users of vessels passing offshore elements of the Project at close quarters. These points are acknowledged and described in the SLVIA.

The Snowdonia Canoe Club has also provided additional comments in their comments on the Statements of Case. These broadly reflect the concerns raised above in relation to the potential effects of the Project, which are responded to above. They also describe the need to balance the mitigation of the visual effects of the project with navigational safety, with reference to the colouring of the surface emergent tidal energy devices and structures. The comments on the balance between visual effects and navigational risks are acknowledged. The offshore elements of the Project will be marked and this will be agreed with relevant consultees in relation to navigational risks.

8.5 North Wales Wildlife Trust Statement of Case

The Statement of Case prepared by North Wales Wildlife Trust repeats comments made in their previous representation. These points are covered in Section 7.3 above.

8.6 Mr and Mrs Roberts Statement of Case

We understand that Mr and Mrs Roberts commissioned DTM Technologies to prepare a digital 3D model of the offshore components of the Project to inform their understanding of what is proposed, and this forms the basis of their Statement of Case. This 3D model has been shared with Menter Môn. Comparing the model prepared by DTM Technologies with the drawing prepared as part of the SLVIA, it appears that overall arrangement of tidal energy devices is consistent with the assumptions made in the SLVIA.

There are important points to highlight based in the information included in the Statement of Case:

- One tidal energy device type has been applied based on the maximum dimensions included in the Environmental Statement, and
- That the tidal energy devices are coloured yellow in their entirety.

The SLVIA is based on a realistic Project Design Envelope which takes account of a range of factors. Importantly the Project will be deployed in arrays of up to 30MW located within a single location or berth within the MDZ. Each array would be made up of a single device type and each developer would only be able to occupy one berth. Therefore, the Project would be made up of a range of device types and it is unrealistic to assume the same type of structure being deployed throughout the MDZ (outside the restricted zones). The Further Environmental Information submitted in March 2020 in relation to the SLVIA makes it clear that only parts of each device would have yellow markings, with the remainder painted grey. Overall, it is considered that the information submitted by Mr and Mrs Roberts present an unrealistic and overly negative depiction of the Project.

The information contained in the Environmental Statement sought to depict a realistic scenario for development of the Project taking into account the constraints and parameters that developers would have to work within. Furthermore, the Device Deployment Protocol would serve as a check and review on the deployment, ensuring specific proposals within different parts of the MDZ are assessed in relation to their potential seascape, landscape and visual effects.

8.7 Mr Llewellyn Statement of Case

Mr Llewellyn considers that the landscape assessments provided by Morlais are not credible and that NRW state that there remain significant effects on the Isle of Anglesey AONB. The SLVIA sets out the predicted effects of the Project. This includes significant effects on seascape, landscape and visual receptors. NRW and IoACC have not disputed the overall judgements and findings reported in the SLVIA.

9. Key Assessment Findings and Judgements

The SLVIA provides a detailed assessment of the potential effects of the Project. The SLVIA considers all offshore and onshore components of the Project. The content of the SLVIA was thoroughly scoped through consultation with NRW and IoACC, with the extent of work undertaken and the approach to the assessment responding to the comments and request made.

The Project is located in an area with seascape, landscape and visual sensitivities. Much of the Study Area is designated as an AONB and the closest section of coastline is also Heritage Coast. There are also other relevant designations within the Study Area. Key visual receptors comprise residents, walkers and road users along the western coastline of Holy Island.

Significant adverse effects are predicted on the AONB and section of the Heritage Coast closest to the Project, specifically in relation to the Holyhead Mountain and Rhoscolyn seascape character areas. No significant effects are predicted for the other section of Heritage Coast in the northern part of the Study Area. Physical effects on the fabric of the seascape/landscape within these designations would be relatively limited and no notable features or elements would be lost. There would be localised significant effects at Abraham's Bosom within the Heritage Coast (and AONB) in relation to the worst-case scenario for the landfall cables.

No significant effects are predicted on the Mynydd Mechell SLA, Conservation Areas and Carreglwyd Registered Park and Garden due to a combination of the intervening distance, limited inter-visibility and/or context of the Project components.

Overall, the SLVIA has identified that there would be some adverse effects as result of the offshore elements of the Project. Of the 14 SCAs and LCAs in the Study Area it is predicted that there would be significant adverse effects on parts of the Holyhead Mountain and Rhoscolyn SCAs. The effects on the Holyhead Mountain and Rhoscolyn Seascape Character Areas would be particularly associated with locations that are more remote and where the composition of the arrays of tidal devices introducing new man-made elements to the seascape would be apparent. In the context of the wider Study Area, the offshore components of the Project would frequently comprise relatively small elements in the context of key components of the character types/units, and the potential effects on seascape/landscape character are not predicted to be significant. The tidal energy devices would not become a defining feature of seascape or landscape character and would comprise small components within the open views that can be seen over the Irish Sea.

It is predicted that the onshore components of the Project would not result in significant adverse effects on seascape or landscape character for any of the 14 SCAs and LCAs identified in the baseline assessment, including the Rhoscolyn and Holyhead SCAs in which the substations would be located. In the case of the Landfall Substation, this has been located and designed to mitigate potential adverse effects on the Rhoscolyn SCA. The Switchgear Building, also within the Rhoscolyn SCA, would comprise a relatively small-scale structure within an allocated employment site. The Grid Connection Substation, within the Holyhead SCA, would comprise larger structures, but these would be positioned within land that is enclosed by existing vegetation and buildings and in the immediate context of existing industrial structures.

The nature of the offshore structures associated with the Project and the sensitivity of local visual receptors means that there would be some adverse effects on visual amenity. The extent of these potential effects would be limited to some extent by landform, as well as the relative size/scale of the structures compared with elements of the existing environment and the reversible characteristics of the proposals. In the case of the Grid Connection Substation and Switchgear Building, the restrictions to potential visibility due to vegetation and buildings, together with the nature of land uses and buildings in the immediate vicinity of these Project components, would limit the potential visual effects.

Significant potential visual effects have been identified in relation to receptors in the closest part of the coastline, between Penrhyn Mawr and South Stack. These receptors include:

- Residents of dispersed properties;
- People walking the Anglesey Coastal Path/Wales Coast Path; and
- People visiting South Stack Lighthouse, the RSPB reserve visitor centre and Ellin's Tower.

In addition, the SLVIA identifies the potential for significant effects on the users of recreational vessels within approximately 2km of the MDZ. At other locations, the degree of change and effect would be less, mitigated by the intervening distance, relative scale of the proposed structures, the context in which they would be seen and/or the scale of the view. The Project has an overall lifespan of 37 years and following decommissioning the devices and structures would be removed, reversing the potential effects identified in the SLVIA.

Extensive consultation has been undertaken with NRW and IoACC both during the preparation of the SLVIA and during the post application period. The main mechanism for this consultation has been the Technical Working Group meetings. This consultation has informed both the scope of the SLVIA and the design of the Project.

The representations made by NRW and IoACC have been responded to in post application submissions. These submissions have included material that supplements and clarifies information provided as part of the application. NRW and IoACC have broadly agreed with the judgements and conclusions contained in the SLVIA.

The Project has evolved over time to incorporate measures to reduce potential effects on seascape, landscape and visual receptors, as described in Section 6 of this Proof of Evidence. This include measures to specifically respond to the comments made by NRW and IoACC. The incorporation of these measures has gone some way to addressing the concerns raised by NRW and IoACC, but residual issues remain. The approach to mitigation has been to respond as proactively as possible to the issues raised by consultees, whilst ensuring the viability of the Project is maintained.

10. Summary and Conclusions

The SLVIA has been scoped in a robust and thorough way responding to the comments and requests made through extensive consultation with NRW and IoACC. Post application comments have been received from NRW and IoACC and these have been responded to through the submission of Further Environmental Information.

The Project is located in an area with seascape, landscape and visual sensitivities. This is reflected in the Area of Outstanding Natural Beauty designation. Key visual receptors in the vicinity of the Project include residents, particularly those living in dispersed properties on the north west edge of Holy Island, together with visitors to the area and people engaged in outdoor recreation. These sensitivities are covered by planning policies contained in the Anglesey and Gwynedd Joint Local Development Plan 2011 – 2026 (adopted 31st July 2017) and The Isle of Anglesey AONB Management Plan Review 2015 – 2020. How the Project accords with the planning policy context is addressed by Mr David Bell in his Planning and Energy Policy Proof of Evidence.

Significant adverse effects have been identified in relation to seascape landscape and visual receptors, including effects on the Anglesey AONB. The Project has an overall lifespan of 37 years and following decommissioning the devices and structures would be removed, reversing the potential effects identified in the SLVIA.

The key seascape/landscape effects are associated with the closer character areas (SCA 13 – Holyhead Mountain and SCA 14 – Rhoscolyn). Physical effects on the fabric of the seascape/landscape within these designations would be relatively limited and no notable features or elements would be lost. There would be localised significant effects at Abraham's Bosom within the Heritage Coast (and AONB) should the landfall cables be trenched and attached to the cliff face. The effects on the Holyhead Mountain and Rhoscolyn Seascape Character Areas would be particularly associated with locations that are more remote and where the composition of the arrays of tidal devices introducing new man-made elements to the seascape would be apparent. In relation to the wider Study Area, the offshore components of the Project would frequently comprise relatively small elements in the context of key components of the character types/units, and the potential effects on seascape/landscape character are not predicted to be significant.

Significant potential visual effects have been identified in relation to receptors in the closest part of the coastline, between Penrhyn Mawr and South Stack, within approximately 3km of the MDZ. These receptors include:

- Residents of dispersed properties;
- People walking the Anglesey Coastal Path/Wales Coast Path; and
- People visiting South Stack Lighthouse, the RSPB reserve visitor centre and Elin's Tower.

In addition, the SLVIA identifies the potential for significant effects on the users of recreational vessels within approximately 2km of the MDZ. At other locations the degree of change and

effect would be less, mitigated by the intervening distance, relative scale of the proposed structures, the context in which they would be seen and/or the scale of the view.

The overall findings and judgements presented in the SLVIA have not been questioned by NRW and IoACC. Further Environmental Information has been submitted in relation to post application comments and to provide clarification on specific points. Part of the Further Environmental Information submitted comprised a more detailed Outline Landscape Management Plan, in order to demonstrate the commitment to reinstating landscape features following the construction phase for the onshore works.

Representations and Statements of Case with relevance to potential seascape, landscape and visual effects have been submitted by a range of parties. These express concerns about the potential seascape, landscape and visual effects of the offshore components of the Project. Broadly, these are consistent with the effects predicted in the SLVIA. NRW and IoACC have both raised points in relation to the Device Deployment Protocol, securing mitigation and a requirement for measures to compensate for these effects, which are described further in the following paragraphs.

Menter Môn has been proactive in incorporating mitigation to response to the concerns raised by NRW and IoACC but residual issues remain in relation to certain predicted effects. The approach to mitigation has been to respond a proactively as possible to the issues raised by consultees, whist ensuring the viability of the Project is maintained. A wide range of measures have been incorporated in the Project and these are explained in the Project Characteristics Proof of Evidence, prepared by Dr. James Orme, and the following points provide a summary of these.

In relation to offshore components of the Project:

- There are limitations on the number of surface emergent tidal energy devices and where these can be deployed;
- A minimum separation distance of 1 km would be applied from the coastline for visually prominent devices;
- Floating elements would be minimised elsewhere within sub-zones to help ensure the composition of offshore elements is as simple as possible;
- Navigation markings would comprise 5m yellow band at the ends of each of the devices, or a band 5m high on hubs or similar vertically shaped infrastructure; and
- Navigation lighting can be reduced compared with the assumptions made in the SLVIA, meaning the markers can use 2NM lighting on the inshore side of the MDZ – i.e. visible for 2 nautical miles. On the offshore side they would be 5NM lights. In addition, the devices themselves only need to have identification lighting with a visibility of 150 metres.

The Device Deployment Protocol will be secured through conditions in the TWAO and Marine Licence. The Device Deployment Protocol is applicable to the arrays of devices and operational hubs throughout the MDZ. It requires:

- All surface emergent deployments to be approved by Welsh Ministers in advance;
- The nature of the devices will need to be described and dimensions provided;
- An updated seascape, landscape and visual assessment needs to be prepared for each surface emergent deployment; and
- Consultation with the IoACC.

The deployment of offshore elements of the Project will be controlled by the Device Deployment Protocol. The purpose of this process is to provide a mechanism to ensure that the devices ultimately proposed for deployment accord with the principles and assessment conclusions established in the Environmental Statement. In particular, there is a commitment within the Environmental Statement to avoid the deployment of visually prominent devices within the restricted areas identified in the TWAO. As different tidal energy devices and hubs have different visual characteristics, the final assessment as to whether a device or the combined effect of the deployment of a particular type or combination of different types is visually prominent can only be undertaken once the characteristics of the devices proposed for deployment are known. The Device Deployment Protocol therefore comprises an important process, involving consultation and approval, to control the deployment of devices and ensure that the proposed deployment remains within the effects assessed in the Environmental Statement. As there will be Device Deployment Protocol conditions in the TWAO and the Marine Licence both the IoACC and NRW will be involved in this process.

In relation to the onshore components of the Project:

- Structures have been positioned to reduce potential seascape, landscape and visual effects e.g. by considering the ground level of any buildings and locating them in the context of existing structures where possible;
- Specific mitigation is proposed in relation to the Landfall Substation, with this comprising the design and layout of the structures, the proposed materials, boundary treatments and reducing security fencing and lighting; and
- The use of underground cables and routing this within the local road corridors where possible.

The Landscape Management Plan will comprise an effective tool to ensure the effects of the onshore elements of the Project are mitigated. This document will be prepared in consultation with IoACC and NRW to ensure any issues and concerns are addressed.

In addition to the above, and in recognition of the predicted seascape, landscape and visual effects, Menter Môn has made a commitment to a landscape compensation package for the AONB. A Section 106 Agreement for securing this is being finalised with the IoACC.

Appendix A – Statements of Case Responses

Stakeholder/ organisation	Comment	Response
Natural Resources Wales	NRW will argue that the proposal would have a significant detrimental effect upon the seascape setting of the Isle of Anglesey AONB and how the public experiences the character and special qualities of the area.	The scope of the SLVIA has been defined through a thorough process with both NRW and IoACC. The SLVIA predicted significant effects in relation to a range of seascape, landscape and visual receptors in the vicinity of the Project.
	The meaning of 'prominent surface emergent devices' needs to be explained using terms and criteria used in visual impact assessment.	The Device Deployment Protocol will address this point. Importantly, this protocol will ensure that each specific deployment for tidal energy devices will be the subject of a specific seascape, landscape and visual impact assessment to ensure it is within the effects assessed in the Environmental Statement and will allow the monitoring of effects during the construction phase.
	The ecological restoration and landscape integration of the worst-case landfall cable scenario at the top of the cliff need to be designed taking account of the Ynys Gybi/Holy Island Coast SAC and the visual amenity of the AONB collectively.	It is still intended to install the landfall cable using HDD techniques. Should this not be feasible, measures to reduce the potential effects of a landfall cable installation that comprises a trenched cable that is also pinned to the cliffs. The Landscape Management Plan comprises a key tool to ensure the delivery of such measures, and the TWAO will require this document to be approved by NRW and IoACC.
	The Landscape Management Plan and offshore development deployment controls require minor amendment to ensure adequate measures for landscape conservation and enhancement are provided.	The Landscape Management Plan is currently an outline document. This comprises a live document that will evolve as the Project moves forward and detailed design information becomes available. Any required amendments to this document can be discussed and agreed as appropriate.

Stakeholder/ organisation	Comment	Response
	The offshore development controls (text, figures and parameters) that limit the visual effects upon the setting of the AONB need to be compiled within a single document. Clarification of how some measures can be achieved within the operational constraints of the development is required.	These measures can be complied within the Device Deployment Protocol. This mechanism will require consultation with IoACC prior to the deployment of tidal energy devices. The process will include the preparation of a specific seascape, landscape and visual impact assessment for each deployment. This will set out the detail of the mitigation measures that are incorporated. The requirement for consultation prior to deployment will ensure appropriate mitigation is incorporated.
	A commitment to monitor the visual effects of offshore development to allow the LPA, planning consultees and future developers to have current information about the visual baseline; allow the worst-case visual effects presented within the ES photomontages to be compared with the as-built development and allow any phased development of the MDZ to be undertaken in a way that does not exceed the worst-case development effects presented by the ES photomontages.	The continual requirement to undertake a specific seascape, landscape and visual impact assessment for each deployment of tidal energy devices as part of the Device Deployment Protocol will ensure continual review and monitoring of the Project during the construction phase.
	Given that significant residual effects on the special qualities of the AONB would occur if the development were to be approved, a commitment to an AONB landscape enhancement package would be required.	Menter Môn has made a commitment to a landscape enhancement package for the AONB.

Stakeholder/ organisation	Comment	Response
Isle of Anglesey County Council	In its Representations the Council noted a number of shortcomings in the Promoter's SLVIA.	These are addressed in the Further Environmental Information document submitted in March 2020.
	The Council's position is that the proposed Project will result in two forms of seascape and landscape impact; impacts from the onshore infrastructure (landfall including transition pit, cabling, landfall substation, grid connection substation and switch gear building) and impacts from the change created offshore through the installation of the array which changes the views into and out of the coastal landscape areas. The Council consider that these impacts will have significant adverse effects on parts of two nationally designated areas: the Anglesey Area of Outstanding Natural Beauty (AONB) and Holy Mountain Heritage Coast.	The effects are reported in the SLVIA that forms part of the Environmental Statement.
	In order to help mitigate such effects the Council supports the application of designed in mitigation and the proposed controls on the placement of the most visually prominent devices offshore and landscaping of the landfall and grid connection sub-stations onshore. In this respect, the Council agrees that all direct mitigation measures which are practicable have been identified by the Promoter.	No response required.

Stakeholder/ organisation	Comment	Response
	The Council considers that, even with the designed in mitigation in place, the impact from a seascape and landscape perspective will remain significant adverse for the closest parts of the AONB and Heritage Coast; the closest parts of two Seascape Character Areas (SCA 13: Holy Mountain and SCA 14: Rhoscolyn) and some recreational and residential visual receptors. As further mitigation for the adverse impacts is not practical, the Council considers that compensatory provision should be made to off-set the harm caused by the Project.	Menter Môn has made a commitment to a landscape enhancement package for the AONB. This is recognised in paragraph 6.3 of the Isle of Anglesey County Council Statement of Case, as follows: *"The Promoter has agreed in principle to provide such compensation. A number of measures are currently under consideration and the Council and the Promoter are in discussions as to the scope and approach, as well as the mechanism and appropriate vehicle for ensuring such measures can be delivered."*
	A key consideration will be to ensure that the Device Deployment Protocol contains a commitment and a simple process to assess cumulative impacts upon key seascape, landscape and visual receptors. These impacts will be incrementally generated by each proposed device deployment and the Council request that these impacts should be assessed against a baseline of the currently operational and consented (by previous Device Deployment Protocols) deployments.	Acknowledged, the Device Deployment Protocol includes a requirement to consider the seascape, landscape and visual effects of each deployment of tidal energy devices. The TWAO includes a requirement for consultation with IoACC as part of the Device Deployment Protocol.
	The Council has requested to be a named consultee on each DDP submitted for approval in the TWAO.	Acknowledged and the TWAO includes this requirement for consultation.

Stakeholder/ organisation	Comment	Response
Royal Yachting Association (RYA)	The RYA set out that Department of Energy and Climate Change (DECC) published an Offshore Energy Strategic Environmental Assessment (OESEA3) in 2016. They include a quote from this document which reference that developments should aim to *"avoid causing significant detriment to tourism, recreation, amenity and wellbeing as a consequence of deterioration in valued attributes such as landscape, tranquillity, biodiversity and hydrographic features"*. The RYA also set out that *"retaining the undisturbed remoteness of some waters will be important in terms of its wilderness and amenity value for recreation"*.	The SLVIA presents an assessment of the predicted effects of the Project. It also describes the measures that have been incorporated in the Project Design Envelope to mitigate these as far as possible.
	The RYA has also provided additional comments in their comments on the Statements of Case. This reflects on the mitigation of the potential effects of the offshore elements of the Project, setting out a need to balance seascape, landscape and visual effects with ensuring maritime safety. The RYA also restate their point in relation to OESEA3 (described above).	Comment acknowledged, the offshore elements of the Project will be marked and this will be agreed with relevant consultees in relation to navigational risks.

Stakeholder/ organisation	Comment	Response
Snowdonia Canoe Club	Concerns about the lack of consideration of the impact on seascape from the perspective of a kayak within the inshore passage. Principally we did not agree with Morlais' assessment that: *The tidal energy devices would not become a defining feature of seascape or landscape character and would comprise small components within the open views that can be seen over the Irish Sea* [page 89 para 324 Ref 6].	This is a selective extract from the conclusions, which includes a summary of the assessment findings. This paragraph sets out the predicted significant adverse effects on parts of the Holyhead Mountain and Rhoscolyn SCAs. The quote made omits the first part of the sentence: "**In the context of the wider Study Area**, the offshore components of the Project would frequently comprise relatively small elements in the context of key components of the character types/units and the potential effects on seascape/landscape character are not predicted to be significant".
	NRW requested additional information on seascape from the viewpoint of small recreational vessels in their letter of the 2 March 2020. Subsequently the Seascape Landscape and Visual Impact Assessment (SLVIA) photomontages were updated [10] but did not include any on the water viewpoints. Snowdonia Canoe Club disagree with this assessment of impacts on kayakers. Many representations from kayakers highlight the importance of the 'wild' nature of the seascape in their qualitative experience of the Stacks and the degradation of the seascape is likely to put people off visiting. We object strongly to the trivialisation of these impacts by Morlais.	Whilst NRW requested additional information, no additional viewpoints were requested. The response to the request sought to highlight where the potential visual effects on offshore recreational users were included in the SLVIA. Importantly Section 24.6.5.5.5.5.6 of the SLVIA identified the potential for significant effects on the users of recreational vessels within approximately 2km of the MDZ. Therefore, significant visual effects could apply to the users of recreational vessels between the coastline and the MDZ, including kayakers. There has been no attempt to trivialise the potential effects of the Project, and the purpose of the response was to identify that significant adverse effects were described in the SLVIA.

Stakeholder/ organisation	Comment	Response
	The perceived wildness of the seascape is a significant component of the qualitative experience of the Heritage Coast seascape. Based on available photomontages and consideration of the scale and alignment of MDZ structures, SCC consider that Morlais will significantly degrade the seascape as viewed from kayaks and other boats passing through the inshore passage.	It is agreed that wildness is an important component of the seascape and this is referred to in the SLVIA. The SLVIA also sets out the potential for significant visual effects on the users of recreational vessels, including kayakers, in the area surrounding the Project (as described above).
	The negative impact of the imposition of large visible infrastructure at close quarters to vessels passing the inshore passage must be included in the SLVIA to enable an informed decision to be made.	It is agreed that there will be negative visual effects on the users of recreational vessels as a result of the offshore components of the Project, and this is acknowledged in the SLVIA. The viewpoints included in the assessment were agreed through extensive consultation with NRW and IoACC. This included a wide range of visual receptors throughout the 15km study area.
	The Snowdonia Canoe Club has also provided additional comments in their comments on the Statements of Case. These broadly reflect the concerns raised above in relation to the potential effects of the Project. They also describe the need to balance the mitigation of the visual effects of the project with navigational safety, with reference to the colouring of the surface emergent tidal energy devices and structures.	The comments on the effects of the Project are responded to above. Comments on the balance between visual effects and navigational risks are acknowledged. The offshore elements of the Project will be marked and this will be agreed with relevant consultees in relation to navigational risks.

North Wales Wildlife Trust	Need to consider visibility during different tidal states and swell	There will be changes in the appearance of the devices and their positioning depending on the state of the tide and wave conditions, for example they will move laterally due to the tidal flow. The devices will also move based on the wave conditions. The assessment judgements have been made recognising these factors, however the main considerations relate to the overall scale and extent of the introduction of an array of tidal energy devices in the context of the baseline environment. The SLVIA assumes that the surface emergent devices are seen above water and the assessment was undertaken during periods of clear visibility to ensure a worst-case scenario was assessed. Photomontages are static images and there are clear limitations in depicted dynamic conditions. For each device type the anticipated maximum height above the water was incorporated in the model to ensure a likely worst-case is shown in the visualisations prepared. The locations where tidal state and swell around the tidal energy devices would be most apparent are elevated viewpoints closer to the MDZ e.g. Viewpoint 03 Car Park at South Stack Light House and Viewpoint 04 Ellin's Tower South Stack. From these locations the tidal energy devices are located beyond 1km and, whilst it is accepted that wakes around the devices would be seen, the key changes would be associated with the introduction of the structures themselves, and their scale and extent in the view. A significant effect on visual amenity is predicted at these locations and this would be applicable in a range of conditions and sea states. There may be some differences in the appearance of the offshore components of the Proposed Development in certain conditions, but the assessment considers a realistic worst-case scenario. The photomontages show the array of devices at the midpoint in the tidal flow. It is expected that the surface emergent devices would move with the tide, but this would not alter the judgements included in the SLVIA.

Stakeholder/ organisation	Comment	Response
	Need to account for visual impact of service vessels	The SLVIA recognises the potential presence of service or maintenance vessels during the operational phase of the Project. The worst-case scenario applied in the SLVIA included 130 surface emergent tidal energy devices, together with other visible structures across the MDZ. These vessels would be most apparent from locations in the vicinity of the closest viewpoints, where significant visual effects are already identified, and the presence of service vessels would not alter this judgement.

Mr and Mrs Roberts	The visualisations provided by Menter Môn as part of the planning application which are supposed to demonstrate the visual impact on the seascape are simply inaccurate and are not a true reflection of the potential impact on this area of outstanding natural beauty.	We understand that Mr and Mrs Roberts commissioned DTM Technologies to prepare a digital 3D model of the offshore components of the Project to inform their understanding of what is proposed. This 3D model has been shared with Menter Môn. This Comparing the model prepared by DTM Technologies with the drawing prepared as part of the SLVIA, it appears that overall arrangement of tidal energy devices is consistent with the assumptions made in the SLVIA. There are important points to highlight based on the information included in the Statement of Case. One tidal energy device type has been applied based on the maximum dimensions included in the Environmental Statement, and that these are shown coloured yellow in their entirety. The SLVIA is based on a realistic Project Design Envelope which takes account of a range of factors. Importantly the Project will be deployed in arrays of up to 30MW located within a single location or berth within the MDZ. Each array would be made up of a single device type and each developer would only be able to occupy one berth. Therefore, the Project would be made up of a range of device types and it is unrealistic to assume the same type of structure being deployed throughout the MDZ (outside the restricted zones). The Further Environmental Information submitted in March 2020 in relation to the SLVIA makes it clear that only parts of each device would have yellow markings with the remainder painted grey. Overall, it is considered that the information submitted by Mr and Mrs Roberts presents an unrealistic and overly negative depiction of the Project. The information contained in the Environmental Statement sought to depict a realistic scenario for development of the Project, taking into account the constraints and parameters that developers would have to work within. Furthermore, the Device Deployment Protocol would serve as a check and review on the deployment, ensuring that specific proposals within different parts of the MDZ are assessed in relation to their potential seascape, landscape and visual effects.

Stakeholder/ organisation	Comment	Response
Mr Llewellyn	The visual marine and landscape assessments provided by Morlais are not credible. NRW state that there remain significant adverse residual effects upon the Anglesey Area of Outstanding Natural Beauty (AONB)	The SLVIA sets out the predicted effects of the Project. This includes significant effects on seascape, landscape and visual receptors. NRW and IoACC have not disputed the overall judgements and findings reported in the SLVIA.