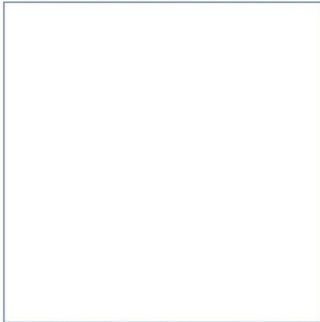
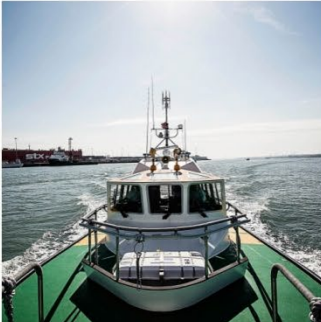
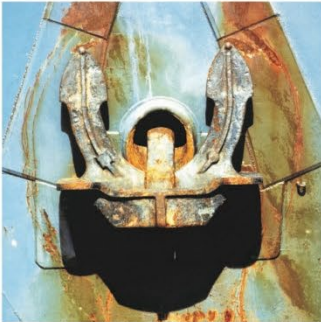
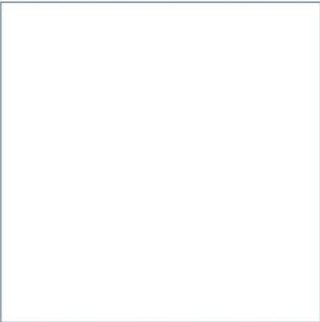
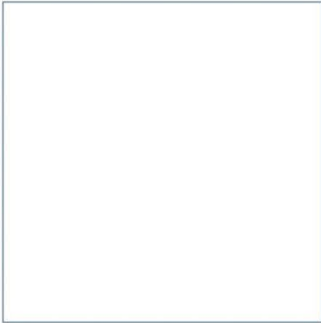


# Port of Mostyn

## Mostyn Energy Park Extension

### Compensation Plan

April 2025



Innovative Thinking - Sustainable Solutions



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# Mostyn Energy Park Extension



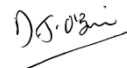
## Compensation Plan

April 2025



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# 1 Introduction

ABPmer has been commissioned by the Port of Mostyn (PoM) to provide the required ongoing technical support to discharge Marine Licence CML2283 conditions for the Mostyn Energy Park Extension (MEPE) Project. This includes the preparation of a Compensation Plan (this report) in order to discharge the following CML2283 condition:

- 3.31.1 The Licence Holder must submit a Compensation Plan to the Licensing Authority for written approval at least 6 weeks prior to commencement of the Licensed Activities. The Compensation Plan must be in accordance with the ABPmer Report (R.4606: Information to support Derogation September 2024). No Licensed Activities may be undertaken prior to written approval from the Licensing Authority.

The basis of the Compensation Plan is the draft Habitat Compensation Plan that was prepared during the licence determination process to collate all the details of the compensatory measures at the Mostyn and Warwick sites into a single document (ABPmer, 2024a).

This Compensation Plan sets out the approach that has been agreed with Natural Resources Wales (NRW) Advisory to implementing the compensation measures. It draws together relevant information from the Habitat Regulations Assessment (HRA) Derogation Report (ABPmer, 2024b), the draft supplementary note prepared by the PoM which was issued to NRW Advisory on 25 October 2024 (Port of Mostyn, 2024), as well as feedback received from NRW Advisory on the site visit on 4 September 2024 and separately by email on 8 November 2024. Subsequent comments that were received from NRW Advisory on 12 December 2024 have also been taken into account in this Compensation Plan.

The compensatory measures set out in this Compensation Plan will be carried out in advance of the reclamation for the MEPE Project so that the compensation can be delivered before the loss of Annex I Estuaries feature of the Dee Estuary Special Area of Conservation (SAC). These compensatory measures comprise the scrape back and remedial of two areas of foreshore. These sites are referred to as follows in this report:

- Mostyn scrape back; and
- Warwick (also known as Marsh Row) foreshore remedial.

The following sections present further details on the compensation sites and how they will be delivered.

## 2 Mostyn Scrape Back

The ‘Mostyn scrape back’ compensation site is located along the western section of the dock estate (Figure 1). This area comprises *circa* 1.5 ha of relatively barren rubble along the toe of the rock armour exhibiting limited colonisation by characteristic macroalgae and epifaunal species (Image 1 to Image 3).

The manmade material in this area will be scraped back to expose underlying natural mud. This will allow silt to settle in this area and support natural mudflat restoration on the upper sections of Mostyn Bank that are typically above mean high water neaps (MHWN). It will also potentially provide an increased area available for feeding and loafing waterbirds. This will improve the quality and function of the Annex I Estuaries feature of the Dee Estuary SAC, as well as potentially provide additional supporting habitat for bird features of the Dee Estuary Special Protection Area (SPA).

The scrape back will involve the use of an excavator to dig out the debris and redistribute it higher up the shore onto the toe of the existing rock armour. These works will take place between May and July to avoid the bird passage/overwintering periods. An ecological clerk of works will be appointed to ensure that there are no significant effects on any existing key ecological features during the remedial works (e.g. breakwater ledge roost).



Figure 1. Scrape back area at Mostyn



**Image 1.** View (east) of the southwest part of scrape back area



**Image 2.** View (northeast) of the central part of scrape back area



**Image 3.** View (northeast) of the northeast part of scrape back area

### 3 Warwick (Marsh Row) Foreshore Remedial

The 'Warwick (Marsh Row) foreshore remedial' compensation site is an area of foreshore directly upstream of the PoM, situated seaward of the previously disused Warwick Chemicals site and redundant breeze block manufacturing works (Figure 2). This *circa* 1.8 ha area comprises discarded manmade debris, including rejected concrete breeze blocks, bricks and demolished building material, as well as coarse mixed sediment that appears to be of manmade origin (Image 4 to Image 7). This material is largely barren with limited colonisation of typical macroalgae and epifaunal species.

The manmade debris in this area will be scraped back to expose underlying natural (i.e., non-manmade) habitat. This will improve the quality of the Annex I Estuaries feature of the Dee Estuary SAC. A drawing showing a plan and cross-sections of the compensation works is included in Figure 3.



Figure 2. Foreshore remedial area at Warwick (Marsh Row)



**Image 4.** View (southeast) of the southeastern part of remedial area



**Image 5.** View (northwest) of the central part of remedial area



**Image 6.** View (southeast) of the northwestern part of remedial area



**Image 7.** View (northwest) of the northwestern part of remedial area

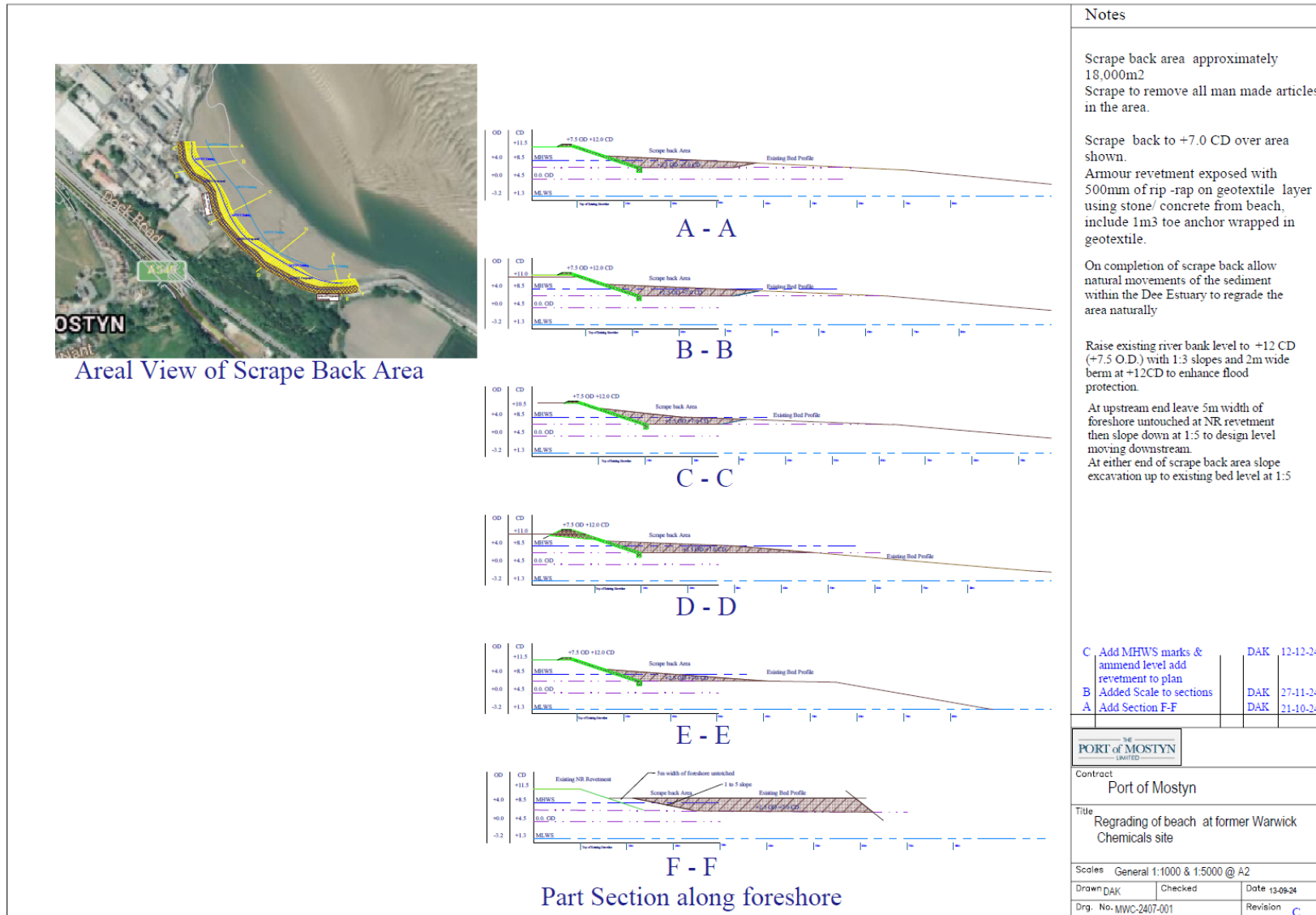


Figure 3. Plan and cross-sections of foreshore remedial works at Warwick site

A long reach excavator with a reach of some 18 m will be used over low tide periods to clear the site of debris (Image 8). This will involve the following steps:

1. The excavator will initially form a working area on the foreshore, where it can stand using the existing concrete blocks on the foreshore. The excavator will be set at a level of about +9 m Chart Datum (CD) and positioned so that it can reach the furthest extent of the scrape back area;
2. Working from this berm the excavator will commence by scraping off the concrete material to seaward of the berm and using this to extend the berm. Work will commence at the upstream end of the site working downstream;
3. The initial berm will be situated such that the section towards the Network Rail (NR) revetment can be reached. This section will be graded such that a distance of 5 m from the NR revetment is not touched (i.e., not excavated). From this point on, a slope down to the desired scrape back level (currently +7.5 m CD) will be cut at a slope no steeper than 1:5 (in order to maintain the stability of the existing NR revetment). NRW Advisory has advised that the 5 m buffer from the NR embankment as shown in cross-section F-F is acceptable and should ensure that the integrity of the adjacent defence will not be compromised (Figure 3). The scrape back works along the downstream boundary of the site will be gradually tapered down and blended in with existing levels, avoiding any steep gradients;
4. Material excavated from the seaward side of the berm will be placed at the toe of the existing embankment by the excavator, this will then be lifted onto the existing ground over high water periods, where it will be further processed;
5. Once the material furthest from the revetment has been removed the berm will be repositioned to the toe of the revetment to allow the further excavation of the foreshore, this material can be placed directly on to the land;
6. The final excavation and armouring of the revetment will take place using the excavator sited at the top of the berm; and
7. Facing stone will be placed along the seaward edge of the boundary (fence line). The facing stone will be similar in nature to what is used in other parts of the PoM (Image 9).

All of the hard material that is not needed as revetment protection will be separated from the softer materials (i.e. coarse mixed sediments) using a sifting bucket on an excavator. The softer material will remain on site and the unwanted hard material will be crushed on site for use as hardstanding, either for the MEPE reclamation or other areas of the PoM estate.

These works will take place between May and July to avoid the bird passage/overwintering periods. An ecological clerk of works will also be appointed by the contractor to ensure that there are no significant effects on any existing environmental receptors or their supporting habitat during the remedial works, including roosting birds using the coarse mixed sediments.

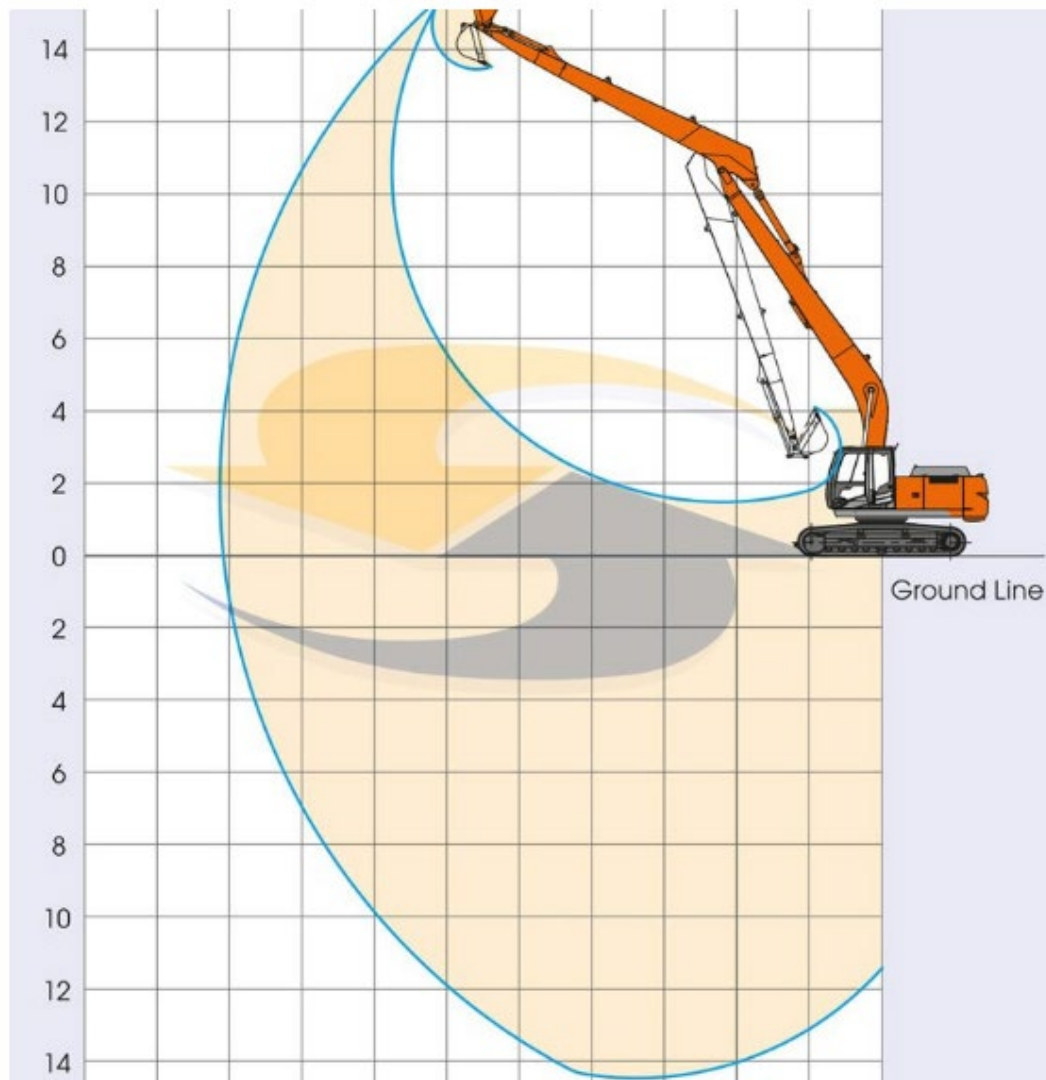


Image 8. Typical long reach excavator



Image 9. Example of facing stone to be used along seaward edge of boundary (fence line)

## 4 References

ABPmer, (2024a). Mostyn Energy Park Extension, Habitat Compensation Plan, ABPmer Report No. R.4687. A report produced by ABPmer for Port of Mostyn, December 2024.

ABPmer, (2024b). Habitats Regulations Assessment, Information to Support 3 Legal Tests for a Derogation to be Granted, ABPmer Report No. R.4606, for Port of Mostyn, September 2024.

Port of Mostyn (2024). Outline Methodology for Scrape Back Works at Warwick Foreshore. Draft Note issued to NRW Advisory on 25 October 2024.

## 5 Abbreviations/Acronyms

CD	Chart Datum
CML	Construction Marine Licence
HRA	Habitats Regulations Assessment
MEPE	Mostyn Energy Park Extension
MHWN	Mean High Water Neaps
MHWS	Mean High Water Springs
NR	Network Rail
NRW	Natural Resources Wales
OD	Ordnance Datum
PoM	Port of Mostyn
SAC	Special Area of Conservation
SPA	Special Protection Area

Cardinal points/directions are used unless otherwise stated.

SI units are used unless otherwise stated.

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