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Wales**

Environmental Impact Assessment Written Confirmation of the EIA Consent Decision

**Marine Works (Environmental Impact Assessment) Regulations
2007 (as amended) (“the Regulations”)**

Construction and Dredge associated with the Mostyn Energy Park Extension Project

The Port of Mostyn, Flintshire

CML2283

Contents

1. Introduction	4
2. The Project	4
2.1 Project Background	4
2.2 Location.....	5
2.3 Statement of need	6
3. Environmental Impact Assessment.....	6
3.1 The Environmental Statement (ES).....	7
3.2 Other Legislative and Policy Framework	7
3.2.1 Water Framework Directive (Council Directive 2000/60/EC)	8
3.2.2 Waste (England and Wales) Regulations 2011 (2011/988).....	8
3.2.3 The Conservation of Habitats and Species Regulations 2017 (as amended)	9
3.2.4 Marine Conservation Zones	11
3.2.5 Wildlife and Countryside Act 1981 (as amended).....	11
3.2.6 Marine Policy Statement and Welsh National Marine Plan.....	11
3.2.7 Environment (Wales) Act 2016	11
3.2.8 Well-being of Future Generations (Wales) Act 2015.....	11
3.3 Further information provided by the applicant pursuant to a notification under regulation 14(1)	12
4. Consultation with the public	13
4.1 Public Notices.....	13
5. Consultation of EEA States.....	14
6. Technical consultation	14
7. Issues arising during the consideration of the Environmental Statement, Marine Licence Application and representations received	20
7.1 Physical Processes	20
7.2 Water and Sediment Quality	24
7.3 Nature Conservation and Marine Ecology.....	25
7.4 Fisheries.....	35
7.5 Commercial and Recreational Navigation	37
7.6 Flood Risk and Drainage.....	38
7.7 Cultural Heritage and Marine Archaeology.....	39
7.8 Cumulative and In-combination Effects	40
8. Mitigation or monitoring measures to be taken	40
8.1 Features or measures to avoid, prevent, reduce or offset likely significant effects...	40
8.2 Mitigation or monitoring required to be attached to the consent (Regulation 22 (c)- (e)).....	42
9. Regulation 21A Conclusion about Environmental Impact	43
9.1 Population and human health.....	44
9.2 Biodiversity	44

9.3 Land, soil, water, air and climate	45
9.4 Material assets, cultural heritage and landscape	45
9.5 Risk of major accidents and disasters relevant to the project.....	45
9.6 Cumulative impacts and in-combination impacts.....	45
10. Regulation 22 EIA Consent Decision	46

1. Introduction

- 1.1 This document is the Environmental Impact Assessment ('EIA') Written Confirmation document for the Mostyn Energy Park Extension Project ("the Project").

2. The Project

2.1 Project Background

- 2.1.1 An application for a Marine Licence for the Project was submitted to NRW by The Port of Mostyn Limited on 13 December 2022. The Port of Mostyn Limited is proposing to extend the Mostyn Energy Park (MEP) so that the Port can continue to support and service current and anticipated future offshore wind development. The Project is named the Mostyn Energy Park Extension (MEPE) Project.
- 2.1.2 The Project comprises the following activities;
- Constructing a 360 m length of new quay wall as a combination pile wall involving both impact (percussive) and vibratory piling methods to reach the required design depths;
 - Infilling the area that is reclaimed (approximately 3.5 ha) behind the new quay wall with approximately 600,000 m³ of infill material to reach a final fill height of 12 m above Chart Datum (CD). This infill requirement is proposed to be fully met by reusing 500,000 m³ or 1,000,000 tonnes of the suitable capital dredge arisings (see below), and 100,000 m³ of aggregate hardcore material for the top circa 1 m layer of the reclamation;
 - Dredging of a new berth pocket along a new quay wall to a depth of -11 m below CD plus 1 m over dredge allowance (approximately 400,000 m³ or 800,000 tonnes);
 - Re-dredging the existing berth pocket along the existing quay wall to a depth of -9 m below CD (approximately 100,000 m³ or 200,000 tonnes);
 - Re-dredging the existing main navigation channel to a depth of -4m below CD (approximately 3 million m³ or 6 million tonnes);
 - Reusing approximately 500,000 m³ or 1,000,000 tonnes of the suitable dredge arisings as infill material for a reclamation and disposing of the remainder at the existing Mostyn Deep disposal site (IS102);
 - Potential relocation of four existing Ro-Ro dolphins (piles) at the Port of Mostyn to another area within the harbour area using the same installation methods as the new quay wall;
 - Finishing the reclaimed area as an area of hardstanding to be used primarily as a storage/laydown area;
 - Maintenance dredging of the new berth, existing berths, harbour and approach channel (approximately up to 499,995 m³ or 999,990 tonnes per year) once the capital works have been completed;
 - Disposing of the maintenance dredge material at the existing marine disposal sites and/or reusing up to 150,000 tonnes or 75,000 m³ per year for beneficial use projects (an increase on the 100,000 tonnes per year beneficial use that is currently

undertaken under the existing maintenance dredge and disposal licence (Marine Licence DML1542v2); and

- Implementing environmental enhancements that support natural mudflat restoration and encourage the colonisation of hard surfaces.

2.1.3 All activities listed in 2.1.2 above require a Marine Licence under Part 4, (Chapter 1) Section 66 of the Marine and Coastal Access Act.

2.1.4 The application had initially included the potential construction of a RoRo linkspan, however in email dated 3 October 2024 it was confirmed that the construction of the linkspan is no longer required. In addition, works at the Mostyn Scrape Back Site was presented as part of the initial proposal as environmental enhancement, however following the conclusion of the HRA, the environmental enhancement work is now proposed to contribute to provide an area for compensation alongside work at the Warwick foreshore remedial site. Further details surrounding the compensation measures are detailed with ABPmer Report (September 2024).

2.2 Location

2.2.1 The Project is located at the Port of Mostyn which is on the Dee Estuary in North Wales, Flintshire.



Figure 1.1 Location of MEPE Project

Figure 1 – Location of MEPE Project taken from Figure 1.1 of Chapter 1 of the Environmental Statement.

2.3 Statement of need

2.3.1 The need for the project and consideration of alternatives have been presented within Chapter 2 of the Environmental Statement (ES). The Project is seeking to expand and enhance its current port infrastructure in order to allow the port to support and service the current and anticipated future growth in the offshore wind industry.

The UK and Welsh Government have identified the role of offshore wind in supporting Government ambition for renewable energy, energy security and meeting net zero.

As is highlighted within the Welsh National Marine Plan (WNMP) Implementation Guidance, Welsh Ministers have declared a climate emergency and has set statutory emission reduction targets. The WNMP identifies offshore wind energy as a proven and strategically important technology with large scale development supported through policy ELC_01.

As the offshore wind sector grows there will be demand for the components and facilities that are required to build, operate, maintain and service a windfarm. This project seeks to support the offshore wind industry through enhancing port infrastructure, and berthing for the construction, operation, and maintenance requirements of the offshore wind sector.

Within the ES the applicant sets out that The Port of Mostyn is ideally placed to support the offshore wind sector already providing the operation and maintenance base for RWE Npower's North Hoyle, Rhyl Flats and Gwynt y Môr windfarms. The Port benefits from a number of physical attributes that make it an attractive site for supporting the construction of offshore wind farms and the location of operation and maintenance facilities. The WNMP Ports and Shipping Policy P&S_02 recognises the significance of the Port of Mostyn in supporting offshore wind construction and services and identifies Mostyn as one of the ports in Wales that have the greatest competitive advantage in exploiting opportunities arising from low carbon and renewable energy generation.

As detailed within Chapter 2 section 2.3 of the ES, enhancement is required to the ports facilities in order to allow it to offer further services to the offshore wind industry in the future. It concluded that the existing facilities were either not capable of servicing the offshore wind sector or already in use by other customers.

3. Environmental Impact Assessment

3.0.1 Council Directive 2011/92/EU (as amended) on the assessment of the effects of certain public and private projects on the environment ("the EIA Directive") aims to protect the environment and the quality of life by ensuring that projects which are likely to have significant environmental effects by virtue of their nature, size or location are subject to an EIA before permission is granted.

- 3.0.2 The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) (“the Regulations”) transpose the EIA Directive in Wales and England for marine licence applications.
- 3.0.3 Pursuant of Regulation 8 of the Regulations, Natural Resources Wales Permitting Service (NRW PS) considered that the proposed works fell under Schedule A2 paragraph 63 of the Regulations on the assessment of the effects of the project on the environment, specifically:
- 63. Construction of harbours and port installations including fishing harbours*
- 3.0.4 Accordingly, the Marine Licence application for the Project was accompanied by an ES.
- 3.0.5 Following submission of “Mostyn Energy Park Extension Scoping Report”, dated October 2021 submitted by Port of Mostyn Limited, NRW PS issued a Scoping Opinion to the Port of Mostyn Limited on 6 January 2022 reference SC2107.

3.1 The Environmental Statement (ES)

- 3.1.1 The ES outlined the proposed project organised under the following topic headings.
- 3.1.2 Technical chapters:
- Non-Technical Summary
 - Chapter 1: Introduction
 - Chapter 2: Proposed Development
 - Chapter 3: Project Methodology
 - Chapter 4: Legislative and Consenting Framework
 - Chapter 5: Impact Assessment Approach
 - Chapter 6: Physical Processes
 - Chapter 7: Water and Sediment Quality
 - Chapter 8: Nature Conservation and Marine Ecology
 - Chapter 9: Fisheries
 - Chapter 10: Commercial and Recreational Navigation
 - Chapter 11: Flood Risk and Drainage
 - Chapter 12: Cultural Heritage and Marine Archaeology
 - Chapter 13: Cumulative and In-combination Effects
 - Chapter 14: Summary
- 3.1.3 The ES is considered to satisfy the requirements of Regulation 12 (2) and Schedule 3 of the Regulations. Specific comments pertinent to each ES chapter can be found in section 7.

3.2 Other Legislative and Policy Framework

Relative considerations under other legislation and / or policy are set out below:

3.2.1 Water Framework Directive (Council Directive 2000/60/EC)

3.2.1.1 The sea from the mean low water mark up to 1 nautical mile from shore is protected under the WFD which requires a project or activity does not cause or contribute to deterioration in status of European Union (EU) water bodies or 'prevent the water body achieving 'good status'.

3.2.1.2 The Potential effect of the Project was also screened against the Water Framework Directive objectives for the following Water Bodies:

- Dee (North Wales) Transitional Waterbody (GB531106708200)
- North Wales Coastal Waterbody (GB641011650000)

3.2.1.3 A Water Framework Directive Compliance Assessment concluded that the proposal, when considered alone and in-combination, will not pose a risk to deterioration of the above listed waterbodies or jeopardise its attainment of good surface water status when undertaken in accordance with appropriate mitigation which can be secured through the Marine Licence including;

- The production of, and adherence to a Construction Environment Management Plan and adherence to pollution prevention best practices in order to mitigate the impact on water quality.
- A requirement to produce and implement an Invasive Non-native Species Management/Biosecurity Plan to limit the spread of non-native species.
- Additional measures to minimise impact of underwater noise levels during piling on fish species these include seasonal tidal restrictions to avoid and/or minimise impact on key fish species, and also night-time piling restrictions to minimise impact on fish species that migrate exclusively or preferentially at night.

3.2.1.4 Further details are described within the Water Framework Directive Compliance assessment.

3.2.2 Waste (England and Wales) Regulations 2011 (2011/988)

3.2.2.1 'Establishes a legal framework for treating waste in the EU. This is designed to protect the environment and human health by emphasising the importance of proper waste management, recovery and recycling techniques to reduce pressure on resources and improve their use.' Waste generated by a project or activity must be dealt with in an environmentally friendly way. To do this it applies the waste hierarchy from the Waste Regulations, which gives an order of preference for how waste is dealt with (prevention, re-use, recycling, recovery, disposal at sea).

3.2.2.2 See consideration under section 7.

3.2.3 The Conservation of Habitats and Species Regulations 2017 (as amended)

3.2.3.1 European sites are those designated under The Conservation of Habitats and Species Regulations 2017 (as amended) (“Habitats Regulations”) as Special Protection Areas (“SPAs”), Special Areas of Conservation (“SACs”) or Sites of Community Importance (“SCIs”).

3.2.3.2 The proposal is located within a European Protected Site.

3.2.3.3 The effects of proposal on the following European Sites, their features and conservation objectives have been considered by NRW PS during the licence determination:

- Dee Estuary SAC
- Dee Estuary SPA
- Dee Estuary Ramsar
- Liverpool Bay SPA
- River Dee and Bala Lake SAC
- North Anglesey Marine SAC
- West Wales Marine SAC
- Bristol Channel Approaches SAC
- Pen Llyn a’r Sarnau SAC (bottlenose dolphin and grey seal features only)
- Cardigan Bay (bottlenose dolphin and grey seal features only)
- Pembrokeshire Marine (grey seal features only)
- Mersey Narrow and North Wirral Foreshore SPA and RAMSAR

3.2.3.4 In light of the conclusions of the appropriate assessment, it has not been ascertained that the project will not adversely affect the integrity of any European Designated site. Specifically adverse effect could not be ruled out on the Dee Estuary SAC for the reason set out below.

3.2.3.5 The proposed land reclamation would result in a direct permanent loss of 3.22ha of Annex I Estuaries feature which is agreed by both Natural Resources Wales Advisory (NRW A) and the applicant.

3.2.3.6 The conservation objective for the Estuaries feature of the Dee Estuary SAC is to maintain the feature in favourable condition, as defined below;
The estuaries feature will be considered to be in favourable condition when, subject to natural processes, each of the following conditions are met;

- i. The aggregate total extent of all estuarine communities within the site is maintained*
- ii. The spatial distribution of estuarine communities within the site is maintained*
- iii. The extent of individual estuarine habitat features within the site is maintained*
- iv. The variety and relative proportion of sediment and rocky substates within the estuaries is maintained*

- v. *The variety and extent of any notable subtidal sediment communities is maintained*
- vi. *The variety and extent of notable intertidal hard substrata communities is maintained*
- vii. *The spatial and temporal patterns of salinity, suspended sediments and nutrients concentrations are maintained within limits sufficient to satisfy the requirement (i to iv).*

3.2.3.6 NRW PS considers that the conservation objective seeks to maintain the total extent of all estuarine communities within the site. NRW PS recognise that due to the size of the feature the loss represents only a small proportion of its total extent 0.024%, however NRW PS agree with NRW A that 3.22ha is not an insignificant area, and the permanent loss of 3.22ha is not considered to be trivial.

3.2.3.7 NRW PS view that the direct permanent loss of 3.22ha of estuaries feature as a result of land reclamation activity go against the conservation objectives for the site and for this reason would lead to an adverse effect on the integrity of the site.

3.2.3.8 Where adverse affect cannot be ruled out approval for a project cannot be given unless the project satisfies the requirements of Article 6(4) of the Habitat Directive, this includes, consideration of alternatives, overriding reason of public interest and suitable compensation measure being secured.

3.2.3.9 The applicant provided ABPmer Report (September 2024) with further information to demonstrate that the project meets the required test for derogation, namely, there are no feasible alternative solutions, there is overriding public interest for the project to proceed, and that necessary compensation can be secured. Compensation was proposed across two sites referred to as the Mostyn Scrape Back site and Warwick Foreshore Remedial site. On both sites it is proposed to scrape back the foreshore which currently comprises discarded man-made debris to expose underlying natural habitat. The proposed compensation measures across the two sites cover an area of 3.3ha.

3.2.3.10 NRW A as the ANCB confirmed they agreed in principle that the measures outlined within ABPmer Report (September 2024) will be adequate to compensate for the loss in 'distribution and extent' of the Estuaries feature of the Dee Estuary SAC, and that the measures proposed will allow the Estuaries features 'distribution and extent' to remain in 'favourable' condition. Natural England confirmed they agreed with NRW A that the compensation put forward would be suitable.

3.2.3.10 NRW PS considered that the project meets the required test for derogation, namely, there are no feasible alternative solutions, there is overriding public interest for the plan to proceed, and that necessary compensation can be secured. The Statement of Case was sent to Welsh Government on the 25 October 2024 notifying Welsh Government of NRW PS intention to approve the project notwithstanding a negative assessment of its implications for the Dee Estuary SAC. Approval to grant a licence under Article 6(4) of the Habitats Directive was provided by Welsh Government on 28 January 2025.

3.2.3.5 Further details are described within the Habitats Regulations Assessment.

3.2.4 Marine Conservation Zones

- 3.2.4.1 Section 116 of the Act provides powers to Welsh Ministers to designate Marine Conservation Zones (“MCZs”) with the aim of contributing to the achievement of a network of ecologically coherent and well-managed marine protected areas.
- 3.2.4.2 The Project is not within a Marine Conservation Zone, and was not identified to have an impact on any Marine Conservation Zone.

3.2.5 Wildlife and Countryside Act 1981 (as amended)

- 3.2.5.1 Sites of special scientific interest (“SSSIs”) are protected by law to conserve their wildlife or geology. The Wildlife and Countryside Act 1981 (as amended) ensures that SSSIs are protected and managed effectively.
- 3.2.5.2 See consideration under section 7.

3.2.6 Marine Policy Statement and Welsh National Marine Plan

- 3.2.6.1 The UK Marine Policy Statement (“MPS”) is the framework for preparing Marine Plans and taking decisions affecting the marine environment. NRW PS must make licensing decisions in accordance with the MPS and the Welsh National Marine Plan unless relevant considerations indicate otherwise.

3.2.7 Environment (Wales) Act 2016

- 3.2.7.1 Article 4 of the Natural Resources Body for Wales (Establishment) Order 2012, as amended by the Environment (Wales) Act 2016 requires NRW to pursue the sustainable management of natural resources in relation to Wales, and apply the principles of sustainable management of natural resources in the exercise of its functions, so far as consistent with their proper exercise.
- 3.2.7.2 NRW PS considers that the procedures outlined in this Written Confirmation in the consideration of EIA consent are consistent with this requirement.

3.2.8 Well-being of Future Generations (Wales) Act 2015

- 3.2.8.1 This Act requires NRW, as a public body, to take reasonable steps in exercising its functions to work in accordance with the sustainable development principle, as set out in Section 5 of the Act.
- 3.2.8.2 NRW considers that that the EIA process is consistent with the sustainable development principle described in the Act, and that the processes outlined in this Written Statement are sufficient to properly demonstrate the sustainable development principle. In particular, NRW acknowledges that the principles of sustainable management include taking account of all relevant evidence and gathering evidence in respect of uncertainties, and taking account of the short, medium and long term consequences of actions. NRW further acknowledges that is it an objective of sustainable management to maintain and enhance the

resilience of ecosystems and the benefits they provide and, in so doing meet the needs of present generations of people without compromising the ability of future generations to meet their needs, and contribute to the achievement of the well-being goals in section 4 of the Well-being of Future Generations (Wales) Act 2015.

3.3 Further information provided by the applicant pursuant to a notification under regulation 14(1)

3.3.1 NRW PS requested further information from the applicant on the 24 March 2023, this was subsequently received on the 1 September 2023. A list of documents submitted following the further information request is listed below;

- R4238_Final for Consultation_29Aug2023 – ABPmer report detailing further information in support of Marine Licence Application CML2283
- AppendixA_MEPE_Comments_log_21Jul2023.xlsx
- MEPE NRW MLT Request for Further Information Comment Log
- MEPE NRW Advisory Signposting Document.
- Updated Marine Works Application Form
- Tracked version of Marine Works Application Form
- Updated Dredge and Disposal Application Form
- Tracked version of Dredge and Disposal Application Form

In addition, copies of the following key references that were mentioned in the further information report were provided;

- Port of Mostyn Breakwater Quay Development Environmental Statement (ERM breakwater ES 2009)
- Mostyn Deep Sediment Transport Studies 2002 (HRW_EX4630_Sep2002.pdf)
- Maintenance of Navigation Mostyn Channel Monitoring Protocols r 1.pdf
- Mostyn Channel Monitoring Protocols (FINAL) Dec 08 rev 4 .pdf
- Port of Mostyn Re-Development (work Undertaken Following Public Inquiry) Environmental Statement Update and Cumulative Impact Assessment (Mostyn dock ES update final as issued 18.9.02.doc)
- Port of Mostyn Dredge and Disposal Operations for Maintenance of Navigation Environmental Statement 2007 (Port of Mostyn ES 24.10.07.pdf)

3.3.2 NRW PS subsequently requested further information from the applicant on the 12 January 2024, this was subsequently received on the 28 March 2024. A list of documents submitted following the further information request is listed below;

- Further Clarification Report dated 27 March 2024
- Appendix A – Further Clarification Comment Log

3.3.3 Pursuant to Regulations 16 and 17 of the Regulations, consultation with the public and technical consultees was carried out on the further information submission, see Section 4 and 6.

3.3.4 On the 2 August 2024, NRW PS provided the applicant with the opportunity to provide information to meet the requirements of Article 6(4) of the Habitat Directive,

namely, there are no feasible alternative solutions, there is overriding public interest for the project to proceed, and that necessary compensation can be secured. On the 20 September 2024 the applicant submitted ABPmer Report (document reference R4606) providing the requested information.

4. Consultation with the public

4.1 Public Notices

- 4.1.1 Pursuant to Regulation 16, public notices were advertised to notify interested parties of the proposed works and give any interested parties or members of the public an opportunity to make representation on the application as necessary.
- 4.1.2 The application documents were made available as follows;
- A translated public notice was placed in The Leader Newspaper on 27 January 2023 & 3 February 2023
 - The application documents were made available to the public at Holywell Library, Holywell, Flintshire, for 42 days following the publication of the first public notice. The application documents were also available on NRW online public register.
- 4.1.3 No public representations were received.
- 4.1.4 Following submission of further information detailed in Section 3.3.1, public notices were advertised to notify interested parties of the provision of further information and give interested parties or members of the public the opportunity to make representation on the application and further information submissions as necessary.
- 4.1.5 The application documents and further information submission were made available as follows;
- A translated public notice was placed in The Leader Newspaper on 11 September 2023 & 18 September 2023
 - The application documents and further information were made available to the public at Holywell Library, Holywell, Flintshire, for 42 days following the publication of the first public notice. The application documents and further information were also available on NRW online public register.
- 4.1.6 No public representations were received.
- 4.1.7 Following submission of further information detailed in Section 3.3.2, public notices were advertised to notify interested parties of the provision of further information and give interested parties or members of the public the opportunity to make representation on the application and further information submissions as necessary.
- 4.1.8 The application documents and further information submission were made available as follows;
- A translated public notice was placed in The Leader Newspaper on 8 April 2024 & 15 April 2024.

- The application documents and further information were made available to the public at Holywell Library, Holywell, Flintshire, for 42 days following the publication of the first public notice. The application documents and further information were also available on NRW online public register.

4.1.9 No public representations were received.

5. Consultation of EEA States

5.0.1 A Transboundary Screening Assessment did not identify potential for effects to any other EEA State.

5.0.2 Consequently, no material was provided to other EEA member States in relation to the application.

6. Technical consultation

6.0.1 In accordance with Regulation 17 of the regulations, NRW PS considered it appropriate to consult the bodies listed in the table below on 24 January 2023 due to their particular expertise. These bodies were consulted for a period of 42 days. For those bodies which responded to the consultation an 'Y' can be found in the response received column, and those which did not respond to the consultation an 'N': It was sent to the following consultation bodies:

Consultee	Response received (Y/N)	Date(s) of receipt
The Crown Estate	N	
NRW Advisory	Y	7 March 2023
Ministry of Defence-Safeguarding Defence	Y	24 January 2023
Maritime & Coastguard Agency	Y	10 March 2023
Trinity House	Y	2 March 2023
Royal Yachting Association	Y	1 February 2023
Local Biodiversity Officer (Flintshire County Council)	N	
Local Planning Authority (Flintshire County Council)	N	
Local Harbour Authority – The Port of Mostyn	N	

Local Harbour Authority – The Dee Conservancy	Y	1 March 2023
Local Harbour Authority – NRW	Y	6 March 2023
Royal Society for the Protection of Birds (RSPB)	Y	7 March 2023
Cadw	Y	28 February 2023
Welsh Archaeological Trust	Y	24 January 2023
Royal Commission on the Ancient and Historic Monuments of Wales	Y	27 February 2023
National Federation of Fishermen’s Organisations (NFFO)	N	
North Western Inshore Fisheries Conservation Authority (IFCA)	Y	14 February 2023
Cockle Fisheries NRW	Y	16 March 2023
Welsh Fishermens Association (WFA)	N	
Chamber of Shipping	N	
NATS Safeguarding	Y	1 February 2023
Cefas – surrounding suitability of dredged material for disposal	Y	7 March 2023
Natural England	Y	14 March 2023
Environment Agency	Y	16 March 2023

6.0.2 Details of the issues raised by the Consultation Bodies and how they have been addressed is set out in section 7.

6.0.3 Consultees who did not provide a response were assumed to have no comment.

6.0.4 Following a submission of further information, as detailed in section 3.3.1, NRW PS consulted the bodies listed in the table below on the 11 September 2023, due to their particular expertise in matters arising in relation to this application. These

bodies were consulted for a period of 42 days. For those bodies that responded to the consultation an 'Y' can be found in the response received column, and those which did not respond to the consultation an 'N':

Consultee	Response received (Y/N)	Date(s) of receipt
The Crown Estate	Y	2 October 2023
NRW Advisory	Y	7 November 2023 and 16 November 2023
Ministry of Defence- Safeguarding Defence	Y	12 September 2023
Maritime & Coastguard Agency	Y	19 October 2023
Trinity House	Y	3 October 2023
Royal Yachting Association	Y	21 September 2023
Local Biodiversity Officer (Flintshire County Council)	N	
Local Planning Authority (Flintshire County Council)	N	
Local Harbour Authority – The Port of Mostyn	N	
Local Harbour Authority – The Dee Conservancy	Y	16 October 2023
Local Harbour Authority – NRW	N	
Royal Society for the Protection of Birds (RSPB)	Y	20 October 2023
Cadw	Y	18 October 2023
Welsh Archaeological Trust	Y	11 September 2023
Royal Commission on the Ancient and Historic Monuments of Wales	Y	18 October 2023
National Federation of Fishermen's Organisations (NFFO)	N	

Fisheries Conservation Authority (IFCA)	Y	12 September 2023
Cockle Fisheries NRW	Y	20 October 2023
Welsh Fishermens Association (WFA)	N	
Chamber of Shipping	N	
NATS Safeguarding	Y	12 September 2023
Cefas – surrounding suitability of dredged material for disposal	Y	13 September 2023
Natural England	Y	2 October 2023 and 20 October 2023
Environment Agency	Y	27 November 2023
Welsh Government Fisheries and Marine Enforcement Division	N	

6.0.5 Following a submission of further information, as detailed in section 3.3.2, NRW PS consulted the bodies listed in the table below on the 8 April 2024, due to their particular expertise in matters arising in relation to this application. These bodies were consulted for a period of 42 days. For those bodies that responded to the consultation an ‘Y’ can be found in the response received column, and those which did not respond to the consultation an ‘N’:

Consultee	Response received (Y/N)	Date(s) of receipt
The Crown Estate	Y	17 May 2024
NRW Advisory	Y	21 May 2024
Ministry of Defence-Safeguarding Defence	Y	14 May 2024
Maritime & Coastguard Agency	Y	17 May 2024
Trinity House	Y	21 May 2024
Royal Yachting Association	N	

Local Biodiversity Officer (Flintshire County Council)	N	
Local Planning Authority (Flintshire County Council)	N	
Local Harbour Authority – The Port of Mostyn	N	
Local Harbour Authority – The Dee Conservancy	Y	13 May 2024
Local Harbour Authority – NRW	N	
Royal Society for the Protection of Birds (RSPB)	Y	31 May 2024
Cadw	Y	16 May 2024
Welsh Archaeological Trust	N	
Royal Commission on the Ancient and Historic Monuments of Wales	Y	17 April 2024
National Federation of Fishermen's Organisations (NFFO)	N	
Fisheries Conservation Authority (IFCA)	Y	22 April 2024
Cockle Fisheries NRW	Y	16 May 2024
Welsh Fishermens Association (WFA)	N	
Chamber of Shipping	N	
NATS Safeguarding	Y	19 April 2024
Natural England	Y	16 May 2024
Environment Agency	N	
Welsh Government Fisheries and Marine Enforcement Division	Y	11 April 2024
Public Health Wales	Y	24 April 2024

6.0.6 Details of the issues raised by the Consultation Bodies and how they have been addressed is set out in section 7.

6.0.7 Following a submission of further information, as detailed in section 3.3.4, NRW PS consulted the bodies listed in the table below on the 24 September 2024, due to their particular expertise in matters arising in relation to this application. These bodies were consulted for a period of 21 days. For those bodies that responded to the consultation an 'Y' can be found in the response received column, and those which did not respond to the consultation an 'N':

Consultee	Response received (Y/N)	Date(s) of receipt
The Crown Estate	N	
NRW Advisory	Y	10 October 2024
Ministry of Defence-Safeguarding Defence	Y	26 September 2024
Maritime & Coastguard Agency	Y	26 September 2024
Trinity House	N	
Royal Yachting Association	Y	14 October 2024
Local Biodiversity Officer (Flintshire County Council)	N	
Local Planning Authority (Flintshire County Council)	N	
Local Harbour Authority – The Port of Mostyn	N	
Local Harbour Authority – The Dee Conservancy	N	
Local Harbour Authority - NRW	N	
Royal Society for the Protection of Birds (RSPB)	Y	14 October 2024
Cadw	Y	8 October 2024
Welsh Archaeological Trust	N	

Royal Commission on the Ancient and Historic Monuments of Wales	Y	2 October 2024
National Federation of Fishermen's Organisations (NFFO)	N	
Fisheries Conservation Authority (IFCA)	Y	15 October 2024
Cockle Fisheries NRW	Y	2 October 2024
Welsh Fishermens Association (WFA)	N	
Chamber of Shipping	N	
NATS Safeguarding	Y	26 September 2024
Natural England	Y	3 October 2024
Environment Agency	Y	14 October 2024
Welsh Government Fisheries and Marine Enforcement Division	Y	1 October 2024
Public Health Wales	N	

6.0.7 Consultees who did not provide a response were assumed to have no comment.

6.0.8 Network Rail were consulted on the 29 November 2024 following the identification of rail infrastructure and coastal defence assets in the vicinity of the Warwick Remedial Site compensation works. A meeting was held on 12 December 2024 between NRW PS and Network Rail to give an overview of the proposal and application process. Following this no response was provided therefore it is assumed Network Rail have no comment to make.

7. Issues arising during the consideration of the Environmental Statement, Marine Licence Application and representations received

7.0.1 Material issues that were highlighted by the ES and consultation process and the extent to which they have been addressed are detailed in this section.

7.1 Physical Processes

7.1.1 Potential effects of the project on physical processes were assessed within Chapter 6: Physical Processes of the ES. The following impact pathways were identified and assessed;

Construction Phase:

- Change to suspended sediment concentration (SSC) and sedimentation as a result of construction activities (piling, dredging and disposal)
- Changes in seabed bathymetry as a result of dredged disposal

Operational Phase:

- Changes to hydrodynamic regime as a result of the new quay wall and capital dredging
- Changes to the wave regime as a result of the new quay wall and capital dredging
- Changes to the sediment transport pathways as a result of localised changes to the driving hydrodynamics (and wave) forcing
- Changes to SSC, sedimentation and seabed bathymetry as a result of maintenance dredging and disposal
- Potential impact on receptors, including marine infrastructure and estuary banks and channels

Impact on physical processes are assessed as insignificant to minor adverse within the ES. The applicant proposed that monitoring would take place to ensure that works do not lead to a significant impact.

7.1.2 NRW A in representation dated 7 March 2023 confirmed they were satisfied that the hydrodynamics/sediment transport model used to assess the predicted impacts on physical processes was appropriate and had been adequately calibrated and validated. NRW A agreed that the minor alterations to the current/wave and sediment transport processes within the vicinity of the proposed expansion works caused by the presence of the new quay wall, alteration to coastline caused by reclaimed land and deepening of the Salisbury approach channel and berth pockets, will not affect the wider hydrodynamics and sediment transport processes of the Dee Estuary.

7.1.3 However, NRW A in representation date 7 March 2023, considered that clarification was required in order to understand whether changes to SSC and sedimentation had been appropriately assessed during both the dredge and disposal activities during the construction and operational phases of the development. Concerns were raised surrounding the inconsistent use of specific gravity used to convert dredge and disposed quantities from m³ to tonnes. Additionally, clarification was requested surrounding the methodology, particularly surrounding the proposed disposal volumes and timings of disposal activity at the disposal site and how these would compare to the volumes which are currently consented within the existing marine licence DML1542v2.

7.1.4 The applicant submitted Further Information Report (ABPmer, August 2023), chapter 2 of which looked to address concerns raised surrounding physical processes. This included;

- Further information was provided surrounding the assessment of changes in SSC and detail surrounding the modelling scenarios used within the assessment.
- The Report detailed that plumes arising from the deposit of activities at IS102 disposal site tend to dissipate within a single peak tidal phase equating to a period of around 2 hrs. Successive deposit events within a period of 2-3 hrs could potentially lead to cumulative increases. However, considering the time taken to transit to the disposal site, dispose and then subsequently carry out further dredge activities it is considered that a realistic worst case would be successive disposal every 4 hrs which would not lead to cumulative increases due to disposal frequency.
- Further information was provided surrounding Disposal volumes at the IS102 disposal site and quantity of dredged material pumped ashore under marine licences since 2009.
- Detail was provided surrounding the conversion factor used and confirmation that a value of 2t/m³ to the dredged material would be applied to remain consistent with existing licences. Clarification was then provided within Table 1 of the Further Information Report where proposed maximum amounts to be dredged and disposed as part of the Project was provided in both tonnes and cubic meters in line with the 2t/m³ conversion factor.
- An indicative dredge and disposal scenario was presented within table 2 of the Report, detailing quantities dredged, disposed of to a disposal site, used as infill for land reclamation or pumped ashore. Confirmation was provided that the project would operate within the confines of tonnage restriction placed on exiting marine licences in relation to volumes disposed annually to the Mostyn Deep Disposal Site, namely, that the annual disposal volume would not exceed 900,000 tonnes (450,000m³) per year to the IS102 site.
- In reference to the capacity of the Mostyn Deep Disposal site the report notes that as the Disposal site is within a high energy environment material deposited is remobilised and redistributed within the Dee Estuary allowing the area to maintain a relatively consistent water depth. The applicant also proposes to continue to monitor the disposal site which will allow an early indication should the disposal site show evidence of accretion.
- The report noted that where suitable the majority of material dredged from the planned new and existing berth pocket is proposed for use as part of the land reclamation.

- The proposed quantity of dredge material to be reused as fill within the land reclamation was reduced from 600,000m³ to 500,000m³.

7.1.5 NRW A confirmed they were satisfied that the further information report addressed concerns previously raised. NRW A considered that a number of conditions from the existing dredge marine licences at the Port should be include, such as restricting the maximum disposal of material to 24,000 tonnes (12,000m³) in any 24hrs period. Within Appendix A Clarification Comment Log dated 27 March 2024 the applicant confirmed the same project specific conditions as referenced by NRW A in relation to dredge disposal daily limit and manner in which disposals are placed should be transferred to the new marine licence, these include;

- ensuring the material deposited does not exceed 24,000 tonnes (12,000m³) in any 24-hour period.
- Ensure that the material is distributed evenly across the site Mostyn Deep disposal site (IS102), to do this the site must be divided into 25 metre by 75 metre cells. The placement of material within these cells must follow a randomised sequence, excluding the perimeter cells designed to provide a safety margin. Each cell must initially only receive one 400 cubic metre load of dredged material; thereafter the sequence may then be repeated on a rolling basis.

7.1.6 The applicant proposed a Monitoring Plan within section 6.1 of Clarification Report (ABPmer, March 2024). The plan proposed a reduced level of monitoring to that currently undertaken at the Port under existing consents. NRW A agree that monitoring is necessary but did not however agree with the reduction in frequency of the current monitoring schedule due to the increased in dredge depths and dredging expected to take place during the construction phase. Within letter dated 17 June 2024 the applicant agreed to undertake higher frequency monitoring and to review after 5 years following the construction of the MEPE project in order to consider whether a lower frequency monitoring schedule would be appropriate based on evidence collected.

7.1.7 NRW PS are satisfied that an appropriate assessment of physical processes has been carried out and no significant effects are predicted subject to mitigation. NRW PS consider that monitoring conditions will be required in order to ensure that disposed material continues to disperse as predicted.

7.1.7 Welsh National Marine Plan Policy D&D_01 details;

The beneficial use of dredged material is encouraged. In accordance with the Waste (England and Wales) Regulations 2011, relevant authorities should apply the waste hierarchy. The disposal of dredged material (whether from navigation or environmental dredging) includes both deposition for beneficial uses (e.g. beach nourishment) and the use of at-sea disposal sites in licensed areas of seabed. Dredged material can be a valuable resource and the preference is, wherever possible, to re-use the material to support other activities, for example actions relating to ecosystem resilience, in engineering projects for construction materials,

in flood defences, for land reclamation or for beach nourishment. In some cases, disposal to land may be appropriate.

- 7.1.8 NRW PS consider that the reuse of dredge material as fill for land reclamation activity is consistent with the Waste (England and Wales) Regulations 2011 (as amended) and the WNMP where the reuse of material is encouraged.

7.2 Water and Sediment Quality

- 7.2.1 Impact of the project on water and sediment quality was assessed and presented within chapter 7 of the ES. The following impact pathways were identified;

Construction and Operation Phase:

- Change to dissolved oxygen concentrations as a result of increase in SSC during activities
- Changes to chemical water quality as a result of potential sediment-bound contaminants during activities
- Redistribution of sediment-bound contaminants during construction activities
- Changes in nutrient concentrations in water during activities
- Change to water quality as a result of potential of sediment bound microbiological contaminants during construction activities

Impact on water and sediment quality are assessed as insignificant to minor adverse within the ES.

- 7.2.2 Sediment sampling was undertaken and results presented within Table 7.2 – Table 7.7 of chapter 7 of the ES. The samples demonstrated that contaminants concentration was low with most values below Cefas Action Level 1. There were no instances where the concentration exceeded the respective Action Level 2. Cefas confirmed following review of sampling and analysis undertaken that sediment was suitable for disposal at sea. Cefas also confirmed in line with OSPAR guidelines sediment sampling should be re-analysed every 3 years.

- 7.2.3 NRW A agreed that the proposed works did not pose a risk of deterioration to the Dee (N. Wales) or North Wales waterbodies due to the resuspension of contaminated sediment.

- 7.2.4 NRW A agreed that there was no risk of deterioration to the shellfish waters due to bacterial releases, and that there was no risk of deterioration to nutrient concentrations as a result of the development. However, NRW A did not consider the assessment was sufficient to allow consideration of impacts of works on dissolved oxygen.

- 7.2.5 The applicant sought to address concerns surrounding assessment of suspended sediments and dissolved oxygen within Further Information Report (ABPmer, August 2023). The report referred to the physical process assessment (chapter 6 of the ES), which considered that although suspended sediment concentration would increase as a result of disposal activities, due to the highly dynamic nature of the estuary, and the natural high levels of sediment within the estuary, excess levels are likely to be reduced to below natural storm disturbance conditions very

quickly, and would likely return to background levels within a single tidal cycle. No further concerns were raised by NRW A in relation to dissolved oxygen.

- 7.2.6 NRW A welcome the proposal for pollution prevention measures to be implemented and secured within a Construction Environmental Management Plan (CEMP).
- 7.2.8 NRW PS are satisfied that an appropriate assessment of water and sediment quality has been carried out and no significant effects are predicted subject to mitigation. NRW PS consider that mitigation required, specifically a CEMP can be secured through the provision of appropriate conditions within any Marine Licence issued.

7.3 Nature Conservation and Marine Ecology

7.3.1 Marine Mammals

7.3.1.1. Impact of the Project on marine mammals was assessed and presented within chapter 8 of the ES. The impacts assessed included underwater noise and vibration disturbance during construction. Construction activity has the potential for noise disturbance to marine mammals through percussive and vibro piling in addition to elevated noise and vibration levels caused by capital dredging. A detailed underwater noise assessment was carried out in support of the application and presented within Appendix 8.4 of the ES. The assessment considered that the impact on marine mammals as a result of underwater noise during dredge activity would be negligible. However, it considered that percussive piling activity carried out during construction had the potential to cause injury and/or disturbance to species of marine mammals. The applicant considered that marine mammals would likely evade areas of works, and additionally noted that the piling operation, although anticipated to take place over a 12 month period, would not be continuous but involve approximately 240 minutes of impact piling per day and 40 minutes of vibro piling per day. In addition, the applicant proposed to reduce the level of impact associated with underwater noise through implementing the following mitigation measures;

- Application of a soft-start procedure during piling
- Using vibro piling wherever possible
- The use of a Marine Mammal Observer in line with JNCC protocol to minimise the risk of injury to marine mammals during percussive piling.

Subject to the mitigation detailed above any remaining impact on marine mammals as a result of underwater noise was assessed within the ES as being minor and not significant.

7.3.1.2 NRW A considered that additional evidence surrounding the use of the log model to estimate Permanent Threshold Shift and Temporary Threshold Shift should have been provided, additionally NRW A considered that the assessment was not sufficient in comprehensively assessing behavioural disturbance of marine mammals. However, despite this, due to the location and scale of the development and intention of the applicant to follow JNCC guidelines for reducing the potential for disturbance and injury to marine mammals, NRW A agreed with the conclusion

of the ES that impact of the works on marine mammals would not be significant. NRW PS consider the mitigation proposed, including soft start procedures, and adherence to JNCC guidelines can be secured through marine licence conditions.

7.3.1.3 NRW PS recognise that there remain points of disagreement between the applicant and NRW A surrounding the assessment carried out. However, note that both NRW A and the applicant agree that the impact of the proposal on marine mammals would not be significant. NRW PS are therefore satisfied that subject to the mitigation proposed that no significant effects are predicted on marine mammals.

7.3.2 Fish and Shellfish

7.3.2.1 Impact of the Project on fish and shellfish was assessed and presented within chapter 8 of the ES. The following impact pathways were identified and assessed;

- Direct loss or changes to fish and shellfish populations and habitats
- Changes in water and sediment quality during capital dredging and dredge disposal
- Underwater noise and vibration disturbance during construction

Impact of the project on fish and shellfish was assessed as insignificant to minor adverse. Mitigation was proposed to reduce the impact of underwater noise during piling operations that included the application of a soft start procedure and using vibro piling wherever possible.

7.3.2.2 NRW A raised that further assessment was required in order to understand the potential impact of the construction, capital dredging and maintenance dredging and disposal on sandeel habitat. Impacts on sandeel would include habitat loss, habitat damage, direct uptake and smothering.

7.3.2.3 NRW A considered that timing restrictions should be applied to percussive piling activities to minimise potential impacts upon diadromous migrant fish species in the Dee Estuary. NRW A considered there was limited evidence of the effectiveness of soft-start piling mitigation at deterring fish from the area of potential significant disturbance/injury.

7.3.2.4 The applicant submitted Further Information Report (ABPmer, August 2023), chapter 4, and Further Clarification Report (ABPmer, March 2024) which looked to address concerns raised surrounding fish and shellfish. These included;

- An updated sandeel assessment was carried out that considered the potential impact to sandeel due to habitat change and dredge and disposal activity. The assessment considered the potential suitable sandeel habitat across the Dee Estuary and considered any affected areas would only constitute a negligible proportion of the total amount of sandeel habitat.
- Further consideration was given to the impact of smothering of sandeel eggs during disposal activities.

- Further consideration was given in relation to impacts to sandeel as a prey item of the common tern SPA feature and as part of the subtidal sediment communities of the estuaries feature of the Dee Estuary SAC.
- Further information was provided surrounding potential impact of fish species as a result of underwater noise, this included proposed timing restriction.

7.3.2.5 Following review of further information provided NRW A confirmed they were satisfied that an appropriate assessment on sandeels had now been carried out. NRW A agreed with the EIA conclusion of a minor adverse effect on sandeels, and also agreed that no adverse effect on site integrity in relation to impacts to sandeel as a prey item of the common tern SPA feature and as part of the subtidal sediment community of the estuaries features of the Dee Estuary SAC was predicted.

Timing restrictions

7.3.2.6 As detailed within the Appendix 8.5 of the ES (Habitats Regulations Assessment) the applicant proposed a number of mitigation measures that would be implemented during piling including;

- Soft start procedures that will give fish features an opportunity to move away from the area before the onset of full impact.
- Vibro piling will be used where possible, however percussive piling is likely to be required.

In addition, as detailed within the Further Information Report (ABPmer August 2023) additional mitigation has been proposed to minimise adverse effect on fish species. These include;

- no percussive piling is to be undertaken 3 hours either side of high water [mid-April to mid-June] in any given year. Percussive piling operations that have already been initiated will, however, be completed where an immediate cessation of the activity would form an unsafe working practice.
- No percussive piling is to take place between 7pm and 7am on any given day. Percussive piling operations that have already been initiated will, however, be completed where an immediate cessation of the activity would form an unsafe working practice.

7.3.2.7 NRW A in representation dated 7 July 2023 considered that the seasonal timing restriction could be widened to protect a wider range of fish species. Within Further Clarification Report (ABPmer, March 2024) a further review of impact of underwater noise on fish species was carried out, and considered that the piling restrictions between mid-April to Mid-June could be extended to cover the higher potential risk of exposure to European smelt during the months of February and March and to herring in September to November. NRW A welcomed this proposal. In letter dated 17 June 2024 the applicant agreed to extend the seasonal tidal restriction to February, March, September, October and November to minimise impact on key fish species.

- 7.3.2.8 NRW A raised concerns in representation dated 3 March 2023, that the conditions as proposed by the applicant would not be effective as they would allow in some circumstances work to take place within the restricted period. NRW A advised that percussive piling activities should be suitably planned and timed so as to not need to contravene these timing restriction.
- 7.3.2.9 Further discussion has continued between NRW A (NRW A response to clarification report dated 21 May 2024) and the applicant in letter dated 17 June 2024 surrounding appropriate timing of piling activities. NRW PS consider that appropriate mitigation can be agreed as part of a Plan approved post consent that will ensure that percussive piling is suitably planned and timed to avoid the need to work past the timing restriction unless for exceptional health and safety purposes. NRW PS consider that mitigation can be secured within the marine licence to ensure seasonal tidal restrictions to avoid and/or minimise impact on key fish species, and also night-time piling restrictions to minimise impact on fish species that migrate exclusively or preferentially at night (including river lamprey).
- 7.3.2.10 NRW PS are satisfied that an appropriate assessment of fish and shellfish has been carried out and no significant effects are predicted subject to mitigation which include seasonal tidal restrictions for piling activities to avoid and/or minimise impact on key fish species, and also night-time piling restrictions to minimise impact on fish species that migrate exclusively or preferentially at night. NRW PS consider that mitigation can be secured through marine licence conditions.

7.3.3 Ornithology

- 7.3.3.1 Impact of the project on ornithology was assessed and presented within chapter 8 of the ES. The following impact pathways were identified and assessed;
- Direct loss and change to intertidal feeding and roosting habitat
 - Airborne noise and visual disturbance during construction

The ES detailed that although the land reclamation area and the capital dredge would result in areas of habitat loss, it was considered that the areas lost were highly impoverished with low abundance of prey items and therefore of limited functional value to the coastal birds. This was reflected by the limited use of the area by waterbirds. Therefore, the impact was assessed as minor adverse. The assessment identified a range of activities which will result in temporary source of noise and visual disturbance to roosting and feeding waterbirds, including through piling activities. A range of mitigation was proposed including;

- Soft start procedure for piling
- Cold weather construction restrictions
- Acoustic barrier/visual screening
- Noise suppression systems during percussive piling.

Subject to mitigation the assessment concluded that impact on waterbirds during construction would be minor adverse and not significant.

- 7.3.3.2 NRW A did not consider that the assessment carried out on marine ornithology was sufficient. NRW A considered that more evidence was required in order to consider the impact of habitat loss on roosting and foraging bird populations across the Dee Estuary. NRW A also considered further evidence was required in order to quantify noise disturbance on different species at locations throughout the Dee Estuary. Similarly, RSPB raised concerns surrounding impact of bird features due to loss of habitat, impact of works on prey availability and disturbance levels.
- 7.3.3.3 The applicant submitted Further Information Report (ABPmer, August 2023), chapter 4, and Further Clarification Report (ABPmer, March 2024) which looked to address concerns raised surrounding ornithology. These included;
- An updated assessment of disturbance. The Further Clarification Report (ABPmer, March 2024) provides additional information surrounding abundance and distribution of SPA features which are regularly recorded in the vicinity of the proposal. Appendix B of the Further Clarification Report (ABPmer, March 2024) provides a review of the sensitivity of key SPA waterbird species to noise and visual disturbance. In addition, airborne noise modelling has been undertaken and is presented within Appendix C of Further Clarification Report (ABPmer, March 2024).
 - Further consideration has been given within Further Clarification Report (ABPmer March 2024) surrounding the impact of the proposal on sandeels a prey species for the common tern, the report concluded that any impact on prey species including sandeel due to land reclamation activity or capital dredging would be negligible and not result in a measurable change in the population size of the common terns.
 - Further consideration was provided surrounding the impact on supporting habitats, concluding that the areas of habitat loss provide very limited feeding opportunities for coastal waterbirds, with the spatial extent of loss representing a negligible reduction in available habitat for these mobile species.

Habitat Loss

- 7.3.3.4 The potential impact of works on coastal waterbirds has been considered within Chapter 8 Nature Conservation and Marine Ecology of the ES, and additionally within Appendix 8.5 (Habitat Regulation Assessment). In addition, further information was provided related to coastal waterbirds within the Further Information Report (ABPmer, August 2023) and Further Clarification Report (ABPmer, March 2024).
- 7.3.3.5 There is a potential loss of and change to intertidal habitat as a result of the construction activity and capital dredge. The habitat lost is considered to support a low abundance of prey items for feeding birds, with birds able to disperse to other feeding areas of the Dee Estuary. The footprint of habitat loss is considered negligible in the context of available feeding habitat within the estuary with other similar habitat in the region. Therefore, the proposed works is not predicted to result in a measurable change to the overall populations of the bird features.

7.3.3.6 Within Representation dated 20 May 2024 NRW A confirmed they were satisfied that the proposed loss of habitat as a result of the works is unlikely to have an effect on the features of the Dee Estuary SPA. RSPB within representation dated 31 May 2024 confirmed they would defer to NRW A in respect of consideration associated with habitat loss. Habitat loss is further considered in section 7.3.4 relating to benthic ecology.

7.3.3.7 In addition, the proposed habitat compensatory measures proposed within ABPmer Report (September 2024) consist of scraping back relatively barren rubble (brick, debris, slag deposits, concrete etc). Scraping back the rubble will allow silt to settle thus supporting natural mudflat restoration, and potentially providing an increased area (up to 3.3ha) available for feeding waterbirds which may have a potential beneficial effect on SPA features.

Visual and noise disturbance

7.3.3.8 There are a number of potential sources of noise and visual disturbance during the construction phase including;

- Piling
- Use of Jack-up-barges
- Operation of plant and machinery
- Capital dredging and the pumping of dredged material as fill in the land reclamation.

7.3.3.9 As detailed within the ES the nearest functionally important waterbird habitat to the construction activity is considered to be the artificial hard substance ledge roost on the western side of the breakwater. As detailed within the ES and Further Information Report (APBmer, August 2023), the breakwater is considered an important roost for Oystercatchers and is also used in large numbers by Redshank, as well as other species in lower numbers such as the Curlew. The nearby Mostyn Bank and the mudflat habitat between the Mostyn Channel and Salisbury Channel are important areas for feeding birds and are considered further within the Further Clarification Report (APBmer, March 2024).

7.3.3.10 Further Clarification Report (APBmer, March 2024) details that noise levels during piling activities are predicted up to 68-81dB at the breakwater roost and similarly between 69-82dB on the nearest area of the mudflat on the Mostyn Bank. Similar levels are also predicted on the mudflat habitat between the Mostyn Channel and Salisbury Channel. It is however important to note that piling work will not take place continually, and as detailed in section 1.1 of Further Clarification Report (ABPmer, March 2024) it is predicted that waterbirds will only be exposed to potential disturbance from percussive piling up to around 5% of the time over the piling programme. Noise levels associated with piling is considered to have the potential to result in a dispersive disturbance response therefore further mitigation is considered necessary. Likewise, a disturbance response as a result of visual stimuli could potentially occur. Noise levels associated with other construction activities are predicted to be much lower, and taking account the fact that works are within an operational port are unlikely to be discernible from background noise levels.

7.3.3.11 A series of mitigation measure have been proposed by the applicant within Further Clarification Report (ABPmer, March 2024) these include;

- Piling activities are not to be undertaken in September (autumn bird passage) in any given year: This measure will help minimise potential disturbance as a result of piling related noise on the ledge roost on the western side of the breakwater in September.
- Noise suppression system: It is proposed that a noise suppression system (consisting of a pile shroud or sleeve with noise insulating properties) is used during percussive piling activities of the tubular piles for the new quay wall to reduce noise levels on the Mostyn Bank or breakwater roost. Airborne noise modelling predicts that the noise suppression system will reduce noise by up to 10dB levels (at the piling source) (Appendix C of Further Clarification Report).
- Soft starts: Using soft starts will allow birds to become more tolerant to piling noise by allowing a more gradual increase in noise levels which will reduce the potential for birds to become startled.
- Cold weather construction restriction: Coastal waterbirds are considered particularly vulnerable to bird disturbance during periods of extreme winter weather. On this basis, it is proposed that a temporary cessation of piling and any activities taking place along the new quay wall is implemented following seven consecutive days of freezing (zero or sub-zero temperature) weather conditions. The restriction should not be lifted until after 24 hours of above freezing temperatures, and also that Metrological Office weather forecasts indicate that freezing conditions will not return for the next five days.
- Acoustic barrier/visual screening: In order to reduce potential visual and/or noise disturbance stimuli to waterbirds on the Mostyn Bank or breakwater roost, an acoustic barrier/visual screen will be installed along the breakwater prior to the commencement of construction so that movements of construction workers or vehicles will not be as visible and the levels of noise will be attenuated.
- As detailed within letter dated 17 June 2024 from the applicant the proposed environmental enhancement works would be timed outside of the bird passage and overwintering periods (i.e., August to April) to avoid any potential adverse visual and noise disturbance effects on bird features.

7.3.3.12 NRW A welcome the mitigation proposed. NRW A do not agree that sufficient evidence has been provided in order to conclude the effectiveness of soft start procedures as mitigation for reducing disturbance for waders and wildfowl. Nevertheless, based on the suit of mitigation proposed NRW A agree that noise levels are unlikely to have a significant effect on coastal birds. Likewise, RSPB welcome proposed mitigation and consider that these should be adhered too.

7.3.3.13 Both NRW A and RSPB advise that monitoring of construction noise and bird responses would be valuable. As detailed above, both NRW A and RSPB agree that based on the mitigation measure proposed that significant effect on coastal birds can be ruled out. As neither NRW A or RSPB consider

monitoring necessary in order to rule out significant effect, NRW PS do not consider the need to require monitoring as part of the consent, however NRW PS would encourage the applicant to discuss the potential monitoring opportunities with NRW A and the RSPB.

- 7.3.3.13 NRW PS are satisfied that an appropriate assessment of ornithology has been carried out and no significant effect is predicted subject to mitigation as detailed above.

7.3.4 Benthic Ecology

- 7.3.4.1 Impact of the project on benthic habitats and species was assessed and presented within chapter 8 of the ES. The following impact pathways were identified and assessed;

- Direct loss of seabed habitat as a result of the construction of the new quay wall
- Direct loss of intertidal habitat as a result of capital dredging
- Changes to subtidal benthic habitats and species as a result of seabed removal during dredging
- Changes to benthic habitats and species as a result of deposition
- Changes in water and sediment quality
- Underwater noise disturbance
- Potential for introduction and spread of invasive non-native species.

Subject to mitigation, specifically the implementation of biosecurity control measures secured in the CEMP the impact on benthic habitats during construction and operation was assessed as insignificant to minor adverse.

- 7.3.4.2 NRW A did not consider that the assessment carried out on benthic habitats and species was sufficient. NRW A considered that the impact of the capital dredge of the navigation channel had not been properly assessed, additionally NRW A disagreed with the assessment of direct habitat loss and its significance.

- 7.3.4.4 The applicant submitted Further Information Report (ABPmer, August 2023) and Further Clarification Report (ABPmer, March 2024) which looked to address concerns raised surrounding benthic ecology. These included;
- Further assessment of potential impact to benthic habitats as a result of capital dredge activities.
 - Further information was presented using evidence from the physical processes assessment in order to consider indirect changes to seabed habitats and species as a result of changes to hydrodynamics and sedimentary processes.
 - Further assessment was provided in relation to habitat loss as a result of land reclamation, and to changes in benthic habitats and species as a result of removal during dredge operations.

- 7.3.4.4 Following further information from the applicant, NRW A were satisfied that impact on benthic ecology had been adequately assessed. NRW A

confirmed that in light of further information provided that the overall potential impact from changes in suspended sediment and sediment deposition from capital dredging on benthic features, including Cockle Beds would not be significant. Although the plume from the capital dredge of the berth pocket may reach the New Bed Cockle bed the predicted total sedimentation is less than 0.4mm in this area which is below the pressure benchmark for the species.

- 7.3.4.5 NRW A agreed with the applicant that the potential impacts to benthic habitats as a result of change to hydrodynamics and sedimentary processes from the presence of the new quay wall during the operation of the project will not be significant. NRW A agreed that changes to habitat and species as a result of dredge disposal would not be significant subject to commitments to work within the disposal tonnage limits. As detailed in section 7.1.5 above, within Appendix A Clarification Comment Log dated 27 March 2024 the applicant confirmed the same project specific conditions as referenced by NRW A in relation to dredge disposal daily limit and manner in which disposals are placed should be transferred to any new marine licence.
- 7.3.4.6 The applicant proposed a Monitoring Plan within section 6.1 of Clarification Report (ABPmer, March 2024). The plan proposed a reduced level of monitoring to that currently undertaken at the Port under existing consents. NRW A agreed that monitoring is necessary but did not however agree with the reduction in frequency of the current monitoring schedule due to the increased in dredge depths and dredging expected to take place during the construction phase. Within letter dated 17 June the applicant agreed to undertake higher frequency monitoring and to review after 5 years following the construction of the MEPE project in order to consider whether a lower frequency monitoring schedule would be appropriate based on evidence collected. NRW A consider that monitoring is required in order to ascertain the assumption made in the ES that the impact on benthic habitats as a result of maintenance dredge activities will be minor.
- 7.3.4.7 NRW A agree that a Biosecurity Risk Assessment and Biosecurity Plan is completed in relation to all marine operations associated to the current proposal. NRW A highlight that the highly invasive species, chinese mitten crab (*Eriocheir sinensis*) is present in the Dee Estuary and extra diligence is required to ensure the species is not spread further. NRW PS consider production and implementation of a Biosecurity Plan can be secured through marine licence conditions.

Habitat Loss

- 7.3.4.8 The proposed development will involve an area of reclamation behind the new quay wall. NRW A confirmed within representation dated 7 November 2023 that the habitat loss should not be considered as Annex I mudflat and sandflat feature of the Dee Estuary SAC. However, the habitat is still within the boundary of the SAC and is part of the Annex I estuaries feature. NRW A consider that the land reclamation activity will result in the permanent loss of 3.22ha of Annex I estuaries feature. It is the applicants view as discussed in

Further Clarification Report (ABPmer, 2024) that the loss of estuaries feature would not lead to an adverse effect on the site integrity of the Dee Estuary SAC. However, NRW A disagree and consider that the permanent loss of estuaries feature would constitute an adverse effect on the Dee Estuary SAC which cannot be mitigated. Detailed reasoning surrounding NRW A position is set out within their representation dated 21 May 2024.

- 7.3.4.9 The applicant notes that the loss of 3.22ha represents 0.024% of the total extent of this feature and consider the scale of this loss to be negligible. In addition, the applicant considers that the ecological structure of the habitat lost consists of impoverished fauna characterised by low number of species and low abundance levels, and due to the location of the habitat within an operational port which is regularly dredged would likely remain impoverished in the foreseeable.
- 7.3.4.10 NRW A disagree and consider that 3.22ha is not an insignificant amount of habitat irrespective of the proportion of the overall feature it occupies at the site level. NRW A note that the impoverished quality of the habitat is due to the presence of the port infrastructure and ongoing dredge operation and that the permanent loss of estuaries feature would mean that the habitat could never improve in quality should dredging activities cease.
- NRW A consider that the direct 3.22ha of Annex I estuaries feature as a result of the proposed port expansion and land reclamation does not constitute an insignificant loss and go against the conservation objectives of the site, specifically:
- i. *The aggregate total extent of all estuarine communities within the site is maintained*
 - ii. *The spatial distribution of estuarine communities within the site is maintained*
- 7.3.4.11 The Indicative Site level feature condition assessment (2018) details that the 'distribution and extent' component of the estuaries feature was in favourable condition. As detailed in email dated 15 July 2024 it is NRW A view as the ANCB that in the absence of adequate compensation measures the permanent loss as a result of the proposed land reclamation activity would result in the condition of this feature becoming 'unfavourable'. This is in-line with the performance indicator NRW A use when assessing the condition of estuaries features which states: "No decrease in extent of estuaries within the site, allowing for natural change".
- 7.3.4.12 Having considered the above, NRW PS considers that the conservation objective seeks to maintain the total extent of all estuarine communities within the site. NRW PS recognise that due to the size of the feature the loss represents only a small proportion of its total extent 0.024%, however NRW PS agree with NRW A that 3.22ha is not an insignificant area, and the permanent loss of 3.22ha is not considered to be trivial.

- 7.3.4.13 Likewise, NRW PS give considerable weight to NRW A view as ANCB that they consider that the loss would result in the 'distribution and extent' condition of the feature moving to unfavourable condition.
- 7.3.4.14 It is NRW PS view that the direct permanent loss of 3.22ha of estuaries feature as a result of land reclamation activity go against the conservation objectives for the site and for this reason would lead to an adverse effect on the integrity of the site.
- 7.3.4.15 Where adverse affect cannot be ruled out approval for a project cannot be given unless the project satisfies the requirements of Article 6(4) of the Habitat Directive, this includes, consideration of alternatives, overriding reason of public interest and suitable compensation measures being secured.
- 7.3.4.16 Opportunity was given for the applicant to provide further information to meet the requirements of Article 6(4). The applicant provided ABPmer Report (September 2024) with further information to demonstrate that the project meets the required test for derogation, namely, there are no feasible alternative solutions, there is overriding public interest for the plan to proceed, and that necessary compensation can be secured. Compensation was proposed across two sites referred to as the Mostyn Scrape Back site and Warwick Foreshore Remedial site. On both sites it is proposed to scrape back the foreshore which currently comprises discarded man-made debris to expose underlying natural habitat. The proposed compensation measures across the two sites cover an area of 3.3ha.
- 7.3.4.17 NRW A as the ANCB confirmed they agreed in principle that the measures outlined within ABPmer Report (September 2024) will be adequate to compensate for the loss in 'distribution and extent' of the estuaries feature of the Dee Estuary SAC, and that the measures proposed will allow the estuaries features 'distribution and extent' to remain in 'favourable' condition. Natural England confirmed they agreed with NRW A that the compensation put forward would be suitable.
- 7.3.4.18 NRW PS considered that the project meets the required test for derogation, namely, there are no feasible alternative solutions, there is overriding public interest for the plan to proceed, and that necessary compensation can be secured. The Statement of Case was sent to Welsh Government on the 25 October 2024 notifying Welsh Government of NRW PS intention to approve the project notwithstanding a negative assessment of its implications for the Dee Estuary SAC. Approval to grant a licence under Article 6(4) of the Habitats Directive was provided by Welsh Government on 28 January 2025. Further detail can be found within the Habitat Regulation Assessment.

7.4 Fisheries

- 7.4.1 Impact of the project on Fisheries was assessed and presented within Chapter 9 of the ES. The assessment identified specific fisheries in the Dee Estuary including cockle fisheries and mussel beds. A number of potential impacts were considered including, interference with fishing activities due to vessel movement during

construction activities, loss of fishing grounds, and potential indirect impacts on stocks during both construction and operational activities. The assessment concluded that any changes to sediment quality during capital dredging and dredge disposal were insignificant, and that the predicted sediment deposition level would remain within the range of natural variability and therefore would have a negligible impact on shellfish beds. The potential to interfere with fishing activities due to vessel movement was not considered significant, and would be controlled by existing Port procedures, which includes issuing notices to mariners.

Cockle Fisheries

- 7.4.2 NRW Cockle Officers confirmed that harvesting of cockles takes place in close proximity to the north-west of the dock. NRW Cockle Officer considered there was inadequate information on hydrodynamic changes, effects of dredging on harvesting beds and on any geomorphological changes that may impact on the harvesting areas.
- 7.4.3 The applicant looked to address concerns by NRW Cockle Officers within Further Information Submission (ABPmer, August 2023) and Chapter 5 of Further Clarification Report (ABPmer, March 2024). The Reports highlighted that modelling undertaken as part of the physical process assessment demonstrated that no increase in sedimentation in any of the cockle beds and harvesting areas are predicted as a result of the disposal activities. However, the assessment does note that the sediment plume from the capital dredge of the berth pockets will reach the New Bed site, but predicted sedimentation is expected to be less than 0.4mm in this area. The report notes that the maximum predicted rate of sedimentation outside of the immediate berths, channel and dredge disposal areas is within the existing range of natural variability experienced within the Dee Estuary. Therefore, it is not predicted that the works would have an impact on the New Bed as a result of sedimentation. NRW A confirmed within their response to the Further Information Report (August 2023), that although the plume from the capital dredge will reach the new bed the predicted total sedimentation is less than 0.4mm in this area, which is below the pressure benchmark for the species. NRW A agreed that the overall potential impact of sediment deposition on benthic features including the cockle beds will not be significant.
- 7.4.4 NRW Cockle Officer also raised concern that dredging the channel to a greater depth near the New Bed cockle bed had the potential to result in the sides of the channel eroding or collapsing until a stable profile develops, this may reduce the potential quantity of stock available in the short term. Within Appendix A of Further Clarification Report (ABPmer, March 2024), the applicant acknowledges there may be some marginal adjustment near the top of the slope, however in the longer term a stable profile will develop that will not collapse or result in any erosion of the adjacent New Bed.
- 7.4.5 NRW Cockle Officer representation dated 16 May 2024 confirmed that uncertainty remained regarding potential impact of the works on the Cockle Beds and suggest that regular monitoring is carried out. The applicant within letter dated 17 July confirmed that they would continue to monitor the estuary and main approaches in

line with an agreed monitoring plan, this will enable any changes in bed elevation to be regularly monitored and reported.

- 7.4.6 NRW PS consider that monitoring plan will be required and can be secured through marine licence conditions.

Mussel Fisheries

- 7.4.7 The North Western Inshore Fisheries and Conservation Authority (NWIFCA) highlighted the presence of commercial mussel beds in the Dee Estuary at Thurstaston and West Kirby and the need to ensure that the construction works will not affect these fisheries. The applicant looked to address this concern within Further Information Submission Annex A (ABPmer, August 2023), which signposted to chapter 6 (Physical Processes) of the ES which demonstrated that the expected maximum spatial extent of sediment plume as a result of construction of the proposed development would not overlap with the Thurstaston and West Kirby mussel beds. NWIFCA confirmed they had no further comment to make.
- 7.4.8 The NWIFCA highlighted that the presence of invasive non-native Chinese Mitten Crab has been documented as present in the locality of the Dee Estuary, and that appropriate biosecurity steps should be put in place to minimise its distribution. As detailed within Chapter 8 of the ES (Nature Conservation and Marine Ecology) biosecurity measures are proposed to be included within the CEMP.
- 7.4.9 Welsh Government Fisheries and Marine Enforcement Division highlighted that ES chapter 9 fails to identify a classified Mussel Fishery in Welsh Waters that was opened in late 2022. The applicant provided a response in email dated 15 April 2024, acknowledging that the Mussel Fishery located in the Mostyn Deep area of the Salisbury Middle Bank had been omitted within the ES, however having reviewed considered that the conclusion of chapter 9 remains valid and would apply to the mussel fishery, namely that no significant impacts are predicted. Following this response, the Welsh Government Fisheries and Marine Enforcement Division confirmed they had no further comment to make on the matter. NRW PS consider the issue resolved.

7.5 Commercial and Recreational Navigation

- 7.5.1 Impact of the project on commercial marine activities and on recreational navigation was assessed and presented within Chapter 10 of the ES. A number of potential impacts were considered within the ES including risk of vessel collision, grounding of vessels and vessel wake wash effect. The assessment concluded that the project would not increase the navigational risk to commercial or recreational users, and through established procedures navigational risk would be appropriately managed. The Mostyn Dock Ltd is the Statutory Harbour Authority for the Port of Mostyn and also the Competent Authority in respect of pilotage. This places duties and powers requiring the applicant to run the ports marine operation safely and efficiently. Outside the Port of Mostyn Statutory Harbour Authority Area the Dee Conservancy is the appropriate Harbour Authority. Jointly agreed

procedures are in place between Mostyn Dock Ltd and the Dee Conservancy to ensure the safety of navigation.

- 7.5.2 The Dee Conservancy raised initial concerns surrounding the consideration of vessel wake wash effect, where vessels travelling at high speeds and/or low water depths could generate a wake wash effect causing danger to navigation. Vessel wake wash effect was considered in chapter 10 of the ES. As detailed within Appendix A Consultation Log (Further Information Report, ABPmer August 2023) following discussion between the Dee Conservancy and the applicant it was agreed that wash effects are addressed within the pilotage regulations and will be reinforced with the customer base. The Dee Conservancy confirmed they are satisfied with this approach.
- 7.5.3 The Dee Conservancy sought assurance from the applicant that they would be able to meet the ongoing dredge maintenance requirements in future. The applicant confirmed it was able to meet the dredge commitments proposed and the Dee Conservancy confirmed they were satisfied with this response. NRW PS consider this matter resolved.
- 7.5.4 No significant concerns were raised by MCA, Trinity House or RYA related to the Project. The MCA confirmed that all works fell within the jurisdiction of a Statutory Harbour Authority either The Port of Mostyn or The Dee Conservancy as such they are responsible for the safety of navigation within their waters during the constructing, and operational lifespan of the project. MCA advised that notices to mariners should be issued as the Port consider necessary, and best practice pollution prevention measures should be followed. The applicant confirmed that issue of local warnings will be placed as required, and that best practice pollution prevention measures will be followed during construction controlled and implemented through a CEMP. NRW PS consider that the CEMP can be secured through marine licence conditions.
- 7.5.5 NRW PS are content that the potential impacts on navigational safety have been sufficiently addressed by the Applicant within the ES. NRW PS are content that as a Statutory Harbour Authority the applicant is responsible for ensuring the safety of navigation and has existing procedures in place and ways of working with the Dee Conservancy to ensure that safety of navigation is maintained. NRW PS consider that mitigation required, specifically a CEMP, can be secured through the provision of appropriate conditions within any marine licence issued.

7.6 Flood Risk and Drainage

- 7.6.1 Potential effects of the project on flood risk and drainage were presented within Chapter 11 of the ES, Appendix 11.1 of the ES included the Flood Consequence Assessment (FCA) conducted for the project. The FCA considered potential impacts of climate change on the proposal including sea level rise and risk of tidal flooding. The ES concluded that the project would not have a significant effect on flood risk.
- 7.6.2 NRW A made a number of comments surrounding the assessment carried out and considered there were some deficiencies within the FCA. However, they

considered the FCA was broadly acceptable and given the scale of the proposal and the location considered it unlikely the project would significantly impact flood risk elsewhere.

- 7.6.3 Following the applicant's proposal for compensatory measures presented within ABPmer Report (September, 2024) NRW A confirmed that further discussion was required with the applicant on the final profiling of the works at Warwick foreshore to ensure that the works to a coastal defence asset on the eastern side of the site is not compromised. NRW A believe it is achievable to produce a profile which will not compromise the coastal defence asset. NRW PS consider that approval of a final design profile can be secured through marine licence conditions.
- 7.6.4 In addition, to address comments received by NRW A the applicant amended the boundary of compensation at Warwick foreshore to ensure that works did not impact a coastal defence asset on the eastern side of the site while continuing to provide the same level of compensation. NRW A confirmed they were satisfied with the amended boundary.
- 7.6.5 NRW PS are satisfied that an appropriate assessment of Flood Risk has been carried out and no significant effect are predicted.

7.7 Cultural Heritage and Marine Archaeology

- 7.7.1 Impacts of the project on cultural heritage and marine archaeology were assessed and presented within chapter 12 of the ES. The ES considered a number of impacts including direct impacts during construction activities, capital and maintenance dredging as well as indirect impacts due to altered sediment or hydrological processes. The ES identified that without mitigation construction activities (particularly piling) as well as capital dredging had the potential to result in major adverse effects that would be considered significant. The applicant proposed mitigation specifically production and adherence to a Written Scheme of Investigation which would include but not be limited to a Protocol for Archaeological Discoveries (PAD) and establishment of Archaeological Exclusion Zones (AEZ) including surrounding a shipwreck identified within the ES. The WSI would detail mitigation that will be in place during the construction and operation and the proposed development. Subject to mitigation the ES concluded that the residual impact on cultural heritage and marine archaeology would be reduced and considered insignificant.
- 7.7.2 Both Cadw and RCAHMW supported the proposal of a AEZ surrounding the identified historic asset, and to implement a protocol for archaeological discoveries and associated WSI for other elements of the scheme. However, both Cadw and RCAHMW noted that the geoarchaeological assessment of existing geotechnical material should have been carried out and presented as part of the EIA and not conducted post consent as proposed by the applicant, without this Cadw consider the EIA for the application is incomplete.
- 7.7.3 In response to concerns raised by Cadw and RCAHMW the applicant produced report entitled "Mostyn Energy Park Extension Project: Stage 1 geoarchaeological assessment of 2022 geotechnical data" prepared by Wessex Archaeology which

concludes: - “Both the geoarchaeological and archaeological potential of all deposits within the Mostyn Park Extension Project area are considered low due to deposition in full glacial, high-energy fluvial, or modern alluvial environments. Based on the results of this Stage 1 marine Geoarchaeological Assessment, Stage 2 Geoarchaeological Recording is not recommended”. Following submission of the report Cadw and RCAHMW are content with the assessment of the Historic Environment, and RCAHMW agree that a WSI and PAD should be produced and adhered to.

- 7.7.4 Following the applicants proposal for compensatory measures proposed within ABPmer Report (September, 2024) RCAHMW confirmed that as the work has potential to discover archaeological material which may be buried beneath the scrape back that the PAD should encompass the compensatory works.
- 7.7.4 NRW PS consider that appropriate assessment of the historic environment has been carried out. NRW PS consider that subject to mitigation, specifically production and adherence to a WSI and PAD that no significant effect of the project on the historic environment is predicted. NRW PS consider that this mitigation can be secured through conditions of the marine licence.

7.8 Cumulative and In-combination Effects

- 7.1.1 The cumulative and In-combination effects of the project were considered within Chapter 13 of the ES. The assessment considered the potential impacts of the below projects and activities on relevant topics/receptors and all potential cumulative and in-combination effects were assessed as significant to minor adverse.
- Awel y Môr (AyM) Offshore Wind Farm (OWF);
 - Holyhead Deep Project;
 - Holyhead Port Expansion Project;
 - Morlais Tidal Energy Project;
 - Regional Maintenance activities for Royal National Lifeboat Institution (RNLI) stations cited around the coast of Wales (including Flint Lifeboat station and Connah’s Quay on the Dee Estuary);
 - Ports, navigation and shipping; and
 - Commercial and recreational fishing.
- 7.1.2 NRW PS are satisfied that an appropriate cumulative and in-combination assessment has been conducted.

8. Mitigation or monitoring measures to be taken

8.1 Features or measures to avoid, prevent, reduce or offset likely significant effects

- 8.1.1 In reaching the Conclusion about Environmental Impact (Regulation 21A of the Regulations), NRW PS must consider any features of the project, or proposed measures, to avoid, prevent, reduce or offset any likely significant adverse environmental effects (regulation 21A (1)(f)).

- 8.1.2 NRW PS considers that the following features of the project, or measures included within the project proposal, as described in the application form, ES and other supporting information, would avoid, prevent, reduce or offset any likely significant adverse environmental effects
- 8.1.2.1 The production of, and adherence to a CEMP and adherence to pollution prevention best practices in order to mitigate impact on water quality.
 - 8.1.2.2 Application of soft start procedures during piling in order to provide mobile features including fish, birds and marine mammals the opportunity to move away from the area prior to the offset of full impact.
 - 8.1.2.3 Use of vibro piling wherever possible to reduce the potential impact as a result of noise disturbance during construction.
 - 8.1.2.4 The use of a Marine Mammal Observer in line with JNCC protocol to minimise the risk of injury to marine mammals during percussive piling.
 - 8.1.2.5 A temporary cessation of piling and any activities taking place along the new quay wall to be implemented following seven consecutive days of freezing (zero or sub-zero temperature) weather conditions to minimise disturbance to coastal waterbirds which are considered particularly vulnerable during periods of extreme winter weather.
 - 8.1.2.6 Installing an acoustic barrier/visual screen along the breakwater prior to the commencement of construction to reduce potential visual and/or noise disturbance stimuli to waterbirds on the Mostyn Bank or breakwater roost. This screen is proposed to remain in place initially during the operational phase, with a phased removal of the screens after 2 years.
 - 8.1.2.7 A noise suppression system (consisting of a pile shroud or sleeve with noise insulating properties) is proposed to be used during percussive piling activities of the tube piles for the new quay wall to reduce noise levels on the Mostyn Bank or breakwater roost.
 - 8.1.2.8 The potential interference with other users during construction will be managed by following the existing Port of Mostyn's and Dee Conservancy's Marine Safety Management System, including issuing Local Notices to Mariners.
 - 8.1.2.9 To protect a record of potential archaeological interest, namely a charted wreck located on the edge of the maintenance dredge area, a precautionary AEZ of 100m is recommended.
 - 8.1.2.10 WSI, which includes a PAD, will be developed in line with guidance. This will detail the mitigation that will be in place during the construction and operation of the proposed development to minimise and/or avoid impacts on potential marine heritage receptors.

8.1.2.12 Seasonal tidal restrictions to avoid and/or minimise impact on key fish species, and also night-time piling restrictions to minimise impact on fish species that migrate exclusively or preferentially at night.

8.2 Mitigation or monitoring required to be attached to the consent (Regulation 22 (c)-(e))

8.2.1 In reaching the EIA Consent Decision required under Regulation 22, NRW PS must make consideration of the requirement for any mitigation measures or monitoring required to be attached to the consent.

8.2.2 Section 7 outlines where NRW PS considers that there is a requirement for mitigation and/or monitoring, and sets out the measures we consider necessary to address potential impacts identified through the EIA process. These are summarised below:

8.2.2.1 To mitigate potential impact as a result of sedimentation, dredge disposal daily limit and the manner in which disposals are placed should be secured within a marine licence. These include;

- ensuring the material deposited does not exceed 24,000 tonnes (12,000m³) in any 24-hour period.
- Ensure that the material is distributed evenly across the Mostyn Deep disposal site (IS102), to ensure this the site must be divided into 25 metre by 75 metre cells. The placement of material within these cells must follow a randomised sequence, excluding the perimeter cells designed to provide a safety margin. Each cell must initially only receive one 400 cubic metre load of dredged material; thereafter the sequence may then be repeated on a rolling basis

8.2.2.3 Production and adherence to a Monitoring Plan, in order to monitor impact the works on the estuary morphology and physical processes. If potential for significant impacts are identified then mitigation will need to be proposed and implemented.

8.2.2.4 In order to mitigate potential impact to marine mammals as a result of underwater noise levels during piling activities the following mitigation will be required;

- Soft start procedures that will give marine mammals an opportunity to move away from the area before the onset of full impact.
- Vibro piling will be used where possible, however percussive piling is likely to be required.
- Use of a Marine Mammal Observer and adherence to the JNCC Statutory Nature Conservation Agency Protocol for minimising the risk of injury to marine mammals during piling (JNCC 2010), which includes;
 - Establishment of exclusion zones
 - Pre commencement search of exclusion zone prior to commencement of piling to determine that no marine mammals are within the exclusion zone prior to commencement.

- Marine Mammal Observer will observe the exclusion zone during piling, and if marine mammals are seen in the vicinity the piling will be altered and cease while marine mammals remain in the zone.
- If there is a pause in percussive piling, the pre-commencement search and soft start procedures should be repeated.

8.2.2.5 In line with OSPAR guidelines conditions will be required to ensure sediment sampling and re-analyse every 3 years in order to ensure material is suitable for disposal at sea.

8.2.2.6 The production of, and adherence to a CEMP and adherence to pollution prevention best practices in order to mitigate the impact on water quality.

8.2.2.7 In order to minimise impact on key fish species seasonal tidal restrictions will be required, and also night-time piling restrictions to minimise impact on fish species that migrate exclusively or preferentially at night (including river lamprey).

8.2.2.8 To mitigate potential impact as a result of noise and visual disturbance on waterbirds the following mitigation are considered necessary:

- Piling activities are not to be undertaken in September (autumn bird passage) in any given year
- Soft start procedure for piling
- Cold weather construction restrictions
- Acoustic barrier/visual screening
- Noise suppression systems during percussive piling

8.2.2.9 Production and adherence to a Biosecurity Plan to ensure that potential impact as a result of spread of marine invasive non-native species (INNS) is minimised or avoided.

8.2.2.10 Production and adherence to a WSI which would be produced post consent and would include but not be limited to a PAD and establish AEZ.

8.2.3 In considering the monitoring requirements outlined above we do not consider that these requirements can be met by existing monitoring arrangements.

9. Regulation 21A Conclusion about Environmental Impact

9.0.1 In reaching a Conclusion about Environmental Impact, as required by Regulation 21A, NRW PS has considered the following (Regulation 21A(1)):

- The application for a Marine Licence
- The ES submitted
- Further information provided, as outlined in section 3.3
- The responses to public consultation outlined in sections 4 and 7
- The responses to the technical consultation outlined in sections 6 and 7
- Any comments received from another EEA state, as outlined in section 5 and 7

- Any features of the project, or proposed measures, to avoid, prevent, reduce or offset any likely significant adverse environmental effects as outlined in section 8

9.0.2 NRW PS, as appropriate authority, has considered the likely significant effects of the project, and reached a conclusion of the likely significant effects of the project with regard to the following (Regulation 21A(2)):

Population and human health (9.1)

Biodiversity (9.2)

Land, soil, water, air and climate (9.3)

Material assets, cultural heritage and landscape (9.4)

Risk of major accidents and disasters relevant to the project (9.5)

Cumulative impacts and in-combination impacts (9.6)

9.1 Population and human health

9.1.1 The project is looking to enhance and expand the facilities at the Port of Mostyn in order to allow the port to support and service the current and anticipated future growth in the offshore wind industry. Due to its ability to support offshore wind developments the proposal will support the UK's decarbonisation and transition to net zero emission, therefore having a positive impact on climate change and clean air. In addition the proposal is expected to provide regional and local socio-economic benefits to the public through direct employment.

Any changes in local air quality associated with the operation of construction plant during the construction phase were considered to be temporary and negligible in scale and were scoped out of the assessment. The project is not anticipated to have an impact on human health.

9.2 Biodiversity

9.2.1 The works are within and near to a number of protected sites. A Habitat Regulations Assessment was carried out and concluded that the project had the potential to adversely affect the estuaries feature of the Dee Estuary SAC due to the permanent loss of habitat as a result of land reclamation activity. NRW PS consider that although adverse effect cannot be ruled out the project satisfies the requirements of Article 6(4) of the Habitat Directive, namely, there are no feasible alternative solutions, there is overriding public interest for the plan to proceed, and that necessary compensation measures have been proposed that will fully offset the damage which will be caused to the site.

9.2.2 The ES considered the potential further impact on biodiversity and identified a number of potential impacts including on marine mammals, ornithology, benthic and fish receptors where additional mitigation was required. NRW PS consider that although there is a potential impact on these features, any significant impact will be avoided through the implementation of appropriate mitigation as discussed in section 8. These include but are not limited to, adherence to a CEMP, measures to avoid or mitigate potential introduction of INNS, measures associated with piling

activities and limit on the amount and manner in which dredge and disposals activities takes place.

9.3 Land, soil, water, air and climate

9.3.1 There is an impact pathway to water quality and land through a pollution event. In addition, there is the potential to impact on water quality through increased sedimentation during dredge and disposal activities. The ES has assessed these impacts and proposed mitigation including adherence to a CEMP which incorporates pollution prevention best practices and a monitoring plan to monitor impact of the works on the estuary morphology and physical processes. Samples of the material to be dredged were chemically analysed and considered that the sediment was suitable for disposal at sea. NRW PS consider that the works have been appropriately assessed and subject to the mitigation identified no significant impact on water quality or land is predicted.

9.4 Material assets, cultural heritage and landscape

9.4.1 The ES considered a number of impacts including direct impacts during construction activities, capital and maintenance dredging as well as indirect impacts due to altered sediment or hydrological processes on cultural heritage assets. Subject to appropriate mitigation significant effect on historic assets is not predicted. Mitigation include, production and adherence to a Written Scheme of Investigation which would include but not be limited to a PAD and establishment of an AEZ.

9.4.2 As the works are within an existing port it is considered that the proposed development would not result in any significant landscape effects, likewise the dredging and disposal operations are similar in character as that which take place under existing port operation therefore no significant change to the landscape character was predicted and were scoped out the assessment.

9.5 Risk of major accidents and disasters relevant to the project

9.5.1 A flood consequence assessment was carried out as part of the ES and demonstrated that the works were not anticipated to increase flood risk within the area.

9.5.2 Due to the nature and scale of the operation, the risk of a major accident or disaster is low. In addition, sufficient pollution prevention measures have been proposed to reduce the risk of a major accident or pollution event.

9.6 Cumulative impacts and in-combination impacts

9.6.1 NRW PS concluded that the potential cumulative impacts and in-combination impacts due to the project have been adequately addressed in the ES and that no significant cumulative and in-combination assessment effects are predicted.

Produced By: Peter Morrison (Lead Specialist Officer – Marine Licensing)
Signed: Peter Morrison
Date: 06 February 2025

Approved by: Emmer Litt (Marine Licensing Team Leader)
Signed: EJTitt
Date: 06 February 2025

10. Regulation 22 EIA Consent Decision

10.0.1 The Marine Licensing Team has considered the application CML2283 and information provided in support of the application and is now in a position to make an EIA consent decision to Port of Mostyn Limited.

10.0.2 In accordance with Regulation 22 of the Regulations, NRW PS, as appropriate authority, have considered:

- The application for a Marine Licence
- The ES submitted
- Further information provided, as outlined in section 3.3
- The Conclusion about Environmental Impact (under Regulation 21A(2)) in section 9, which we consider to be up to date
- The responses to public consultation outlined in sections 4 and 7
- The responses to the technical consultation outlined in sections 6 and 7
- Any comments received from another EEA state, as outlined in section 5 and 7
- Whether monitoring of the significant adverse environmental effects of the Project is appropriate (as outlined in section 8), including whether
 - Existing monitoring can be relied upon
 - Conditions should be attached to the regulatory approval
 - Whether conditions to make provision for potential remedial action are required, as outlined in section 8
 - Whether any other conditions need to be attached to the regulatory approval, with respect to the likely significant environmental effects of the Project, as outlined in section 8.

10.0.3 After conducting a full and comprehensive review of the Project and applying appropriate additional external expertise, we conclude that the environmental impacts of the Project have been adequately identified, described and assessed. Accordingly, we conclude a favourable determination and that EIA consent for the project should be given.

10.0.4 Adequate mitigation strategies have been agreed to minimise, or altogether remove, the potential significant impacts associated with the construction and operational phases of the Project. Where this has not been possible (i.e.

permanent loss of habitat as a result of land reclamation activity) adequate compensation measures have been secured.

10.0.5 We consider that the monitoring and mitigation conditions outlined in section 8 should be considered in the regulatory decision.

10.1 This Written Confirmation of the EIA Consent Decision will be sent to the following, in accordance with Regulation 23 of the Regulations:

- Port of Mostyn Limited
- Any person from whom NRW PS received representation arising from the consultation described in section 4
- Any EEA states consulted (see section 5)
- All consultation bodies listed in section 6

10.2 This Written Confirmation of the EIA Consent Decision is available on the NRW online public register at <https://publicregister.naturalresources.wales/>

Produced By: Peter Morrison (Lead Specialist Officer – Marine Licensing)

Signed: Peter Morrison

Date: 06 February 2025

Approved by: Emmer Litt (Marine Licensing Team Leader)

Signed: EJLitt

Date: 06 February 2025
