

Environmental Impact Assessment Written Confirmation of the EIA Consent Decision

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

**Aggregate Extraction at North Middle Ground (NMG) (Area 455/459) and Bedwyn
Sands**

MMML2367

18 October 2024

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1. Introduction

- 1.1 This document is the Environmental Impact Assessment ('EIA') Written Confirmation document for MMML2367 ("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 Breedon Trading Limited on 13 November 2023.
- Extraction of aggregates from NMG (Area 455/459) and Bedwyn Sands in the Severn Estuary*
 - Annually, 250,000 tonnes in total from Bedwyn Sands with no more than 150,000 from Welsh waters, and 250,000 tonnes in total from NMG*
 - The licence will be live for 15 years, giving a total of 2,250,000 tonnes from Bedwyn Sands (3,750,000 including English waters) and 3,750,000 tonnes from NMG*
 - Method of extraction – Trailer-suction-hopper-dredge*
- 2.1.3 All activities listed in 2.1.2 with a * require a Marine Licence under Part 4, (Chapter 1) Section 66 of the Marine and Coastal Access Act.

2.2 Location

- 2.2.1 The Project is located at NMG (Area 455/459) and Bedwyn Sands which are located in the Severn Estuary. Bedwyn Sands is in Welsh and English water, whereas NMG is entirely within Welsh waters. The total area covered by these sites are detailed within the table and figure below:

Latitude	Longitude
Bedwyn Sands	
51° 32.5938' N	2° 47.3922' W
51° 33.1392' N	2° 46.5366' W
51° 33.1596' N	2° 43.3524' W
51° 31.4274' N	2° 44.2500' W
51° 31.4352' N	2° 44.7084' W
NMG (Area 455)	
51° 31.0000' N	2° 52.0000' W
51° 31.6000' N	2° 48.6000' W
51° 31.1460' N	2° 48.3282' W
51° 29.9040' N	2° 52.0000' W
NMG (Area 459)	
51° 31.0000' N	2° 52.0000' W
51° 30.0300' N	2° 52.0000' W
51° 30.0300' N	2° 54.0000' W
51° 31.0000' N	2° 54.0000' W

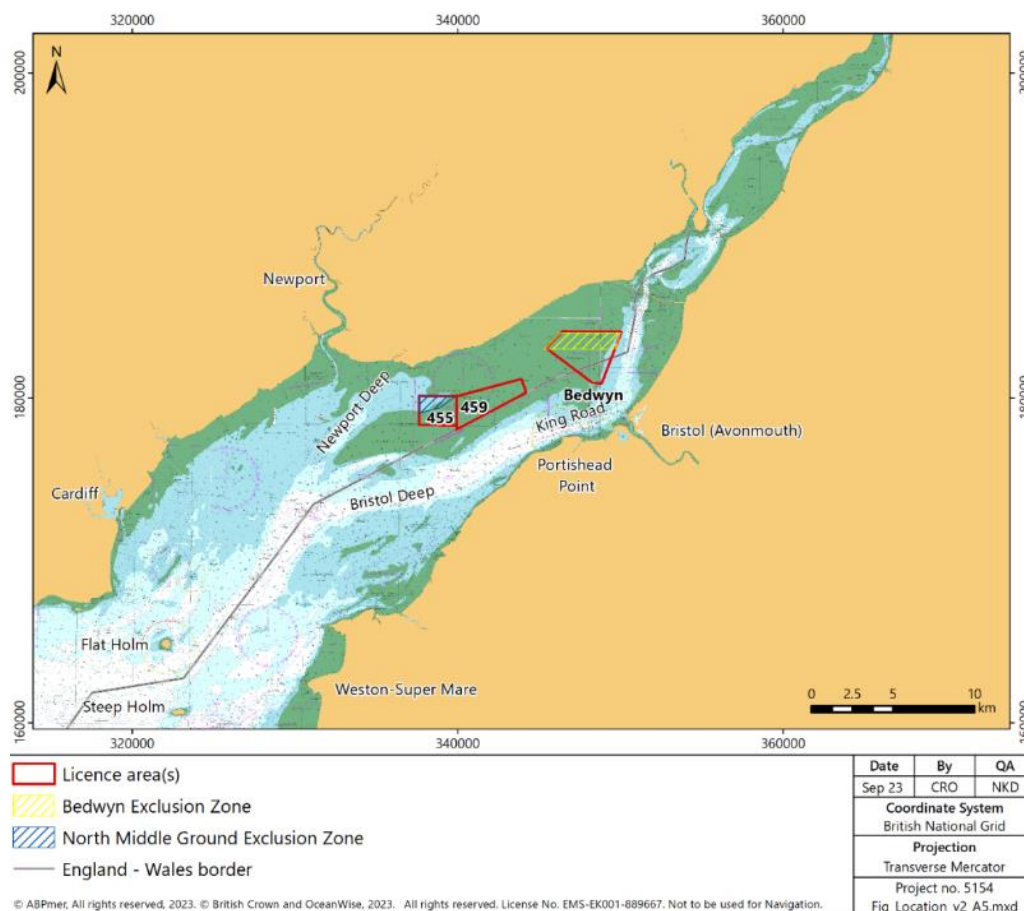


Figure 1 – Location of NMG (Area 455/459) and Bedwyn Sands aggregate sites

2.3 Statement of need

2.3.1 Marine aggregates are essential minerals which are widely used in concrete for the construction of homes, schools, hospitals and infrastructure. They are also used for beach nourishment. Government policy and plans recognise that marine aggregates play a key role in servicing the nation's demand for construction aggregate and supplying materials for the maintenance of coastal and flood protection defences required for climate change adaptation. Marine aggregates also contribute to energy security and economic development through provision of fill for major coastal infrastructure projects, for example ports, renewable energy and nuclear energy projects.

Land-based and marine-based construction aggregate resources are unevenly distributed, and many regions are heavily dependent on supplies from other areas. Marine aggregates contribute to the diversity of supply and deliver high quality aggregate into the centre of areas of high demand with minimum disruption.

One of the main benefits of using marine sources is that vessels can deliver aggregates directly to wharves in urban areas, reducing pollution and road congestion.

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 (NRW) considered under SC2204 that the proposed works fell under Schedule A2, Paragraph 10 of the Regulations on the assessment of the effects of the project on the environment, specifically:
- *Extraction of minerals by fluvial or marine dredging*
- 3.0.4 Accordingly, the Marine Licence application required for the Project was accompanied by an Environmental Statement (ES).
- 3.0.5 NRW provided comments on a Scoping Report entitled “R3976_Bedwyn Sands and North Middle Ground EIA_Scoping_30Aug2022”, dated 30 August 2022 and produced by ABPmer (SC2204).

3.1 The Environmental Statement (ES)

- 3.1.1 The Environmental Statement outlined the proposed project organised under the following topic headings.
- 3.1.2 Technical chapters:
- Physical Processes;
 - Water and Sediment Quality;
 - Nature Conservation;
 - Benthic Ecology;
 - Fish and Shellfish Ecology;
 - Marine and Coastal Ornithology;
 - Marine Mammals;
 - Commercial and Recreational Fisheries;
 - Commercial and Recreational Navigation;
 - Marine Archaeology;
 - Coast Protection and Flood Defence;
 - Air Quality;
 - Infrastructure and Other Marine Users;
 - Human Health; and
 - In-combination/ Cumulative Effects.

- 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:
- Severn Lower (GB530905415401)
- 3.2.1.3 A Water Framework Directive Compliance Assessment was concluded that the proposal, when considered alone and in-combination, will not pose a risk to deterioration of the above listed waterbodies.
- 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 during the licence determination:

- Severn Estuary SAC
- Severn Estuary SPA
- Severn Estuary Ramsar

3.2.3.4 A test of likely significant effect (TLSE) was undertaken and potential significant effects on features of the European Sites listed above could not be ruled out. It was concluded that the proposal, when considered alone and in-combination, will not adversely affect the integrity of the European site(s) concerned.

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 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 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 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 it is 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 No further information was requested from the applicant pursuant to a notification under Regulation 14 (1).

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 South Wales Echo on 16 January 2024 & 23 January 2024
 - The application documents were made available to the public at: Breendon Severn Sands, Alexandra Dock, Newport, NP20 2WZ, for 42 days following the publication of the first public notice.
- 4.1.3 0 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 The Marine Licence application was consulted upon on 14 December 2023 for a period of 42 days, in accordance with Regulation 17 of the regulations. It was sent to the following consultation bodies:

- Natural Resources Wales Advisory (NRW A)
- Ministry of Defence (MoD)
- Maritime and Coastguard Agency (MCA)
- The Crown Estate (TCE)
- Local Biodiversity Officers (LBO)
- Local Planning Authorities (LPA)
- Local Harbour Authorities
- Local Port Authorities
- Gloucester Harbour Trustees
- Newport Harbour Commissioners
- Welsh Fisherman Association
- National Federation of Fishermen's Organisations (NFFO)
- Royal Yachting Association (RYA)
- Royal Society for the Protection of Birds (RSPB)
- Trinity House (TH)
- WG Marine and Fisheries Division/WG Marine Enforcement Officers
- Cadw
- Natural England (NE)
- The Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW)
- Welsh Archaeological Trust
- Environmental Public Health Service Wales
- Department for Transport (DFT)
- Chamber of Shipping
- NERL Safeguarding
- IFCA (Devon & Severn)

6.0.3 The following organisations submitted comments:

- NRW A
- MoD
- MCA
- TCE
- Gloucester Harbour Trustees
- Newport Harbour Commissioners
- Cadw
- NE
- RCAHMW
- Environmental Public Health Service Wales
- IFCA (Devon & Severn)

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

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

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 The assessment considered five pathways, which addressed: the potential for changes in wave energy and tidal currents, changes in sediment movements, changes to seabed morphology, cumulative effects with ongoing dredging and cumulative effects on the coast. All potential impacts on Physical Processes receptors as a result of the proposed dredging in Bedwyn Sands and NMG were insignificant (not significant) due to the negligible probability of occurrence and negligible magnitude of change for all physical process impact pathways.

7.1.2 NRW A agree with the mitigation measures proposed for the continued aggregate dredging at Bedwyn sands and NMG. Providing the conditions of the previous licence relating to the content and frequency of monitoring reports and substantive reviews continue into the new licence (adherence to the RSMP approach), NRW A agree with the conclusions of the assessments carried out. These conditions are detailed within section 8 below.

7.1.3 Following consultation with IFCA, numerous comments were made relating to both physical processes and benthic ecology. Given the comments made relate to both receptors, these have been considered in section 7.3 below under benthic ecology.

7.1.4 NRW PS is therefore satisfied with the conclusions presented within the ES.

7.2 Water and Sediment Quality

7.2.1 The assessment considered four impact pathways; including potential changes to suspended sediment concentrations, dissolved oxygen concentrations, water borne contaminant concentration and redistribution of sediment bound contaminants. All potential impacts on Water and Sediment Quality receptors were assessed as insignificant (not significant), due to the low magnitude of change and low probability of occurrence based principally on the sediment composition of the area.

7.2.2 Comments were received by NRW A in relation to the WFD assessment which concluded that the proposal, when considered alone and in-combination, will not pose a risk to deterioration of the Severn Lower waterbody, as detailed in section 3.2.

7.2.3 NRW PS is therefore satisfied with the conclusions presented within the ES.

7.3 Nature Conservation

Benthic Ecology

7.3.1 The assessment considered six impact pathways that address: the direct removal of the seabed, increases in suspended sediment, smothering, bathymetric changes, noise, and the introduction or spread of non-native species. The assessment considered the overall potential impacts on the benthic environment to be minor adverse (not significant) at worst, due to a species poor benthic community and the localised (relatively small scale) changes predicted to occur as part of the dredging, within the context of the natural variability of the estuary.

7.3.2 Based on the information presented and in the context of the current conservation objectives for the Severn Estuary, adherence to the Regional Seabed Monitoring Plan (RSMP) approach and the renewal nature of the proposal (i.e., no change in extent of aggregate extraction areas and/or extraction volumes) NRW A have no significant concerns with the proposal to renew the current licence and agree with the conclusions of the assessments. These conditions are detailed within section 8 below.

7.3.3 In relation to managing the spread of marine invasive non-native species – NRW A advised that the applicant completes and submits an updated version of the biosecurity risk assessment in relation to the proposed activity. NRW PS will ensure licence conditions are added to the marine licence to ensure all works are carried out in line with a biosecurity risk assessment and ensuring hopper washing is carried out appropriately. This condition is detailed within section 8.

7.3.4 IFCA raised numerous concerns regarding the potential impacts to the following features of marine protected areas:

- Annex I habitats, specifically H1110 (Subtidal sandbanks) and H1140 (Intertidal mudflats and sandflats) within the Severn Estuary SAC
- Severn Estuary SSSI
- Marine fish assemblage (sub-feature of Estuaries feature) of the Severn Estuary SAC

IFCA remains concerned about the level of precaution being used when considering potential impacts to Annex I habitats. IFCA believes that, based on the evidence available, and by the nature of the aggregate extraction process, the Conservation Objectives for these features will be directly impacted.

7.3.5 The IFCA comments received were shared with NRW A as the Appropriate Nature Conservation Body (ANCB) who noted the key feature of concern for this aggregate dredging licence application is the Annex 1 intertidal mudflats and sandflats habitats of the Severn Estuary SAC. NRW A remain content that the combination of historical monitoring data, the modelled predictions reported in the Environmental Impact Assessment (EIA) and the proposed mitigation measures, provide sufficient evidence and safeguarding measures to conclude no adverse effect on site integrity (AEOSI) for the Severn Estuary SAC for the renewal licence period. Mitigation

measures in place via monitoring the benthic habitat, morphology and elevation of the seabed allow for adaptive management of the site should variations outside of natural variability to the extent or morphology of the mudflat and sandflat feature be detected. Adaptive management measures include reduction in dredging allowance and exclusion zones if necessary.

- 7.3.6 IFCA raised concerns about the monitoring that had been carried out in the past and the appropriateness of the baseline used.
- 7.3.7 These comments were shared with NRW A as the ANCB who stated that previous licence conditions for both sites in question stipulate ongoing monitoring of the aggregate resource since extraction began at Bedwyn Sands in 2008. Monitoring reports for both sites have shown fluctuations of accretion and lowering of the seabed since monitoring began (we note monitoring started later for North Middle Grounds as dredging began in 2011). The evidence presented through monitoring reports thus far indicates that changes in seabed elevations have not exceeded the range of natural variability to date.
- 7.3.8 NRW A recognise that the differentiation between the impacts caused by dredging activity and impacts to Annex 1 features due to natural variability is a key factor of determining whether AEOSI is a concern. NRW A highlighted the importance of past monitoring data in informing future assessments of cumulative impacts to the extent and morphology of the protected features. Within the Environmental Statement, the applicant outlines plans to use all available monitoring data collected dating back to 2008, to inform future assessments of cumulative impacts. This should include annual monitoring reports and substantive reviews. In order to discharge licence conditions, as the ANCB, NRW A review all monitoring reports and substantive reviews. This includes the survey specifications and report outputs to assess whether changes to seabed type, morphology and extent have exceeded the limits of natural variability and whether cumulative impacts have been accounted for.
- 7.3.9 NRW A note that predicted changes to hydrodynamics and bed shear stress do not show significant variation over the proposed 15-year licence period and are content that a realistic 'worst case scenario' for dredging activity and climatic conditions were used. NRW A are content that no significant changes to physical processes and the addition of appropriate mitigation measures, as described in Section 5 of the Coastal Impact Study, allows the support of the conclusion of no AEOSI.
- 7.3.10 Concerns were raised by IFCA relating to the management of sediment and maintaining sediment within the system. NRW A recognise the NRW Position Statement on The Sustainable Management of Marine and Coastal Sediment (PS 012) does encourage retaining sediments within each sediment cell, and therefore NRW A have advised and would continue to advise for the disposal of dredged material to remain within the same sediment cell. However, aggregate extraction is considered as an exception to this position as there are mitigation measures in place and periodic monitoring of a licensed area, as per the Regional Seabed

Monitoring Programme (RSMP), to ensure any negative effects are detected at the earliest opportunity.

7.3.11 IFCA also raised concerns surrounding the minimum sediment thickness of 0.5m and whether it will include the infill, or if this a minimum sediment thickness of only the surficial sediments. However, 0.5m of mobile sand will remain on average over the dredging area rather than Holocene infill (relict sediments). This has been addressed through the inclusion of licence conditions as detailed in section 8.

7.3.12 NRW PS is therefore satisfied with the conclusions presented within the ES.

Fish and Shellfish Ecology

7.3.13 The potential pathways assessed involved: the direct removal of seabed, changes to water quality, and increased levels of noise, vibration and lighting. The effects of dredging in Bedwyn Sands and NMG on sandeel and herring were also assessed separately. Overall, impacts are assessed as minor adverse (not significant) at worst, chiefly due to the limited number of species present in Bedwyn Sands and NMG and their ability to move away from the small-scale localised changes predicted to occur as a result of dredging.

7.3.14 NRW A to requested further clarification from the applicant to support their conclusions within the sandeel assessment under the 'direct removal' pressure.

7.3.15 Whilst the ES states that few sandeels were captured in the fish surveys undertaken at various times at both dredge sites, it also acknowledges that the fish survey methods used were not designed to capture sandeels. Based on that information the ES states that the sites are unlikely to hold important sandeel populations. However, the sediment type at both sites lies within the preferred habitat type for sandeels, and even when utilising non-specific survey methods sandeels were captured during the various fish surveys for the area. This information suggests that a larger population is present in the area than is implied within the ES.

7.3.16 NRW A advise that within the RSMP monitoring requirements, any grab samples are assessed for their sandeel habitat suitability (preferred/marginal/prime/sub-prime) and any sandeels captured within macrofaunal monitoring sampling activities are recorded to give a better understanding of the potential value of the site for sandeel populations within the Severn Estuary. This will be conditioned within the licence and is detailed in section 8.

7.3.17 NRW A also acknowledged that given the mitigation that will be conditioned within the licence of a capping layer of at least 0.5m to be retained at the site, the cap on extraction at 250,000 tonnes a year for each site, the low expected levels of sediment screening and the dynamic nature of the Severn Estuary the remaining habitat would continue to be suitable for sandeels to recolonise following the cessation of dredging activities.

7.3.18 IFCA raised concerns surrounding the potential impacts to such fish species such as Cod and Whiting. These comments were shared with NRW A and whilst NRW A agreed that there could be some impact to these species from the dredging activity,

they did not consider it to be significant on a population level. The diets of both species are varied, relying on multiple prey species across a wide area of the Severn estuary. If some of these prey components were locally impacted by the dredging activity there are other species/areas nearby that Whiting and Cod can exploit for food. A heat map of dredging activity was also provided which illustrates that the dredging activity has occurred across a relatively small spatial area and due to the nature of the site, access is restricted across the high tide period.

7.3.19 NRW PS is therefore satisfied with the conclusions presented within the ES.

Marine and Coastal Ornithology

7.3.20 Potential impacts assessed include; indirect effects of seabed removal, effects on foraging due to suspended sediments, and effects from vessel disturbance. Due to the negligible to low exposure of birds to the potential impacts, the overall effects on ornithology features are assessed as insignificant.

7.3.21 No comments were received in relation to Marine and Coastal Ornithology, therefore, NRW PS is satisfied with the conclusions presented within the ES.

Marine Mammals

7.3.22 Four potential impacts to marine mammals were identified and assessed, these involved: the direct removal of seabed, reduced water clarity, noise and vibration, and collision with dredging vessels. Due to the predicted small scale of the change resulting from dredging activity in Bedwyn Sands and NMG, all impacts were assessed as insignificant.

7.3.23 No major comments were received in relation to Marine Mammals, therefore, NRW PS is satisfied with the conclusions presented within the ES.

7.4 Commercial and Recreational Fisheries

7.4.1 The assessment considered three potential impacts which involved: the disruption of fishing activities, the damage of fishing gear and impacts upon fish stocks. All impacts were assessed as insignificant.

7.4 Commercial and Recreational Navigation

7.4.1 The assessment considered four potential impact pathways, which included: the potential for accidents or incidents arising from the presence of dredging vessels either on transit or within Bedwyn Sands and NMG, the displacement of vessels out of the licence areas, and potential water quality impacts from pollutants resulting from accidents, incidents or spillages. Several mitigation measures aimed at increasing the navigation safety of the Inner Bristol Channel and Severn Estuary currently exist. These include emergency response infrastructure and the application of several pieces of maritime legislation that state best practice methods for safe operations at sea. The aggregate industry has furthermore developed a related code of practice, in consultation with regulators. With these in place, all residual impacts/risks were assessed as potentially minor adverse.

7.5 Marine Archaeology

- 7.5.1 The assessment considered two potential impacts, which involved direct and indirect damage to the marine archaeological resource. It was found that, without mitigation, direct impacts could result in potential major adverse effects. The significance of indirect impacts to archaeological receptors was expected to be insignificant.
- 7.5.1 RCAHMW and Cadw had no comment/objections to the scheme based on any impact to marine archaeology within the scheme area. Providing that the developer adheres to the recommendations for reporting protocols in the event of any unexpected discoveries no impacts are predicted.
- 7.5.2 NRW PS is therefore satisfied with the conclusions presented within the ES.

7.6 Coast Protection and Flood Defence

- 7.6.1 The assessment considered the removal of aggregate from Bedwyn Sands and NMG in relation to its potential to affect seabed height, potentially resulting in a change in wave exposure at the coast, which could in turn affect coastal protection/flood defence. The other impact pathway which was assessed related to the potential for maintaining source aggregate for future coastal defence and beach nourishment projects. The assessment concluded that dredging activities in Bedwyn Sands and NMG will have an insignificant.
- 7.6.2 No major comments were received in relation to Coast Protection and Flood Defence, therefore, NRW PS is satisfied with the conclusions presented within the ES.

7.8 Air Quality

- 7.8.1 The assessment considered one potential impact pathway for air quality related to the vessel presence, namely the potential for marine aggregate dredger emissions to affect air quality receptors. It is considered that, whilst increased vessel presence has the potential to impact upon air quality, given the low estimated number of cumulative emissions, impacts are insignificant.
- 7.8.2 No major comments were received in relation to Air Quality, therefore, NRW PS is satisfied with the conclusions presented within the ES.

7.9.1 Infrastructure and Other Marine Users

- 7.9.2 The assessment considered one potential impact pathway for this receptor, related to the potential for changes to physical processes occurring (i.e., currents, waves and tides; seabed), thus impacting marine and land-based infrastructure and other marine users. This impact is assessed as insignificant.

7.9.3 The MCA had stated that the proposed activities fall within the jurisdiction of a Statutory Harbour Authority (SHA) - Gloucester Harbour Trustees and therefore they are responsible for the safety of navigation within their waters.

7.9.4 Gloucester Harbour Trustees confirmed they have no objection to the proposed activities and the developer will be required to obtain gain the approval/agreement of the responsible local navigation authority or the Harbour Authority/Commissioners/Council.

7.9.5 NRW PS is therefore satisfied with the conclusions presented within the ES.

7.10 Human Health

7.10.1 The assessment considered noise and increased emissions from the proposed dredging activity as having the potential to impact on human health. However, this impact is assessed as insignificant.

7.10.2 No major comments were received in relation to Human Health, therefore, NRW PS is satisfied with the conclusions presented within the ES.

7.11 In-combination/Cumulative Effects

7.11.1 As detailed in section 3.2.4, NRW PS carried out a Habitat Regulations Assessment, as part of which an in-combination assessment was carried out and concluded subject to appropriate mitigation that the works would not cause a significant impact alone or in combination on a European designated site.

7.10.3 Other than those comments discussed in section 7.3, no further comments were received in relation to In-combination/Cumulative Effects, therefore, NRW PS is satisfied with the conclusions presented within the ES.

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 must consideration of 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 considers that the following features of the project, or measures included within the project proposal, as described in the application form, Environmental Statement and other supporting information, would avoid, prevent, reduce or offset any likely significant adverse environmental effects.

8.1.2.1 All proposed and embedded mitigation for the activities are detailed in full within section 20 of the Environmental Statement. The key points have been summarised below.

- 8.1.2.2 Exclusion zones are implemented to avoid heritage, nature conservation and resource thickness. With regard to the latter, where the resource is less than 0.5 m thick, exclusion zones are implemented.
- 8.1.2.3 To ensure safety to navigation during dredging operations, BMAPA, in consultation with the MCA has developed a guide to good practice for ensuring navigation safety during dredging operations which the developer will adhere to.
- 8.1.2.4 To ensure mitigation is in place to reduce the risk of introduction and spread of INNS, the developer will adhere to the Biosecurity Plan Template and Guidance Document (BMAPA, 2018) and the INNS reporting protocol.
- 8.1.2.5 Pre-dredge and operational monitoring proposals are incorporated into the Environmental Statement.
- 8.1.2.6 It is proposed that the existing baseline datasets are maintained for use in future monitoring studies, with analysis compared against each dataset collected in the interim period.
- 8.1.2.7 It is proposed that the operational monitoring programme continues to follow that which is currently in place for each of the two extraction sites (Bedwyn and Area 455/459).
- 8.1.2.8 It is proposed that the future operational monitoring programme continues to collect the following:
- Annual offshore bathymetry data across the extraction sites and the wider Middle and Welsh Grounds (repeating the annual surveys collected since 2008 and, most recently, in 2023);
 - Analysis of the offshore bathymetry against the agreed metrics (i.e., height, area and volume of the offshore resource), as reported in ABPmer, 2022;
 - Collection of annual LiDAR data across the study foreshore, for subsequent analysis should the offshore bathymetry reveal an 'Amber' or 'Red' outcome;
 - Seabed grab samples collected in line with the RSMP approach (coverage and frequency over the renewal period to be agreed with Cefas during Year 1 of the new licenses), with subsequent analysis of particle size distribution (PSD) and macrobenthos;
 - Annual reporting to include analysis of the wider regional Middle and Welsh Grounds as well as the established study areas associated with each of the extraction areas;
 - Monitoring data analysed to provide updated resource thickness maps across each of the licensed areas; and
 - 5-year substantive reviews of the annual monitoring survey data undertaken at 5-year intervals throughout the licence period.
- 8.1.2.9 The frequency of these surveys would be reviewed based on the results of the substantive reviews which would take place every five years during dredging operations.

- 8.1.2.10 A new resource assessment will be produced each time new bathymetric data are reported in order to ensure that an adequate layer of resource remains on the seabed.
- 8.1.2.11 As well as the sediment monitoring undertaken through the RSMP approach, the PSD analysis of the cargoes taken off each Area will also be undertaken and reported on in the regular annual monitoring reports (related to the review of the morphological conditions, see above), with highlighting of any noticeable changes in the particle size.

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 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 Licence conditions will be added to the licence to ensure relevant stakeholders are notified prior to commencement of each phase of the Licensed Activities. This will include but is not limited to, local mariners, HM Coastguards, UK Hydrographic office and Welsh Government Marine & Fisheries Division.
- 8.2.2.2 Licence conditions will be required to ensure pollution prevention best practice is always adhered to.
- 8.2.2.3 Licence conditions will be required to mitigate against the spread and introduction of INNS. This will include adherence to a biosecurity risk assessment and ensuring hopper washing is carried out appropriately.
- 8.2.2.4 Licence conditions will be required to ensure no dredging operations are carried out within restricted areas prior to a pre-dredge monitoring report being submitted and approved by the licensing authority. The pre-dredge monitoring specification will need to be submitted and approved by the licensing authority.
- 8.2.2.5 Licence conditions will be required to ensure the baseline survey is carried out in line with the latest version of the Regional Seabed Monitoring Plan (RSMP) Protocol for Sample Collection and Processing.
- 8.2.2.6 Licence conditions will be required to ensure an exclusion zone report is submitted and approved prior to commencement of any dredging activity outside of the Restricted Dredge Zone. The report must include details of the following:
- i. Charts or information detailing the location of known cable and pipelines present in or near the licence area;
 - ii. Isopachyte charts detailing the location of areas where resource thickness is 0.5m or less over 250m by 250m grid centred on 125m nodes;

- iii. Charts detailing the location of known sensitive nature conservation features;
- iv. Charts or information detailing known features of archaeological interest;
- v. Details of Exclusion Zones relating to any of the features listed in (i) to (iv).

- 8.2.2.7 Licence conditions will be required to ensure the geophysical data in the pre-dredge monitoring report is reviewed and an updated archaeological baseline is submitted to the Licensing Authority for written approval prior to the commencement of dredging outside of the Exclusion Zone.
- 8.2.2.8 Licence conditions will be required to ensure the location of all grab and vibrocore samples is submitted to the Licensing Authority. in the event of removal of any sensitive species or habitat designated by Natural Resources Wales under Schedule 7 of the Environment (Wales) Act 2016, no further removals occur at that location, or within 20 meters of that location.
- 8.2.2.9 A licence conditions will be required to ensure on trailer suction hopper dredging is permitted.
- 8.2.2.10 A licence condition will be required to ensure all dredgers operating in the licence area are fitted with a functional and operational Electronic Monitoring System.
- 8.2.2.11 A licence condition will be required to ensure that no dredging occur in areas of resource 0.5m or less measured over a 250m by 250m grid centred on 125m nodes.
- 8.2.2.12 A licence condition will be required to ensure any archaeological and/or military interest identified is recorded and reported according to the procedures set out in the 'Protocol for Reporting Finds of Archaeological Interest' (BMAPA and English Heritage 2005).
- 8.2.2.13 A licence condition will be required to ensure any previously unreported wrecks (vessel or aircraft), or other sites of archaeological interest identified within the marine licence area, have an Exclusion Zone implemented around them in accordance with the procedures set out in the 'Protocol for Reporting Finds of Archaeological Interest' (BMAPA and English Heritage 2005).
- 8.2.2.14 Licence conditions will be required to ensure extraction rates are reported on an annual basis for both NMG (Area 455/459) and Bedwyn Sands. Any errors in extraction rates will need to be rectified within five days.
- 8.2.2.15 A licence condition will be required to ensure a site-specific monitoring plan, in line with the latest version of the Regional Seabed Monitoring Plan (RSMP) Protocol for Sample Collection and Processing. The monitoring plan will need to include a timetable for the individual monitoring surveys. Any changes to the monitoring plan will need to be submit and approved by the Licensing Authority.
- 8.2.2.16 A licence condition will be required to ensure all monitoring surveys are of a comparable specification to the pre-dredge survey, in line with the latest version of the RSMP Protocol for Sample Collection and Processing and as agreed in the

site-specific monitoring plan. All survey reports will need to provide a comparison with the final report of the pre-dredge survey results.

8.2.2.17 A licence condition will be required to ensure a report on compliance with the conditions is submitted for approval on an annual basis.

8.2.2.18 Licence conditions will be required to ensure a substantive review of the dredging operations that have taken place within 9 months of the start of year 5 and year 10, following the commencement of dredging within the Licensed Area. The report must summarise the results of all monitoring undertaken and detail:

- i. The impact of dredging operations on the marine environment;
- ii. The effectiveness of the conditions imposed on the dredging operations and recommending any variations to the dredging operations as may be necessary to protect the environment; and
- iii. Any recommendations of variations to the monitoring programme as may be necessary to ensure that effective environmental monitoring of the dredging is maintained.

8.2.2.19 Licence conditions will be required to ensure that a specification for post-dredge monitoring is submitted to the Licensing Authority for written approval prior to the cessation of dredging. Post-dredge monitoring programme must be implemented in accordance with the approved specification.

8.2.2.20 Licence conditions will be required to ensure a post-dredge monitoring report is submitted to the Licensing Authority, post cessation of dredging. The post-dredge monitoring report must include:

- i. A report describing the condition of the seabed within the Licence Area following the cessation of dredging. The report must ensure that an assessment is made of the need for further post-dredge monitoring of the Licence Area.
- ii. Appropriate evidence demonstrating that there have been no adverse impacts on the relevant environmental indicators, as identified in the pre-dredge survey report.
- iii. If this evidence cannot be provided then the report will detail recommendations of actions, which must be undertaken to ensure the remediation of any adverse impacts on the seabed sediment environment.

8.2.2.21 A licence condition will be required to ensure that all monitoring surveys are comparable to the pre-dredge survey, in line with the latest version of the RSMP Protocol for Sample Collection and Processing and as agreed in the post-dredging monitoring specifications.

8.2.2.22 A licence condition will be required to ensure upon cessation of dredging the sediment substrate must be of a similar grading to the conditions that existed before dredging commenced with due allowance being made for natural sediment movements.

8.2.2.23 Licence conditions will be required to ensure that in the event that the Licensing Authority determines that remedial work is required, the Licence Holder must

ensure a scheme for remedial works is prepared and submitted to the Licensing Authority for approval. The remedial works must be implemented as approved.

- 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 has considered the following (Regulation 21A(1)):
- The application for a Marine Licence
 - The Environmental Statement 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, 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 ES has assessed the impact on population and the human health. Due to the nature of the operation, the measures proposed to reduce the impacts on population and human health, and conditions attached to the marine licence, NRW PS consider the risk of impacts on population and human health to be extremely low.

9.2 Biodiversity

- 9.2.1 The project has the potential to impact the following designated sites:
- Severn Estuary SAC
 - Severn Estuary SPA
 - Severn Estuary Ramsar
 - Severn Estuary SSSI

- 9.2.2 NRW PS carried out a Habitat Regulation Assessment and concluded, subject to appropriate conditions detailed in Section 8, that the Licensed Activities will not adversely affect the integrity of any of the European Sites. NRW is satisfied that the Proposed Activities do not have the potential to impact on the Severn Estuary SSSI and that its features are appropriately assessed as part of the HRA.
- 9.2.3 Numerous comments were received from IFCA, focusing mainly on the monitoring and the baseline used. NRW considered this representation and obtain confirmation and assurance from NRW A as the ANCB to proceed due to controls imposed in the licence through the inclusion of licence conditions.

9.3 Land, soil, water, air and climate

- 9.3.1 NRW PS consider that the works have been appropriately assessed and that, subject to the mitigation proposed within the ES and the licence conditions outlined in section 8, no significant impact on water quality is predicted.

9.4 Material assets, cultural heritage and landscape

- 9.4.1 The ES has adequately assessed the impacts on marine archaeology and provided the recommendations for reporting protocols in the event of any unexpected discoveries and the conditions detailed in section 8 are followed, no impacts are predicted.


9.5 Risk of major accidents and disasters relevant to the project

- 9.5.1 Due to the nature of the operation, NRW PS consider the risk of a major accident or disaster to be extremely low. This is based on embedded mitigation measures proposed to reduce the risk of a major accident or pollution event and conditioned within the marine licence, stated in section 8.

9.6 Cumulative impacts and in-combination impacts

- 9.6.1 As detailed in section 3.2.3, NRW PS carried out a Habitat Regulation Assessment, as part of which an in-combination assessment was carried out and concluded subject to appropriate mitigation that the works would not cause a significant impact alone or in combination on a European designated site.
- 9.6.2 An in-combination assessment was also carried out as part of the WFD assessment and the ES assessment, which also concluded no significant impacts.
- 9.6.3 NRW PS considers that the Project as proposed and with the control measures imposed through conditions in the marine licence will not result in significant impacts alone or in combination with other projects. NRW PS concluded that the potential impacts due to the project have been adequately addressed in the ES.

Produced By: Joe Thomas

Signed: 

Date: 18 October 2024

Approved by: Emmer Litt



Signed:

Date: 18 October 2024

10. Regulation 22 EIA Consent Decision

- 10.0.1 The Marine Licensing Team has considered the application MMML2367 and information provided in support of the application and is now in a position to make an EIA consent decision to Breedon Trading Limited.
- 10.0.2 In accordance with Regulation 22 of the Regulations, NRW PS, as appropriate authority, have considered:
- 7 The application for a Marine Licence
 - 8 The Environmental Statement submitted
 - 9 Further information provided, as outlined in section 3.3
 - 10 The Conclusion about Environmental Impact (under Regulation 21A(2)) in section 9 (18 October 2024), which we consider to be up to date
 - 11 The responses to public consultation outlined in sections 4 and 7
 - 12 The responses to the technical consultation outlined in sections 6 and 7
 - 13 Any comments received from another EEA state, as outlined in section 5 and 7
 - 14 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 operational phases of the Project.

- 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:
- 15 Breedon Trading Limited
 - 16 Any person from whom NRW received representation arising from the consultation described in section 4
 - 17 Any EEA states consulted (see section 5)
 - 18 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 [Public register - Customer Portal \(naturalresources.wales\)](#).

Produced By: Joe Thomas

Signed: 

Date: 18 October 2024

Approved by: Emmer Litt

Signed: 

Date: 18 October 2024
