Partners in UK offshore wind

MONA OFFSHORE WIND PROJECT

Response to NRW Deadline 3 Submission

Deadline: 4

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F01

Image of an offshore wind farm

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Prepared by:

RPS

Prepared for:

Mona Offshore Wind Ltd.

Tables

Glossary

Term	Meaning
Applicant	Mona Offshore Wind Limited.
Appropriate Assessment	A step-wise procedure undertaken in accordance with Article 6(3) of the Habitats Directive, to determine the implications of a plan or project on a European site in view of the site's conservation objectives, where the plan or project is not directly connected with or necessary to the management of a European site but likely to have a significant effect thereon, either individually or in-combination with other plans or projects.
Bodelwyddan National Grid Substation	This is the Point of Interconnection (POI) selected by the National Grid for the Mona Offshore Wind Project.
Competent Authority	Regulation 6(1) defines competent authorities as "any Minister, government department, public or statutory undertaker, public body of any description or person holding a public office".
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Project (NSIP).
Environmental Statement	The document presenting the results of the Environmental Impact Assessment (EIA) process for the Mona Offshore Wind Project.
Evidence Plan Process	The Evidence Plan process is a mechanism to agree upfront what information the Applicant needs to supply to the Planning Inspectorate as part of the Development Consent Order (DCO) applications for the Mona Offshore Wind Project.
Expert Working Group (EWG)	Expert working groups set up with relevant stakeholders as part of the Evidence Plan process.
Inter-array cables	Cables which connect the wind turbines to each other and to the offshore substation platforms. Inter-array cables will carry the electrical current produced by the wind turbines to the offshore substation platforms.
Interconnector cables	Cables that may be required to interconnect the Offshore Substation Platforms in order to provide redundancy in the case of cable failure elsewhere.
Intertidal access areas	The area from Mean High Water Springs (MHWS) to Mean Low Water Springs (MLWS) which will be used for access to the beach and construction related activities.
Intertidal area	The area between MHWS and MLWS.
Landfall	The area in which the offshore export cables make contact with land and the transitional area where the offshore cabling connects to the onshore cabling.
Local Authority	A body empowered by law to exercise various statutory functions for a particular area of the United Kingdom. This includes County Councils, District Councils and County Borough Councils.
Local Highway Authority	A body responsible for the public highways in a particular area of England and Wales, as defined in the Highways Act 1980.
Marine licence	The Marine and Coastal Access Act 2009 requires a marine licence to be obtained for licensable marine activities. Section 149A of the Planning Act 2008 allows an applicant for a DCO to apply for a 'deemed' marine licence as part of the DCO process. In addition,

Term	Meaning
	licensable activities within 12nm of the Welsh coast require a separate marine licence from Natural Resource Wales (NRW).
Maximum Design Scenario (MDS)	The scenario within the design envelope with the potential to result in the greatest impact on a particular topic receptor, and therefore the one that should be assessed for that topic receptor.
Mona 400kV Grid Connection Cable Corridor	The corridor from the Mona onshore substation to the National Grid substation at Bodelwyddan.
Mona Array Area	The area within which the wind turbines, foundations, inter-array cables, interconnector cables, offshore export cables and offshore substation platforms (OSPs) forming part of the Mona Offshore Wind Project will be located.
Mona Array Scoping Boundary	The Preferred Bidding Area that the Applicant was awarded by The Crown Estate as part of Offshore Wind Leasing Round 4.
Mona Offshore Cable Corridor	The corridor located between the Mona Array Area and the landfall up to MHWS, in which the offshore export cables will be located.
Mona Offshore Cable Corridor and Access Areas	The corridor located between the Mona Array Area and the landfall up to MHWS, in which the offshore export cables will be located and in which the intertidal access areas are located.
Mona Offshore Transmission Infrastructure Scoping Search Area	The area that was presented in the Mona Scoping Report as the area encompassing and located between the Mona Potential Array Area and the landfall up to MHWS, in which the offshore export cables will be located.
Mona Offshore Wind Project	The Mona Offshore Wind Project is comprised of both the generation assets, offshore and onshore transmission assets, and associated activities.
Mona Offshore Wind Project Boundary	The area containing all aspects of the Mona Offshore Wind Project, both offshore and onshore.
Mona Offshore Wind Project PEIR	The Mona Offshore Wind Project Preliminary Environmental Information Report (PEIR) that was submitted to The Planning Inspectorate (on behalf of the Secretary of State) and NRW for the Mona Offshore Wind Project.
Mona Offshore Wind Project Scoping Report	The Mona Scoping Report that was submitted to The Planning Inspectorate (on behalf of the Secretary of State) and NRW for the Mona Offshore Wind Project.
Mona Onshore Cable Corridor	The corridor between MHWS at the landfall and the Mona onshore substation, in which the onshore export cables will be located.
Mona Onshore Development Area	The area in which the landfall, onshore cable corridor, onshore substation, mitigation areas, temporary construction facilities (such as access roads and construction compounds), and the connection to National Grid substation will be located
Mona Onshore Transmission Infrastructure Scoping Search Area	The area that was presented in the Mona Scoping Report as the area located between MHWS at the landfall and the onshore National Grid substation, in which the onshore export cables, onshore substation and other associated onshore transmission infrastructure will be located.
Mona PEIR Offshore Cable Corridor	The corridor presented at PEIR that was consulted on during statutory consultation and has subsequently been refined for the application for Development Consent. It is located between the Mona Array Area and the landfall up to MHWS, in which the offshore export cables and the offshore booster substation will be located.

Term	Meaning
Mona PEIR Offshore Wind Project Boundary	The area presented at PEIR containing all aspects of the Mona Offshore Wind Project, both offshore and onshore. This area was the boundary consulted on during statutory consultation and subsequently refined for the application for Development Consent.
Mona Potential Array Area	The area that was presented in the Mona Scoping Report and in the PEIR as the area within which the wind turbines, foundations, meteorological mast, inter-array cables, interconnector cables, offshore export cables and OSPs forming part of the Mona Offshore Wind Project were likely to be located. This area was the boundary consulted on during statutory consultation and subsequently refined for the application for Development Consent.
Mona Proposed Onshore Development Area	The area presented at PEIR in which the landfall, onshore cable corridor, onshore substation, mitigation areas, temporary construction facilities (such as access roads and construction compounds), and the connection to National Grid infrastructure will be located. This area was the boundary consulted on during statutory consultation and subsequently refined for the application for Development Consent.
Mona Scoping Report	The Mona Scoping Report that was submitted to The Planning Inspectorate (on behalf of the Secretary of State) and NRW for the Mona Offshore Wind Project.
National Policy Statement (NPS)	The current national policy statements published by the Department for Energy Security & Net Zero in 2024.
Non-statutory consultee	Organisations that an applicant may choose to consult in relation to a project who are not designated in law but are likely to have an interest in the project.
Offshore Substation Platform (OSP)	The offshore substation platforms located within the Mona Array Area will transform the electricity generated by the wind turbines to a higher voltage allowing the power to be efficiently transmitted to shore.
Offshore Wind Leasing Round 4	The Crown Estate auction process which allocated developers preferred bidder status on areas of the seabed within Welsh and English waters and ends when the Agreements for Lease (AfLs) are signed.
Pre-construction site investigation surveys	Pre-construction geophysical and/or geotechnical surveys undertaken offshore and, or onshore to inform, amongst other things, the final design of the Mona Offshore Wind Project.
Point of Interconnection	The point of connection at which a project is connected to the grid. For the Mona Offshore Wind Project, this is the Bodelwyddan National Grid Substation.
Relevant Local Planning Authority	The Relevant Local Planning Authority is the Local Authority in respect of an area within which a project is situated, as set out in Section 173 of the Planning Act 2008. Relevant Local Planning Authorities may have responsibility for discharging requirements and some functions pursuant to the DCO, once made.
the Secretary of State for Business, Energy and Industrial Strategy	The decision maker with regards to the application for development consent for the Mona Offshore Wind Project.
Statutory consultee	Organisations that are required to be consulted by an applicant pursuant to the Planning Act 2008 in relation to an application for development consent. Not all consultees will be statutory consultees (see non-statutory consultee definition).

Term	Meaning
Wind turbines	The wind turbine generators, including the tower, nacelle and rotor.
The Planning Inspectorate	The agency responsible for operating the planning process for NSIPs.

Acronyms

Acronym	Description
ADD	Acoustic Deterrent Device
AfL	Agreement for Lease
BEIS	Department for Business, Energy and Industrial Strategy
BNG	Biodiversity net gain
CEA	Cumulative Effects Assessment
CSIP	Cable Specification Installation Plan
DCO	Development Consent Order
EIA	Environmental Impact Assessment
EnBW	Energie Baden-Württemberg AG
EWG	Expert Working Group
HRA	Habitats Regulations Assessment
HVAC	High Voltage Alternating Current
IEF	Important Ecological Feature
IEMA	Institute for Environmental Management and Assessment
iPCoD	Interim Population Consequences of Disturbance Model
ISAA	Information to support the Appropriate Assessment
MDS	Maximum Design Scenario
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
NBB	Net Benefits for Biodiversity
NPS	National Policy Statements
NRW (A)	Natural Resources Wales (Advisory)
NRW	Natural Resources Wales
NRW-MLT	Natural Resources Wales – Marine Licensing Team
NSIP	Nationally Significant Infrastructure Project
NTS	Non-Technical Summary
oCMS	offshore Construction Method Statement
OSP	Offshore Substation Platform
PDE	Project Design Envelope

Acronym	Description
PEI	Preliminary Environmental Information
PEIR	Preliminary Environmental Information Report
POI	Point of Interconnection
PTS	Permanent Threshold Shift
SAC	Special Area of Conservation
SNCB	Statutory Nature Conservation Body
SoCC	Statement of Community Consultation
SPA	Special Protection Area
SSC	Suspended Sediment Concentration
SSSI	Site of Special Scientific Interest
TCE	The Crown Estate
TTS	Temporary Threshold Shift
TWT	The Wildlife Trusts
UWSMS	Underwater Sound Management Strategy
WFD	Water Framework Directive
WTW	Wildlife Trust Wales
ZoI	Zone of Influence

Units

Unit	Description
GW	Gigawatt
km	Kilometres
km^2	Kilometres squared
kV	Kilovolt
MW	Megawatt
nm	Nautical miles
SEL_{cum}	Cumulative Sound Exposure Level

1 Response to NRW D3 Submission

1.1 Introduction

1.1.1.1 The Applicant has responded to NRW's D3 Submission below.

2 Response to NRW D3 Submission

2.1 Offshore

2.1.1 Marine Ornithology

Table 2.1: REP3-090 – Natural Resource Wales Advisory – Marine Ornithology

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.1	1. **REP2-080; para REP1-056.1**: NRW (A) welcomes the Applicant's comments. We have provided responses to each of these below.	The Applicant welcomes NRW (A)'s comment and has responded to each point raised below, as required.
REP3-090.2	2. **REP2-080; para REP1-056.2**: We welcome the Applicant's submitted detailed quantitative assessment of impacts of the Mona project alone on the kittiwake, guillemot and razorbill features of the Pen y Gogarth / Great Orme's Head Site of Special Scientific Interest (SSSI) [REP1-037]. NRW (A) provided a response on this at Deadline 2 [REP2-099], where we noted some aspects of the assessment approach that we have concerns / queries regarding, or that we do not agree with / advise are undertaken, regarding: • Non-breeding season age class apportioning. • Calculation of non-breeding season apportionment rates to the Pen y Gogarth / Great Orme's Head SSSI. • Concerns regarding the foraging ranges used for guillemot and razorbill (as raised by JNCC in their Written Representations, REP1-066, with which we agree) and potential implications of this for the breeding season apportionment rate calculations for the SSSI. • Kittiwake seasonal definitions and calculations of Environmental Impact Assessment (EIA) scale seasonal collision totals used in calculating seasonal collision impacts to the SSSI. • The need to consider, and present, displacement impacts across the full range of SNCB advised % displacement and % mortality rates for auk displacement assessments, and, where predicted impacts equate to 1% or more of baseline mortality of the colony to give further consideration through Population Viability Analysis (PVA). • The need to undertake a cumulative assessment of impacts as well as assessment of project alone impacts.	The Applicant can confirm that following the submission of the Offshore Ornithology Assessment of Pen y Gogarth / Great Orme's Head Site of Special Scientific Interest (SSSI) (REP1-037) and NRW's comments received at Deadline 2 (REP2-099) and Deadline 3 (REP3-089), the Applicant has submitted an updated assessment for the Pen Pen y Gogarth / Great Orme's Head SSSI (S_D1_25 F02) at Deadline 4 which addresses these comments. The confirmation of an update to Offshore Ornithology Assessment of Pen y Gogarth / Great Orme's Head SSSI (REP1-037) was also stated within the Applicant's response to NRW's Deadline 2 comments (see REP1-099.7 within Table 2.1 of Response to Natural Resources Wales Deadline 2 Submission (S_D3_6)). The Applicant can confirm that additional clarity is provided within Offshore Ornithology Assessment of Pen y Gogarth / Great Orme's Head Site of Special Scientific Interest (SSSI) (S_D1_25 F02) for the following points: • The methods for calculating non-breeding season age-class apportioning (Table 1-2 of Offshore Ornithology Assessment of Pen y Gogarth / Great Orme's Head Site of Special Scientific Interest (SSSI) (S_D1_25 F02)); • The Applicant can confirm that the foraging range table was updated at Deadline 2 (see Table 1.7 of HRA Stage 1 Screening Report F02 (REP2-012)). The changes have not altered the breeding season apportioning undertaken for common guillemot or razorbill,; • Updated the collision impact for black-legged kittiwake in line with the full breeding season (March to August) as presented in Table 5.13 of Volume 2, Chapter 5: Offshore Ornithology (F2.5 F03); • This note considers the full range of SNCB advised displacement and mortality rates for common guillemot and razorbill; however, this note no longer presents displacement impacts on black-legged kittiwake, in line with NRW guidance. The Applicant can confirm that the removal of displacement impact on black-legged kittiwake does not amend the conclusions for the Mona Offshore Wind Project alone assessment (section 1.3.1 of S_D1_25 F02). • This note provides a CEA for offshore wind projects with known impacts. The projects included are the same as those presented in Section 5.9 of Volume 2, Chapter 5: Offshore Ornithology (F2.5 F03) and the inclusion of the gap-filled projects from Offshore Ornithology Cumulative Effects Assessment and In-combination Gap-filling Historical Projects Technical Note (S_D3_12 F02).
REP3-090.3	3. **REP2-080; para REP1-056.3:** With regard to the data gaps in the Applicant's cumulative and in-combination assessments, please see NRW (A)'s response to point REP1-056.59 (para 25 below) for further information in relation to this point.	The Applicant notes NRW's comment and confirms that the Offshore Ornithology Cumulative Effects Assessment and In-combination Gap-filling Historical Projects Technical Note (REP3-044) was submitted at Deadline 3 with a revised version submitted at Deadline 4 (S_D3_12 F02) to address feedback from the JNCC.
REP3-090.4	4. We welcome the amendments the Applicant has made to the figures included in the cumulative assessments in the updated Offshore Ornithology Chapter in REP2 016 / REP2-17. We note that the majority of the errors in the Erebus figures have been corrected, however, there appears to still be a slight error in the Erebus guillemot breeding season figure and hence annual abundance value presented in the construction cumulative displacement in Table 5.51 of REP2-016 / REP2-017. We also query the source of the collision figures included for Erebus for the large gull species and suggest the Applicant considers the figures we provided in our Preliminary Environmental Information Report (PEIR) response regarding this and then corrects to account for the current advised species-group avoidance rates. We also welcome that the corrections made to the Mona alone figures have been taken through and updated in the cumulative tables.	The Applicant can confirm that the Erebus large gull impacts were taken from the Supplementary Environmental Information Addendum Report (Project Erebus, 2022). All errata identified since Deadline 2 in relation to Volume 2, Chapter 5: Offshore ornithology (F2.5 F02) has been addressed in a revised version submitted at Deadline 4. The Applicant can confirm that updates have not altered the magnitude of effect on herring gull and common guillemot from the Mona Offshore Wind Project cumulatively with other plans and projects. It should be noted that the Offshore Ornithology Cumulative Effects Assessment and In-combination Gap-filling Historical Projects Technical Note (S_D3_12 F02) and Offshore Ornithology Supporting Information in line with SNCB Advice (S_D3_19 F02) have also been updated at Deadline 4.
REP3-090.5	5. We welcome that the Applicant has worked with the Morgan and Morecambe generation asset projects to collectively agree abundance and collision estimates used within the Mona DCO application. Please see our response to reference REP1-056.69 at para 34 below with respect to the further information provided by the Applicant regarding differences that have arisen following submission of the Morgan generation and	Please see the Applicant's response to REP3-090.3

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
	Morecambe generation assets DCO applications. We have not yet fully reviewed these changes for consistency against the Morgan Generation application, but as we understand that the Applicant intends to submit into the examination an updated cumulative effects assessment (CEA) to address the gap filling issue at Deadline 3, we will provide further advice on cumulative effects following full review of this document.	
REP3-090.6	6. Until we have reviewed the gap-filling work that the Applicant will be submitting at Deadline 3, we cannot agree with the Applicant's statement at REP1-056.3 that *"…the amendments do not alter the conclusions presented".*	The Applicant notes NRW (A)'s comment. The Offshore Ornithology Cumulative Effects Assessment and In-combination Gap-filling Historical Projects Technical Note (S_D3_12 F02) submitted at Deadline 4 concludes that with the addition of indicative numbers for historical offshore wind projects, there is no potential for significant effects or adverse effects on site integrity from the Mona Offshore Wind Project in-combination with other projects and plans.
REP3-090.7	7. We also welcome the confirmation that the Applicant is actively engaging with the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets to align cumulative and in-combination assessments where possible. We acknowledge that these projects are being examined separately by different Examining Authorities and that Natural England (NE) is leading the majority of SNCB input in the examinations of Morgan and Morecambe. However, NRW (A) is providing advice into these projects from a mobile species and cumulative impact perspective where there is the potential for the projects to impact Welsh protected sites / features. It should be noted by the Applicant and the ExA that our clear understanding is that the advice provided by NRW (A) regarding the CEA and in-combination assessment methods is aligned with that of NE as the advice has been provided to both the Mona and Morgan generation Applicant's through the joint project EWGs and through the Relevant Representations submitted by both SNCBs for both projects. Therefore, we are uncertain why the Applicant has sought to highlight that there are "different principal SNCBs" for Morgan generation assets to the Mona project and if the Applicant is implying that this should have a potential to result in different cumulative assessments or in-combination assessment for Welsh designated sites.	The Applicant notes NRW (A)'s comment and can confirm that the assessments for Welsh designated sites have been undertaken in exactly the same way as English, Scottish, Northern Irish and Irish designated sites.
REP3-090.8	8. **REP2-080; para REP1-056.4:** We note the Applicants confirmation and have no further comments to make.	The Applicant notes this response.
REP3-090.9	**1.1.1 EIA Related Issues** 9. **REP2-080; para REP1-056.41:** NRW (A) welcomes the Applicant's comments. We have provided responses to each of these below.	The Applicant notes NRW (A)'s comment.
REP3-090.10	10. **REP2-080; para REP1-056.42:** Please see our response in Annex A regarding the updated offshore ornithology related assessment documents submitted by the Applicant at Deadline 2 to correct the various errors and discrepancies identified by interested parties and the Applicant themselves.	The Applicant notes NRW's comment and has responded to specific points in Annex A belowREP3-090.247-272.
REP3-090.11	11. Additionally, we note that the Applicant intends to submit at Deadline 3, assessments following SNCB advice and updated CEA to fill gaps (as requested by the ExA in their R17 request of 15 August 24, PD-012). We recommend that the Applicant ensures that all updates to the Mona project 'alone' predicted impacts are included within this updated CEA. We will provide updated advice on levels of significance of impacts from the Mona project alone and cumulatively/in-combination following full review of these Deadline 3 submissions.	The Applicant can confirm that all updates to the Mona Offshore Wind Project 'alone' assessment (presented at Deadline 2 and within the Offshore Ornithology Errata Clarification Note (REP3-073) have been included within the Offshore Ornithology Cumulative Effects Assessment and In-combination Gap-filling Historical Projects Technical Note (S_D3_12 F02) and Offshore Ornithology Supporting Information in line with SNCB Advice (S_D3_19 F02) submitted at Deadline 4.
REP3-090.12	12. **REP2-080; para REP1-056.43 to REP1-056.48:** We welcome that the Applicant acknowledges that the approach described by NRW (A) (i.e. using the full breeding season as defined by Furness (2015) and adjusting the non-breeding season where necessary to avoid any overlap of months) should have been undertaken for the assessment of collision impacts presented in the application. We welcome the changes that have been made in the updated assessment documents submitted by the Applicant at Deadline 2 and agree with the seasonal definitions now used. Please see our separate response in Annex A regarding the updated offshore ornithology related assessment documents submitted by the Applicant at Deadline 2 to correct the various errors and discrepancies identified by interested parties and the Applicant themselves.	The Applicant welcomes NRW(A)'s agreement that the seasonal definitions have been updated to follow NRW(A)'s advice, therefore we consider this matter closed. The Applicant notes NRW(A)'s comment. Regarding Annex A, the Applicant has provided specific responses within REP3-090.247-272 below.
REP3-090.13	13. Additionally, we note that the Applicant intends to submit at Deadline 3 assessments following SNCB advice and updated CEA to fill gaps (as requested by the ExA in their R17 request of 15 August 24, PD-012). We recommend that the Applicant ensures that all updates to the Mona project 'alone' predicted impacts are included within this updated CEA. We will provide updated advice on levels of significance of impacts from the Mona project alone and cumulatively/in-combination following full review of these Deadline 3 submissions.	Please see Applicant's response to REP3-090.11.

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.14	14. **REP2-080; para REP1-056.49**: Please see our response to REP1-056.42 at para 10 above.	Please see the Applicant's response to REP3-090.10
REP3-090.15	15. **REP2-080; para REP1-056.50 to REP1-056.51:** Please see our separate response in Annex A regarding the updated offshore ornithology related assessment documents submitted by the Applicant at Deadline 2 to correct the various errors and discrepancies identified by interested parties and the Applicant themselves.	The Applicant notes NRW (A)'s comment. Regarding Annex A, the Applicant has provided specific responses within REP3-090.247-272 below.
REP3-090.16	16. Additionally, we note that the Applicant intends to submit at Deadline 3 assessments following SNCB advice and updated CEA to fill gaps (as requested by the ExA in their R17 request of 15 August 24, PD-012). We recommend that the Applicant ensures that all updates to the Mona project 'alone' predicted impacts are included within this updated CEA. We will provide updated advice on levels of significance of impacts from the Mona project alone and cumulatively/in-combination following full review of these Deadline 3 submissions.	Please see the Applicant's response to REP3-090.11
REP3-090.17	17. **REP2-080; para REP1-056.52:** We welcome the updates the Applicant has made to the various offshore ornithology related documents. Please see our separate response in Annex A regarding the updated offshore ornithology related assessment documents submitted by the Applicant at Deadline 2 to correct the various errors and discrepancies identified by interested parties and the Applicant themselves.	The Applicant notes NRW(A)'s comment. Regarding Annex A, the Applicant has provided specific responses within REP3-090.247-272 below.
REP3-090.18	18. Additionally, we note that the Applicant intends to submit at Deadline 3 assessments following SNCB advice and updated CEA to fill gaps (as requested by the ExA in their R17 request of 15 August 24, PD-012). We recommend that the Applicant ensures that all updates to the Mona project alone predicted impacts are included within this updated CEA. We will provide updated advice on levels of significance of impacts from the Mona project alone and cumulatively/in-combination following full review of these Deadline 3 submissions.	Please see the Applicant's response to REP3-090.11
REP3-090.19	19. **REP2-080; para REP1-056.53**: Please see our response to REP1-056.2 at para 2 above.	Please see the Applicant's response to REP3-090.2
REP3-090.20	20. **REP2-080; para REP1-056.54**: No further comment	The Applicant notes NRW (A)'s comment.
REP3-090.21	21. **REP2-080; para REP1-056.55:** Please see our response to REP1-056.2 at para 2 above.	Please see the Applicant's response to REP3-090.2
REP3-090.22	22. **REP2-080; para REP1-056.56:** Please see our responses to REP1-056.2 at para 2 above. Additionally, as the Applicant confirms here that the adult survival rates have been used, please note our specific comments in Section 2.2.3.2 of our Deadline 2 response [REP2-099] on the Applicant's Great Orme's Head SSSI annual assessment in REP1-037 regarding the calculation of the baseline mortality figure of 457.87 for guillemot. Please note the specific point that the baseline mortality figure presented does not appear correct if the adult survival rate from Horswill & Robinson (2015) has been used to calculate the mortality rate and hence baseline mortality figure.	Please see the Applicant's response to REP3-090.2 The Applicant provided a response to section 2.2.3.2 of NRW's Deadline 2 response (REP2-099) within REP2-099.18 of Response to Natural Resource Wales Deadline 2 Submission (REP3-038) which provides clarity on which values were used for the calculation of baseline mortality. The Applicant can confirm that the updated assessment of the Pen Pen y Gogarth/Great Orme's Head SSSI submitted at Deadline 4 (S_D1_25 F02) has used the correct baseline mortality of 0.061.
REP3-090.23	23. We also refer to our comments in Section 2.2.3.2.1 of our Deadline 2 response [REP2-099] regarding the input parameters (use of standard errors rather than standard deviations and the productivity rate) used in the Applicant's Great Orme's Head SSSI guillemot PVA. We continue to recommend the Applicant gives consideration to these comments / queries.	The Applicant provided a response to section 2.2.3.2.1 of NRW's Deadline 2 response (REP2-099) within REP2-099.21 of Response to Natural Resource Wales Deadline 2 Submission (REP3-038) which confirms that the standard deviation will be used in the PVA. The Applicant can confirm that the updated assessment of the Pen Pen y Gogarth/Great Orme's Head SSSI submitted at Deadline 4 (S_D1_25 F02) has used the standard deviation of the immature survival rates.
REP3-090.24	24. **REP2-080; para REP1-056.57 to REP1-056.58:** Please see our responses to REP1-056.2 at para 2 above. We recommend the Applicant gives consideration to the comments / issues we have raised regarding their Great Orme's Head SSSI assessment.	Please see the Applicant's response to REP3-090.2
REP3-090.25	25. **REP2-080; para REP1-056.59 to REP1-056.63:** We welcome that the Applicant is progressing work to gap-fill historical projects. NRW (A) is currently engaging with the Applicant regarding their proposed approach and results to the gap-filling exercise in cumulative (and in-combination) assessments, and a useful meeting was held with the Applicant, NRW (A), JNCC and NE to discuss this on 29 August 2024. Joint SNCB written comments (NRW (A), NE and JNCC) have been provided to the Applicant following this meeting on the 6 September 2024. We welcome the Applicant's intention to submit this information into the examination at Deadline 3. NRW (A) will provide further advice into the examination following review of the submitted document.	Please see the Applicant's response to REP3-090.3

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.26	26. **REP2-080; para REP1-056.64:** Please see our response to point REP1-056.3 at para 3 above and our response to point REP1-056.69 at para 34 below.	Please see the Applicant's response to REP3-090.3and REP3-090.4.
REP3-090.27	27. We welcome the amendments the Applicant has made to the figures included in the cumulative assessments in the updated Offshore Ornithology Chapter in REP2-016/REP2-017. We note that the majority of the errors in the Erebus figures have been corrected, however, there appears to still be a slight error in the Erebus guillemot breeding season figure and hence annual abundance value presented in the construction cumulative displacement in Table 5.51 of REP2-016/REP2-017. We also query the source of the collision figures included for Erebus for the large gull species and suggest the Applicant considers the figures we provided in our PEIR response regarding this and then corrects to account for the current advised species-group avoidance rates. We also welcome that the corrections made to the Mona alone figures have been taken through and updated in the cumulative tables.	
REP3-090.28	28. We recommend that the Applicant ensures that these corrected figures and totals for the projects with data are included in the updated CEA document they intend to submit at Deadline 3 that will include gap-filling for historical projects in the CEA.	
REP3-090.29	29. **REP2-080; para REP1-056.65:** No further comment. Issue resolved.	The Applicant notes NRW (A)'s comment.
REP3-090.30	30. **REP2-080; para REP1-056.66:** No further comment. Issue resolved.	The Applicant notes NRW (A)'s comment.
REP3-090.31	31. **REP2-080; para REP1-056.67:** We welcome that the Applicant has amended the large gull collision figures included for the Awel-y-Môr project in the cumulative assessments in REP2-016 / REP2-017 from the Band Option 3 figures to the Band Option 2 figures, and that these figures have then been corrected to account for the current advised avoidance rates. We advise that the Applicant should ensure that these corrected figures for Awel-y-Môr large gull collisions are be included in the corrected cumulative and in-combination totals in the updated CEA document to be submitted at Deadline 3. NRW (A) will provide further advice into the examination once we have fully reviewed the information submitted by the Applicant at Deadline 3.	The Applicant can confirm that the updated large gull collision estimates for Awel y Môr presented within Volume 2, Chapter 5: Offshore Ornithology (REP2-016) and within the Offshore Ornithology Errata Clarification Note (REP3-073)) have been included within the Offshore Ornithology Cumulative Effects Assessment and In-combination Gap-filling Historical Projects Technical Note (REP3-044) submitted at Deadline 3.
REP3-090.32	32. **REP2-080; para REP1-056.68:** We welcome that the Applicant is currently undertaking a review of new information for cumulative and in-combination projects and anticipates being able to provide further information at Deadline 3. We will therefore provide further advice into the examination once we have fully reviewed the information submitted by the Applicant at Deadline 3.	The Applicant notes NRW (A)'s comment and can confirm that a consideration of additional projects submitted post the submission of Mona Offshore Wind Project was submitted at Deadline 3 (Review of Cumulative Effects Assessment and In-Combination Assessment (REP3-058). The conclusions for offshore ornithology required additional consideration and an Offshore Ornithology Review of Cumulative Effects Assessment and In-Combination Assessment (S_D4_9) has been submitted at Deadline 4.
REP3-090.33	33. We also advise that the Llŷr 1 project has recently submitted its application to NRW MLT and therefore, figures are now available for this project to include within CEAs. Further information can be found on NRW's public register. We suggest that the Applicant considers the inclusion of this project in their updated CEA to be submitted at Deadline 3.	
REP3-090.34	34. **REP2-080; para REP1-056.69:** We welcome that the Applicant has updated the relevant abundance and collision estimates for other projects in the cumulative assessments in the updated Offshore Ornithology Chapter [REP2-016 / REP2-017] to facilitate alignment with the Morgan Generation and Morecambe Generation asset project submissions. We have not yet fully reviewed these changes for consistency against the Morgan Generation application, but as we understand that the Applicant intends to submit into the examination an updated CEA to address the gap filling issue at Deadline 3, we will provide further advice on cumulative effects following full review of this document.	The Applicant notes NRW (A)'s comment.
REP3-090.35	**1.1.2 HRA Related Issues** 35. **REP2-080; para REP1-056.70**: No further comment	The Applicant notes NRW (A)'s comment.
REP3-090.36	36. **REP2-080; para REP1-056.71 to REP1-056.72:** We welcome that the Applicant acknowledges that information relating to the Habitats Regulations Assessment (HRA) stage 1 screening and stage 2 Information to Support Appropriate Assessment (ISAA) is presented across multiple documents. Whilst the Applicant has addressed many of the errors and inconsistencies identified by interested parties in the updated assessment documents submitted at Deadline 2, and these corrections have fed through to the HRA related documents, please see our separate response in Annex A regarding the updated offshore ornithology related assessment documents submitted by the Applicant at Deadline 2. However, we still consider that the presentation of the process for reaching the predicted impacts in the HRA related documents remains difficult to follow as the required information is scattered throughout. We do not recommend that this approach is followed by future projects. We again advise that the information recommended in our Written Representations (para 109; section	The Applicant submitted an Offshore Ornithology Supporting Information in line with SNCB Advice (REP3-059) at Deadline 3, which provides the statutory nature conservation bodies (SNCBs) with the necessary information in a single document to follow the Applicant's Habitats Regulations Assessment (HRA) approach. Following a call with the JNCC on the 14 October, the Applicant has submitted a revised Offshore Ornithology Supporting Information in line with SNCB Advice (S_D3_19 F02) at Deadline 4 which provides additional clarity on the un-apportioned impacts from other plans and projects

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	2.1.2.1 of REP1-056) is presented in a table for each site. This is in order to have all the required information in one place, so that the calculations from unapportioned figures through to the apportioned impacts and the resulting proportions (%) of baseline mortality the impacts equate to, can be fully followed through.	
REP3-090.37	37. We note that the Applicant intends to submit additional information into the examination at Deadline 3, which will include additional information and specific aspects of assessment in accordance with advice provided by NRW (A) and JNCC in Relevant and Written Representations. We welcome this and will provide further advice into the examination once we have fully reviewed the information submitted by the Applicant at Deadline 3.	
REP3-090.38	38. The Applicant has engaged with NRW (A) to seek further guidance on how best to present the information requested. We advised the Applicant accordingly on 18 September 2024.	The Applicant welcomes NRWs advice received on 18 September 2024 and has considered this in the Offshore Ornithology Supporting Information in line with SNCB advice (REP3-059) note submitted at Deadline 3. Please see Table 1.1 of the Offshore Ornithology Supporting Information in line with SNCB Advice (REP3-059) note for further information.
REP3-090.39	39. **REP2-080; para REP1-056.73:** We welcome that the Applicant has corrected the errors in the qualifying features of Welsh designated sites, particularly Skomer, Skokholm and seas of Pembrokeshire Special Protection Area (SPA), within the updated HRA related documents (Stage 1 Screening Report, REP2-012 / PEP2-013; Stage 2 ISAA Part 3, REP2-010 / REP2-011; HRA Integrity Matrices, REP2-014 / REP2-015).	The Applicant welcomes NRW (A)'s comment and considers this matter to be closed.
REP3-090.40	40. **REP2-080; para REP1-056.74:** We again welcome the confirmation from the Applicant that the proportion of immatures presented in the apportioning technical report (updated version submitted in REP2-022 / REP2-023) have not been used in the assessment. Whilst we note the Applicant considers this has been presented for information only, we still consider that its inclusion adds confusion to the assessment process and results.	The Applicant welcomes NRW (A)'s comment and considers this matter to be closed.
REP3-090.41	41. **REP2-080; para REP1-056.75 to REP1-056.76:** We welcome that the Applicant has updated the breeding season age-class apportioning in the updated apportionment technical report in REP2-022 / REP-023. It appears that these updates have fed through to the amendments to the apportioned impacts to kittiwake at Skomer, Skokholm and seas off Pembrokeshire SPA (the only Welsh SPA with kittiwake as a feature, in this case a named component of the assemblage feature). Please note that we have not checked whether updates have fed through into assessments of impacts to other kittiwake designated sites outside of Wales, given that this is out with our jurisdiction.	The Applicant welcomes NRW (A)'s comment and considers this matter to be closed.
REP3-090.42	42. We understand that the Applicant intends to submit further information/updated assessments following SNCB advised approaches at Deadline 3 and therefore, we will provide further advice regarding impacts to Welsh designated sites following full review of the information submitted at Deadline 3.	Please see the Applicant's response to REP3-090.3 and REP3-090.38.
REP3-090.43	43. **REP2-080; para REP1-056.77 to REP1-056.79;** NRW (A) has re-checked the approach set out by the Applicant in the original Apportioning Technical Report that was submitted at application [APP-095]. Paragraph 1.3.38 and the values presented in Table 1.6 of APP-095 clearly state and show that: *'In the non-breeding season, age-class was based on Furness (2015)'*, i.e. the stable age structures from Furness (2015). Additionally, the Applicant's worked example of the approach taken for apportioning non-breeding season impacts for great black-backed gull for the Isles of Scilly SPA provided in PDA-008 (see response to point RR-011.13 of PDA-008) clearly states that for the non-breeding season the Applicant applied an apportionment rate for proportion of adults (*'44% of birds are estimated to be adults in the non-breeding season, Furness 2015'* - this is based on stable age structure from Furness 2015). At the time of writing of Written Representations, this was the information presented on this approach by the Applicant. Therefore, it is clear that NRW (A) did not misinterpret the information presented by the Applicant at that time. We do note that in the updated apportionment technical report (see tracked changed version, REP2-023), the Applicant has now amended its approach to non-breeding season age-class apportioning (see paragraph 1.3.3.4 and Table 1.5 of REP2-023) to state that it has taken the same approach as per the breeding season for age-class apportionment in the non-breeding season (i.e. use site-specific digital aerial survey data for gannet, kittiwake and large gulls and assume all birds are adult for auks and Manx shearwater).	The Applicant notes NRW (A)'s comments and in light of these and similar comments from the JNCC at Deadline 3 (REP3-086), has submitted a technical note on the apportioning approach during the non-breeding season (S_D4_10) at Deadline 4 to clarify these specific points.
REP3-090.44	44. Whilst we acknowledge these amendments, we maintain our advice as given in our Written Representations [REP1-056] that there is no requirement to apportion to age classes in the non-breeding season as the non-breeding season BDMPS proportions in the tables in Appendix A of Furness (2015) already takes account of the number of adults likely to be present in the Biologically Defined Minimum Population Scales (BDMPS). See response to REP1-056.80 below at para 45.	

<table>
<tr><th>Planning Inspectorate Ref. No.</th><th>NRW D3 Written Submission comment</th><th>Applicant's response</th></tr>
<tr><td>REP3-090.45</td><td>45. REP2-080; para REP1-056.80 to REP1-056.81: As noted in response to the points REP1-56.77 - REP1-56.79 above, it is clear that NRW (A) did not misinterpret the information presented by the Applicant at the time of production of our Written Representations. We do note that in the updated apportionment technical report (see tracked changed version, REP2-023), the Applicant has now amended its approach to non-breeding season age-class apportioning (see paragraph 1.3.3.4 and Table 1.5 of REP2-023) to state that it has taken the same approach as per the breeding season for age-class apportionment in the non-breeding season (i.e. use site-specific digital aerial survey data for gannet, kittiwake and large gulls and assume all birds are adult for auks and Manx shearwater).</td><td></td></tr>
<tr><td>REP3-090.46</td><td>46. We note there is likely to be more difficulty associated with ageing birds from digital aerial surveys during the non-breeding period than during the breeding season. Therefore, less confidence can be place in age-class proportions of site-specific data from digital aerial surveys in the non-breeding season. Therefore, we maintain our advice as given in our Written Representations [REP1-056] that we recommend that no apportionment of impacts to age classes in the non-breeding season is undertaken as the non-breeding season BDMPS proportions in the tables in Appendix A of Furness (2015) already takes account of the number of adults likely to be present in the BDMPS. We again recommend that the approach we have previously suggested of apportioning to colonies in the non-breeding season(s) is undertaken based on the proportion of the SPA adult birds across the BDMPS total of birds of all ages for each relevant non-breeding BDMPS season using the information in the tables in Appendix A of Furness (2015). We note that this is the standard approach that has been taken to non-breeding season apportionment by offshore wind farm projects located in the North Sea and has also been taken by the Morgan Generation Assets application.</td><td></td></tr>
<tr><td>REP3-090.47</td><td>47. However, we note that the Applicant's approach of calculating the proportion of adults at the colony as a proportion of the total adults in the BDMPS does mean that a higher apportionment value for a designated site is calculated (as shown in the table below), which can be considered precautionary:
<table>
<tr><th>Species, site & non-breeding season</th><th>Apportionment rate – Applicant's approach</th><th>Apportionment rate – NRW (A) approach</th></tr>
<tr><td>Gannet: Grassholm, spring</td><td>20.07%</td><td>11.87%</td></tr>
<tr><td>Gannet: Grassholm, autumn</td><td>24.71%</td><td>14.39%</td></tr>
<tr><td>Guillemot: SSSP, non-breeding season</td><td>4.47%</td><td>2.58%</td></tr>
<tr><td>Manx shearwater: SSSP, migration seasons</td><td>70.54%</td><td>44.28%</td></tr>
<tr><td>Great black-backed gull: Isles of Scilly, non-breeding season</td><td>28.85%</td><td>9.14%</td></tr>
</table></td><td></td></tr>
<tr><td>REP3-090.48</td><td>48. Given the very small predicted impacts from the Mona project alone, we note that if the standard advised approach to age classes and apportioning to designated sites in the non-breeding season was used instead of the Applicant's approach it would not alter the conclusions regarding levels of significance of impact from the project alone in this instance. However, for other projects with larger predicted impacts, taking the Applicant's potentially overly precautionary approach may result in different conclusions. Therefore, we would not advise the Applicant's approach is followed for other projects and maintain that our preferred approach is to follow the standard approach taken by other projects, such as Morgan Generation for apporting impacts in the non-breeding season.</td><td></td></tr>
<tr><td>REP3-090.49</td><td>49. REP2-080; para REP1-056.82 to REP1-056.87: As was noted in our Written Representations (see point REP1-056.83) the Applicant had confirmed in PDA-008 that sabbaticals had not been removed from adult numbers. We reiterate that we welcome that this is the case. However, the inclusion of Table 1.7 in the apportioning technical report [APP-095] and associated text regarding sabbaticals within paragraph 1.3.4.5 of APP-095 added confusion as to the approach that was taken. We welcome that in the updated apportioning technical report submitted at Deadline 2 [REP2-022 / REP2-023] the Applicant has removed Table 1.7 and has amended the information provided in paragraph 1.3.4.5 in light of our advice in our Written Representations. We are now content with the information provided.</td><td>The Applicant welcomes NRW (A)'s comment and considers this matter to be closed.</td></tr>
<tr><td>REP3-090.50</td><td>50. REP2-080; para REP1-056.88 to REP1-056.101: We welcome the Applicant's acknowledgement and welcome of our evidence to support different displacement and mortality rate rates, specifically in relation to auks, Manx Shearwater and northern gannet provided in our Written Representations.</td><td>The Applicant welcomes NRW (A)'s comment and considers this matter to be closed.</td></tr>
</table>

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.51	51. We also welcome that the Applicant intends to provide additional information in accordance with the advice provided by NRW (A) and JNCC in Relevant and Written Representations and that this will be submitted into the examination at Deadline 3. We welcome that this additional information will include presentation of displacement impacts apportioned to designated sites for the full range of displacement and mortality rates recommended by the SNCBs. We will provide further advice into the examination following full review of the information submitted at Deadline 3.	Please see the Applicant's response to REP3-090.38.
REP3-090.52	52. **REP2-080; para REP1-056.102 to REP1-056.104:** With regard to the advice for the Applicant to consider the apportioned impacts across the full range of SNCB advised % displacement and % mortality rates, please see our response to points REP1-056.88 to REP1-056.101 above at paras 50 and 51.	Please see the Applicant's response to REP3-090.50-51 above.
REP3-090.53	53. We again note that NRW (A)'s advice is provided in relation to Welsh designated sites only and we will not provide advice on designated sites outside of our remit and therefore cannot provide advice/agreement as to the suitability of the Applicant's approach or level of predicted impact significance to sites located outside of Wales.	The Applicant notes NRW's comment.
REP3-090.54	54. **REP2-080; para REP1-056.105:** We understand that the Applicant intends to provide additional information in accordance with the advice provided by NRW (A) and JNCC in Relevant and Written Representations and that this will be submitted into the examination at Deadline 3. We welcome that this additional information will include presentation of displacement impacts apportioned to designated sites for the full range of displacement and mortality rates recommended by the SNCBs. We note that once these updated assessments covering the full range of advised rates have been undertaken and presented, then if any potential project alone impact (including at the upper end of the advised ranges) equates to more than 0.05% of baseline mortality then this site and species combination should be taken through to a full in-combination assessment, which should take into account the issues with gaps in data for historic projects.	The Applicant notes NRW's comment and looks forward to receiving comments on the Deadline 3 submissions. The Applicant can confirm that if any designated site considered within the HRA predicted to be impacted by the Mona Offshore Wind Project alone, which results in an increase in baseline mortality of >0.05% when considering the full range of SNCBs displacement rates than an in-combination assessment is presented. This additional assessment is presented in Offshore Ornithology Supporting Information in line with SNCB advice (S_D3_19 F02).
REP3-090.55	55. We will provide further comment/advice into the examination following full review of the information submitted by the Applicant at Deadline 3.	The Applicant notes NRW's comment and looks forward to receiving comments on the Deadline 3 submissions.
REP3-090.56	56. **REP2-080; para REP1-056.106 to REP1-056.107**: No further comments	The Applicant notes NRW's comment.
REP3-090.57	57. **REP2-080; para REP1-056.108**: No further comments.	The Applicant notes NRW's comment.
REP3-090.58	58. **REP2-080; para REP1-056.109 to REP1-056.110:** We note the Applicant's position with respect to the scope of the DCO deemed Marine Licence (dML) and the Transmission Asset Marine Licence (TA ML). Furthermore, we understand that there is a degree of separation between the works consented under the two. Whilst it may be the case that the seasonal timing restrictions on construction activity within the Liverpool Bay SPA is only relevant to the transmission marine licence (which the Applicant notes is outside the scope of the DCO dML), we consider that clarification is required from the Applicant as to whether the overlap between the TA ML and DCO dML for the Generation Assets areas - as shown in APP-013 and APP-014 – still exists. We note that the offshore substation platforms and interconnector cables have been considered in both the recent TA ML application and within the DCO application. Our comments with respect to securing the seasonal timing restrictions measures in both the DCO dML and the TA ML relate to the wording of the conditions. We note that the DCO consents all activities and works relevant to the project, therefore as the controlling consent for the project, it should ensure that required mitigation measures are secured by specifying what the requirement is. If this overlap has been misunderstood, NRW (A) would welcome further clarity from the Applicant. For the avoidance of doubt, NRW (A) support the necessity of a seasonal timing restriction and that the details of how these would be implemented is contained in Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels [APP-203] and the Offshore Environmental Management Plan (oEMP).	The Applicant confirms that the overlap between the Transmission Assets (TA) marine licence (ML) and the dML is such that the TA ML includes the dML area. For the avoidance of doubt, the dML does not cover the TA ML area. The reason for the overlap is that at this stage the location of the offshore substation platforms within the array area is not known and neither is the extent of the TA transfer to the OFTO. Whilst the DCO does provide the development consent required for the Mona project, the marine licences are where the specific controls relating to the various elements of the project are secured through the relevant management plans and details for approval by NRW MLT. As it is only the TA export cable works that are located within the Liverpool Bay SPA which have the potential to disturb marine mammals it is only necessary for any seasonal restriction to apply to those works (which will be secured through the TA ML) and no similar restriction is justified or required for the dML.
REP3-090.59	59. **REP2-080; para REP1-056.111;** We acknowledge that the timing restriction for cable laying within the Liverpool Bay SPA is included in the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels [APP-203]. With regard to the Applicant's consideration that the timing restriction on construction activity within the Liverpool Bay SPA is only relevant to the transmission marine licence which is outside the scope of the DCO dML, please see our comments to REP1-056.109-110 above at para 58.	The Applicant welcomes NRW's comment and therefore considers this matter to be closed.
REP3-090.60	60. **REP2-080; para REP1-056.112:** We welcome the changes made by the Applicant to the updated Marine Licence Principles document (J3 F02) submitted at Deadline 2 [REP2-028 / REP2-029]. We have no further comments regarding this aspect.	The Applicant welcomes NRW's comment and therefore considers this matter to be closed.

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REP3-090.61	61. **REP2-080; para REP1-056.113**: No further comment.	The Applicant notes NRW's comment.
REP3-090.62	62. **REP2-080; para REP1-056.114**: No further comment.	The Applicant notes NRW's comment.
REP3-090.63	63. **REP2-080; para REP1-056.115**: No further comment.	The Applicant notes NRW's comment.
REP3-090.64	64. **REP2-080; para REP1-056.116:** No further comment and issue addressed.	The Applicant notes NRW's comment.

2.1.2 Marine Mammals

Table 2.2: REP3-090 – Natural Resource Wales Advisory – Marine Mammals

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REP3-090.65	1.2 Marine Mammals 65. **REP2-080; para REP1-056.5 to REP1-056.9:** Marine Mammals are protected by Schedule 2 of the Conservation of Habitats and Species Regulations 2017 ('the Regulations') as amended. It is an offence under Regulation 43 of the Regulations to *inter alia* deliberately capture, injure, kill, or disturb such species or to damage or destroy their breeding site. We note the Applicant's response and welcome their intention to submit an application for a European Protected Species (EPS) licence, post-consent for any activities which have the potential to impact marine mammals.	The Applicant notes this response.
REP3-090.66	66. **REP2-090: para REP1-056.118 to REP1-056.123:** These paragraphs refer to our representations about injury and disturbance to marine mammals from elevated underwater sound due to vessel use and other (non-piling) sound producing activities. NRW (A) confirm that we continue to agree on an overall conclusion of "*low magnitude*". We also note that this methodological discussion does not materially impact our agreement with the overall conclusions of no significant effect / adverse effect on marine mammal populations due to the mitigation methods that will be employed. Our opinion remains that presenting an estimate of numbers of animals disturbed based on a static radius (even if using a robust and conservative impact radius based on the literature) will lead to a significant underestimate compared to a methodology that in some way captures the movement of vessels. As currently presented, the estimated numbers disturbed are for a vessel at a fixed point in time only.	The Applicant welcomes NRW (A)'s agreement of the conclusion of 'low magnitude' from elevated underwater sound due to vessel use and other (non-piling) sound producing activities. The Applicant also welcomes the confirmation that this methodological discussion does not materially impact NRW (A)'s agreement with the overall conclusions of no significant effect / adverse effect on marine mammal populations due to the mitigation methods that will be employed. The Applicant refers to their detailed response in its Response to Natural Resource Wales Deadline 2 Submission (REP3-038) (see REP2-099.1 to 4), which presents the numbers of animals disturbed using the 4.08 km (as suggested by NRW (A)in comparison to the 7 km radius, following engagement with NRW (A) via a meeting on 9th September 2024 and written engagement on 10th September 2024. This showed that fewer animals were potentially disturbed using NRW (A)'s suggested approach, and therefore the Applicant does not consider its approach taken at application to significantly underestimate the predicted impact. This demonstrates that the Applicant has used a precautionary approach in the assessment and considers the conclusions of no significant effect to remain unchanged. Therefore the Applicant agrees this matter is closed.
REP3-090.67	67. We welcome the review of the term "habituation" with a greater emphasis on tolerance, and also welcome the Applicant's statement that direct measures of associated energetic costs of exposure to vessel noise would be useful in future. We agree that any parameters for disturbance remain a work in progress in the scientific community and will not be available for the Mona project.	The Applicant welcomes NRW (A)'s comments on the use of the term 'tolerance' as opposed to 'habituation', and agreement with the Applicant that any parameters for modelling vessel disturbance in iPCoD remain a work in progress in the scientific community and will not be available for the Mona Offshore Wind Project to model.
REP3-090.68	68. We note and welcome the correction and clarification made in the errata sheet. We discussed this with the Applicant and provided advice on the 10 September 2024 which further explained our position. For ease of reference, the advice provided is included here at paragraph 69.	Please see response to REP3-090.66.
REP3-090.69	69. "We fully understand and agree that no changes were made to the assessment method or approach. We also note that this methodological discussion does not materially impact our agreement with the overall conclusions that there will be no significant effect / adverse effect on marine mammal populations due to the mitigation methods that will be employed. Essentially, this is a divergence of opinion on how best to calculate the numbers of animals disturbed. By way of explanation our written representation / response to the errata sheet was mainly underpinned by three points:	Please see response to REP3-090.66.
REP3-090.70	Firstly, we believe that presenting numbers of animals disturbed based on a static radius to be a significant underestimate compared to a methodology that in some way captures the movement of vessels (even if this is a simplified methodology) – this view is unchanged from the pre-application period. As mentioned in our written representations and pre-application comments, we fully acknowledge that attempting to make a (maximalist) calculation that attempts to include everything (i.e. all variables) without any simplifying assumptions would be challenging for many reasons including for e.g.: (a) absence of existing guidance / standard methodologies that e.g. consider energetic costs of interrupted feeding, (b) the difficulties of considering issues like animal movement in and out of the area / repeated disturbance to the same individual, (c) all individual vessel trips and types which will differ. In other words, independently of whether a radius of 23 km or 4.08 km is used we still agree that attempting the above would be disproportionate in terms of the effort involved especially given the uncertainties noted. However, this is not equivalent to agreeing that therefore the use of a static radius is a suitable approach to estimate numbers disturbed.	The Applicant refers to its detailed response in Response to Natural Resource Wales D2 Submission (REP3-038) (see REP2-099.1 to 4) which highlights empirical data was used to derive impact ranges based on moving receptors in the field (as per the Applicant's Response to Relevant Representation from NRW(A) - Impacts on Marine Mammals from Elevated Underwater Sound Due to Vessel Use (PDA-009)).
REP3-090.71	Secondly, in the assessment the main argument posed is that a maximalist calculation would be disproportionate and therefore this justifies taking a static approach presented in table 4.44. We disagree with the conclusion made here because a maximalist calculation and a static approach are not the only two options possible. It is quite possible to carry out some form of intermediate simplified methodology (e.g. as has been	The Applicant refers to its detailed response in Response to Natural Resource Wales D2 Submission (REP3-038) (see REP2-099.1 to 4), which demonstrated the two approaches suggested by NRW. The number of animals disturbed for the 4.08 km modelled range still represents a precautionary approach as it does not use dose-response but illustrates fewer animals would be disturbed using this value and, therefore does not change the

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	suggested in our written representations) and such an approach does not seem to have been considered in the assessment. We feel that the change from 23 km to 4.08 km, even if done to correct an error, weakens the argument for a static approach further since here you are in part arguing against a key result from the modelling (vs 23 km, which is what we had assumed to be an extreme edge case) in addition to some of the published evidence presented. This is what we meant by *"we can no longer fully agree with the rationale provided".*	conclusions of the assessment in Volume 2, Chapter 4: Marine mammals (APP-056) (which uses the numbers of animals from the 7 km impact range). The Applicant acknowledges in REP3-038 that a dose response approach from Benhemma le Gall *et al.* (2021) could be derived, but no apparent response was observed at 4 km in the study (which is less than the maximum modelled disturbance range of 4.08 km) and therefore using the dose response suggested would assume no animals are impacted at 4 km, rather than the 15 animals derived from the 4.08 km radius approach outlined above.
REP3-090.72	Finally, we note the argument that using a behavioural impact radius of 7 km is a worst-case scenario and more conservative than the modelled range of 4.08 km, or the range of 4 km at which responses were no longer noted in Benhemma Le Gall et al. 2020. We agree that this is valid in the context of an impact area calculated from a static radius, however as we posited in the first point, a static radius would be an underestimate compared to a simplified methodology which captures the movement of vessels. This is why we suggest that in an effort to make the latter method more realistic and avoid the potential over precaution from a blanket application of a 7 km radius which assumes 100 % disturbance, the applicant could for example either (a) apply the modelled impact range of 4.08 (noting that this would still be an overestimate if we were to assume 100% disturbance), or (b) use refinements based on the literature. As suggested in our written representations, one example of this could have been assuming e.g. 24% disturbance at 3 km, and 0% at 4 km (as per Benhemma le Gall et al).	The Applicant considers there is adequate justification provided for the assessment of the Mona Offshore Wind Project alone or in-combination with other projects and for the determination of low magnitude effects from underwater sound from vessel use and welcomes NRW (A)'s agreement of the conclusion of 'low magnitude' and confirmation that this methodological discussion does not materially impact NRW's agreement with the overall conclusions of no significant effect / adverse effect on marine mammal populations. Therefore the Applicant agrees this matter is closed.
REP3-090.73	70. **REP2-080; para REP1-056.124 to REP1-056.132**: These paragraphs refer to our representations about injury from elevated underwater sound due to piling and the use of Acoustic Deterrent Devices (ADDs). We welcome the Applicant's response and we can confirm that this matter has been resolved.	The Applicant welcomes NRW (A)'s agreement that this matter (assessing disturbance from ADD use) is resolved.
REP3-090.74	71. **REP2-080; para REP1-056.133 to REP1-056.135:** These paragraphs refer to our representations about barrier effects. As noted in REP1-053.135, on balance, we considered that the information supplied by the Applicant is sufficient given the low probability that all offshore wind projects in the area would undergo construction at the same time. We therefore consider this matter closed.	The Applicant welcomes NRW (A)'s agreement that this matter (barrier effects) is resolved.
REP3-090.75	72. **REP2-080; para REP1-056.136 to REP1-056.139:** These paragraphs refer to our representations about interrelated effects. We welcome the Applicant's position on this matter and can now confirm that no additional information is needed. As such, we consider the issue closed.	The Applicant welcomes NRW (A)'s agreement that this matter (inter-related effects) is resolved.
REP3-090.76	73. **REP2-080; para REP1-056.140 to REP1-056.-142:** These paragraphs refer to our representations about the Applicant's outline Underwater Sound Management Strategy (USWMS)**.** We acknowledge and welcome the response from the Applicant. We also welcome the clarification provided by the Applicant with regard to points (b) and (e) of paragraph 179 of our Written Representation [REP1-056]. We welcome the commitment of the Applicant to continue to engage with NRW (A) to develop the USWMS post-consent.	The Applicant acknowledges the comments from NRW (A).
REP3-090.77	74. **REP2-080: para REP1-056.143 to REP1-056.144.** We note the reconfirmation of the commitment, as secured in the DCO, to monitoring the installation of the first four piled foundations of each piled foundation to be installed. We note that the Applicant acknowledges paragraph 180 of REP1-056 which states that *"…NRW (A) would also adopt a standard approach to this monitoring requirement (ISO 18407:2017)."* In response to this, para REP1-056.144 of REP2-080 states that "*The Applicant notes the standard approach to this monitoring requirement and the reference to ISO 18406:2017 which describes the methodologies, procedures, and measurement systems to be used for the measurement of the radiated underwater acoustic sound generated during pile driving using percussive blows with a hammer. This is in* ***addition*** (our emphasis) *to the mitigation which is secured through the MMMP and UWSMS (and as described in the rows above).* It is not clear from this response if the Applicant intends to adopt the ISO approach or not - it would be helpful if the Applicant can confirm their intention on this matter.	The Applicant notes that ISO 18406:2017 relates to 'Measurement of radiated underwater sound from percussive pile driving'. The Applicant is committed to implementing a suitable approach for monitoring underwater sound from the impact piling of the first four foundations but from experience in European markets, is aware that service providers work to different standards and therefore committing to a specific standard at this time risks significantly constraining the project as the credentials of potential service providers are not currently known. The Applicant will establish a suitable standard approach such as ISO (or similar) for monitoring sound with respect to the first four piled foundations to be installed post-consent in agreement with the relevant statutory nature conservation bodies.
REP3-090.78	75. **REP2-080; para REP1-056.145:** We acknowledge the additional clarity provided regarding the Maximum Design Scenario (MDS) for the Offshore Substation Platforms (OSPs), and while we agree that there is no error, we believe that the report would benefit from additional clarity by including this explanation. This will help for future projects using the information from this project in their own project considerations.	The Applicant welcomes NRW (A)'s agreement that there is no error in Volume 1, Chapter 3: Project Description (APP-050) with regard to Offshore Substation Platforms (OSPs) but considers that an update is not required.
REP3-090.79	76. **REP2-080; para REP1-056.147 to REP1-056.150:** This refers to comments made with respect to the effects of impulsive noise at range. We disagree that this issue has been wholly resolved.	The Applicant agrees with NRW (A) that the effects of impulsive noise at range is an important area warranting further research and that limited empirical studies have been conducted to date to inform modelling. Foremost, the Applicant highlights that in NRW's Deadline 1 Submission - Written Representation (REP1-056) (paragraph 187) NRW (A) states that "*this does not materially affect the conclusions, since assessment results were based on the*
REP3-090.80	77. While research on the range of transition and how this may impact the rate of Temporary Threshold Shift (TTS) / Permanent Threshold Shift (PTS) growth is an active area of research and scientific debate, to our	

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	knowledge no such research or debate has been conducted on whether changes in impulsivity with range may also affect behavioural responses and / or to what degree this may occur.	*full response modelled range of disturbance*", and therefore, whilst the Applicant agrees there is uncertainty in the effects of impulsive noise at range and how this influences injury and disturbance on marine mammals, the assessment presented in APP-056 is precautionary, robust and the conclusions remain valid. The Applicant considers this matter to be resolved and does not propose any updates to Volume 2, Chapter 4: Marine mammals (APP-056); however, a response to NRW (A)'s specific point has been provided below for completeness.
REP3-090.81	78. The Applicant draws attention to the statement included in APP-079: "defining this transition range is an active area of research and scientific debate". Here they have argued that this sufficiently justifies their statement that changes in impulsivity also impact behavioural responses, and its subsequent inclusion as one of the many factors that contributes to multiple layers of conservatism. We believe that such a statement could be misleading given that this is not currently an active area of research.	The subject of how the character of noise is likely to translate into behavioural disturbance to marine mammals and fish is embedded in the laws of physics and underpinned by academic research (e.g. Götz & Janik, 2011; Ellison *et a*l., 2018; Harris *et al*., 2018). Evidence suggests that the impulsive nature of a sound wave, which is defined by spectral content (i.e. frequencies and signal structure) and temporal characteristics (e.g. rise time, pulse duration), will change over distance (Ellison *et al*., 2018). A change in impulsivity intrinsically results in a change to the frequency spectrum of the sound, and consequently, sound loses more high frequency elements over these larger ranges as the impulsivity changes. Evidence for this effect is discussed in numerous studies such as Hastie *et al*. (2019), Martin *et al*. (2020) and Southall (2021). These sound characteristics will directly influence how marine mammals perceive and respond to the noise, with different species exhibiting varying hearing sensitivities across frequency ranges (Southall *et al*. 2021). For this reason, Southall (2021) recommended that future research studies should measure spectral content/temporal characteristics in addition to sound levels.
REP3-090.82	79. In our view this remains a hypothesis proposed by the Applicant and should be noted as such. While we agree that it is a plausible hypothesis on which research should be carried out, we would caution against phrasing it in more conclusive terms	The Applicant has provided an explanation of sound propagation over large behavioural effect ranges in Volume 2, Chapter 4: Marine mammals (APP-056) and Volume 5, Annex 3.1: Underwater Sound Technical Report (APP-07);9 and reiterates that there are complexities with understanding how sound behaves over distance and at the cross-over point between impulsive and continuous sound. The Applicant reiterates that assessment results were based on the full modelled range of disturbance and therefore the conclusions of the Environmental Statement remain valid (as per agreement from NRW in REP1-056.150). Finally, the statement referred to by NRW (A) (in paragraph 78) which states "*defining this transition range is an active area of research and scientific debate*" is located in paragraph 4.9.2.39 of Volume 2, Chapter 4: Marine mammals (APP-056), and the Applicant highlights that the statement in this specific paragraph relates to adopting impulsive injury ranges (rather than behavioural responses as indicated in NRW's comments) at larger distances (see "*sound models still adopt the impulsive thresholds at all ranges and this is likely to lead to an overly precautionary estimate of injury ranges at larger distances (tens of kilometres) from the sound source*"), and highlights the subsequent paragraph 4.9.2.40 clearly states "*These layers of conservatism highlight that both Permanent Threshold Shift (PTS) and Temporary Threshold Shift (TTS) onset ranges predicted using the SEL_{cum} threshold are likely to lead to overestimates in the ranges and therefore should be interpreted with caution*". Therefore, as PTS/TTS are forms of auditory injury and thresholds are based upon impulsive noise (but at distances the noise may be more continuous in nature, and therefore would apply a continuous threshold), the Applicant considers that the statement is not misleading. The Applicant considers that NRW are in agreement that the range of transition and how this may impact the rate of TTS/PTS growth is an active area of research and scientific debate.

2.1.3 Fish and Shellfish

Table 2.3: REP3-090 – Natural Resource Wales Advisory – Fish and Shellfish

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.83	1.3 Fish and Shellfish 80. We note from review of the Mitigation and Monitoring Schedule [REP2-030] that the Underwater Sound Management Strategy (UWSMS) is not included as mitigation in relation to minimising impacts on fish and shellfish (REP2-030 only references the USWMS in relation to marine mammals). Given the importance of the UWSMS for reducing the impacts on fish species and the commitment by the Applicant to the strategy, we advise that this is corrected.	The Applicant confirms that the Underwater Sound Management Strategy (UWSMS) is included as mitigation in relation to minimising impacts on fish and shellfish and the Mitigation and Monitoring Schedule (J10 F04) has been updated at Deadline 4 to reference Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) in relation to the UWSMS (Commitment Reference 35).
REP3-090.84	81. **REP2-080; para REP1-056.12:** We welcome the Applicant's intention to engage further with NRW (A) on the development of the UWSMS as the project progresses.	The Applicant welcomes this feedback and will continue to engage with NRW (A) through development of the Underwater Sound Management Strategy (UWSMS; Outline provided in APP-202).
REP3-090.85	82. **REP2-080; para REP1-056.157:** This refers to our representations on the predicted impacts to cod in Annex C of REP1-056. Please see comments on REP1-056.159 to REP1-056.170 below at paras 83-96 respectively.	NRW (A)'s comment is noted by the Applicant, with responses provided below by the Applicant to the points raised in REP3-090.86-99.
REP3-090.86	83. **REP2-080; para REP1-056.159:** This paragraph refers to our representations about the impacts of the project to cod high intensity spawning habitat from underwater noise. NRW (A) agrees with the Applicant's cumulative assessment presented in relation to cod, and the subsequent conclusion of a '*moderate adverse*' impact. We agree that the UWSMS is needed to manage the predicted significant cumulative effects of underwater noise to spawning cod as result of the Mona project with other plans and projects.	The Applicant welcomes this agreement from NRW (A) regarding the conclusion of the cumulative effects assessment regarding cod in relation to the impacts of underwater sound from piling, and the implementation of the UWSMS (Outline provided in APP-202).
REP3-090.87	84. The points raised by NRW (A) in its Written Representation [REP1-056] in relation to the assessment of the impacts of the project alone included a variety of factors specific to cod, as opposed to a focus only on the substrate type present in the vicinity of the proposed development.	The Applicant acknowledges the risk of adverse effects to spawning cod and has considered a range of factors when determining the magnitude of impact from underwater sound generated by piling, and the sensitivity of cod to this impact within Volume 2, Chapter 3: Fish and shellfish ecology (APP-055). The substrate type is not considered significant when assessing impacts to the spawning grounds of cod, given their lack of substrate-specificity, therefore the Applicant agrees with NRW (A) on this point.
REP3-090.88	85. It is our view that as herring require specific substrate types on which to adhere their eggs, the Applicant's focus on substrate suitability is appropriate when assessing the impacts to herring. However, for cod, which do not have specific substrate preferences, we consider other aspects should be taken into account when assessing their specific risk, as outlined within Annex C of our Written Representation [REP1-056]. We consider that these aspects combined indicate that spawning cod are more vulnerable to piling noise impacts than herring from the development alone. These factors include the species reliance on sound and noise during spawning, the specific behavioural patterns that the species displays during mate choice, courtship and subsequent spawning, the size and relative sedentary nature of the wider population in the Irish sea, and the amount of high intensity spawning ground impacted by the proposed development. As such, we maintain our position that we disagree that the impact to cod high intensity spawning habitat as a result of disturbance from underwater noise from the project acting 'alone', should be considered as *minor*. We continue to advise that by adopting the same approaches applied for herring, that the impact should be assessed as *moderate adverse* during the breeding season.	The Applicant welcomes the agreement from NRW (A) on the herring substrate suitability assessment. The Applicant recognises and acknowledges the risk of underwater sound impacts to spawning cod and potential impacts regarding recruitment success beyond cessation of piling, as outlined within Volume 2, Chapter 3: Fish and shellfish ecology (APP-055). Cod has specifically been included as a key species within the Outline UWSMS (APP-202). The UWSMS will manage the effects of underwater sound on spawning cod with mitigation focused on the management of contributions to cumulative underwater sound inputs by the Mona Offshore Wind Project. As such, these measures will likewise manage effects on cod due to the Project alone, and therefore, the difference between the Project alone and cumulative impact significance for cod in relation to underwater sound generated by piling is considered immaterial and no change is proposed to the assessment conclusions. NRW (A) will be consulted throughout the development of the final UWSMS, and approval from NRW (A) will be required to discharge the consent condition related to the UWSMS. This ensures that concerns regarding underwater sound impacts can be fully addressed with appropriate and proportionate measures implemented, where necessary, based upon the final project design and construction schedule and taking account of underwater sound policy at that time.
REP3-090.89	86. **REP2-080; para REP1-056.160:** We acknowledge that piling will be intermittent and temporally spaced throughout the proposed piling window. However, should piling occur within the spawning season, the impact has the potential to be detrimental– including subsequent impacts to future cohorts should reproduction be impeded.	
REP3-090.90	87. NRW (A) reinstate our previous advice that ceasing piling within the key spawning months for cod (February and March) would provide the most robust mitigation for the species.	The Applicant is carefully considering NRW (A)'s Deadline 3 submissions with respect of project alone impacts on cod and would like to engage with NRW (A) further before providing a more detailed response. A technical meeting with NRW(A) is scheduled for 8 November 2024 and the Applicant anticipates this matter being discussed then. An update on these discussions will be submitted for examination at Deadline 5.
REP3-090.91	88. We wish to highlight that the Applicant has stated that 'whilst piling is predicted to be undertaken over a maximum of 114 days, across a two-year piling phase, it is considered highly unlikely that much of this activity will be undertaken during the cod spawning period of January to April, or the reported historic peak of February to March (Coull et al., 1998), given operational constraints during the winter period.'. Based on this, we consider that a formal mechanism to cease piling within these months is therefore unlikely to have a large impact on construction timescales but would have improved impacts on cod.	

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REP3-090.92	89. NRW (A) acknowledge and agree with the Applicant's assessment of cod sensitivity as 'high'. As previously highlighted, we disagree with the Applicant's assessment of 'low' for the magnitude of the impact from the project alone.	The Applicant notes and welcomes NRW (A)'s agreement with respect to the sensitivity assessment of cod. Please see the Applicant's response to REP3-099.8 in relation to the Applicant's assessment of the magnitude of the impact from the project alone.
REP3-090.93	90. For comments relating to the UWSMS, see paras 83-85 above at REP1-056.159.	The Applicant notes this response.
REP3-090.94	91. **REP2-080; para REP1-056.165**: NRW (A) acknowledges the references cited by the Applicant in determining appropriate noise thresholds for fish species, and in light of additional comments provided by the Applicant, recognises the limitations of the Mueller-Blenkle study in providing an argument for the use of a 140dB threshold. Whilst we consider that the study illustrates the increased sensitivity of cod, and their behavioural responses to sound levels from 140dB, we acknowledge that the Applicant considers that a 160dB threshold is appropriate and concede that the threshold was previously discussed within the environmental working groups with no objections raised.	The Applicant welcomes agreement from NRW (A) on the behavioural sound impact levels for cod and considers this matter closed.
REP3-090.95	92. Whilst piling activities may be intermittent and occurring over a fixed time period, if cod are adversely impacted by piling, the duration of the effect is not limited to the duration of the piling activities themselves, as outlined above at REP1-056.160 at para 86-90.	The Applicant acknowledges the risk to cod associated with underwater sound within Volume 2, Chapter 3: Fish and shellfish ecology (APP-055). Please refer to the Applicant's response to REP3-090.88.
REP3-090.96	93. NRW (A) reiterates our position that a 21%+ overlap with cod high intensity spawning ground, using the 160dB threshold, does not constitute a '*low*' magnitude of impact to the species for the project alone. Further reasoning is provided within REP1-056.159 at para 83-85 above.	The Applicant acknowledges the 21%+ overlap with the east Irish Sea high intensity cod spawning ground for behavioural disturbance, however as outlined within the Applicant's Response to Relevant Representations (PDA-008), in response to RR-011.41, a range of factors are considered when identifying the magnitude of impact, not just the degree of overlap with mapped spawning grounds by behavioural sound contours which have led to the determination of a low magnitude in this case for the project alone assessment for the impacts of underwater sound from piling with respect to spawning cod. The underwater sound modelling and assessment of impacts to fish and shellfish ecology receptors presented within Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) are based upon a maximum pin pile diameter of 5.5 m, and a maximum hammer energy of 4,400 kJ. This approach ensures a highly precautionary assessment when using these data to assess the maximum design scenario for this impact, which is based upon a maximum pin pile diameter of 4 m. It should also be considered that the maximum hammer energy will not be reached in all cases. As such, the degree of potential overlap by behavioural contours with mapped cod spawning grounds presented within Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) is considered highly conservative in line with the maximum design scenario approach and the area affected is expected to be of a smaller extent in real terms. Please refer to the Applicant's response to REP3-090.87-88 for further information.
REP3-090.97	94. NRW (A) welcome the inclusion of the UWSMS and agree that mitigation could have the potential to reduce the impacts on the species depending on the specifics of the mitigation proposed. However, measures proposed to limit the impact of in-combination effects may not be as effective or robust as measures focused on reducing the impact to the species from the Mona development alone. For example, an in-combination mitigation measure may be proposed so piling is not simultaneously occurring across multiple developments. Whilst this could reduce the impact to cod on an in-combination basis, this may still mean that piling within the Mona development occurs within the key spawning months for cod, which NRW (A) consider would be detrimental.	The Applicant welcomes agreement on the implementation of the UWSMS (Outline provided in APP-202) to reduce the impacts of underwater sound. The Applicant appreciates NRW (A)'s concerns, however wishes to highlight that NRW (A) will be engaged throughout the development and finalisation of the UWSMS post-consent. Further, NRW (A) will be consulted on the discharge the relevant consent condition within the deemed Marine Licence of the draft development consent order (C1 F05) and the condition expected to be secured through the standalone NRW Marine Licence prior to any piling commencing. This ensures that agreed appropriate and proportionate measures will be implemented (where necessary), based on the final project design and construction schedule and taking account of underwater sound policy at that time.
REP3-090.98	95. **REP2-080; para REP1-056.168 to REP1-056.169:** These paragraphs referred to the representations we made about sound exposure levels for assessing impacts. We welcome the additional clarification provided by the Applicant on this matter. We have no further comment to make and consider this matter now closed.	The Applicant welcomes the agreement by NRW (A) on this matter and consideration of this matter as closed.
REP3-090.99	96. **REP2-080; para REP1-056.170**: NRW (A) acknowledge the additional detail provided by the Applicant with respect to the UWSMS. We reiterate our previous comments in relation to the '*alone*' assessment regarding cod and advise that mitigation is required to reduce the impacts of piling from the proposed project alone during the cod spawning period. NRW (A) consider that the most robust mitigation method to protect spawning cod would be a commitment to not pile during the key spawning period (February and March). Please see further comments in para 91-94 above relative to **REP1-056.165** and the UWSMS.	The Applicant notes NRW (A)s representation. Please refer to the Applicant's response to REP3-090.90.
REP3-090.100	97. **REP2-080; para REP1-056.407 to REP1-056.418:** These paragraphs relate to our representations in Annex C: Fish and Shellfish Ecology of REP1-056 Annex C - Fish and shellfish ecology).	The Applicant notes this response.

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REP3-090.101	98. Whilst NRW (A) disagree with the Applicant's assessment of the magnitude of impact to cod and the subsequent assessment of 'minor adverse' from the project alone, we welcome the inclusion of mitigation measures for cod (arising from the assessment within the in-combination assessment of 'moderate adverse' for cod within the spawning season) within the UWSMS. NRW (A) will continue to work with the Applicant on the refinement of measures proposed.	The Applicant welcomes NRW (A) 's agreement with regards to including mitigation measures for cod within the UWSMS (Outline provided in APP-202) and will continue to engage with NRW (A) on refining the measures proposed within the UWSMS.
REP3-090.102	99. Please see comments at REP1-056.160 in para 86-90 regarding limiting piling within key spawning months as the most robust form of mitigation for cod.	The Applicant notes NRW (A)'s comment. Please refer to the response provided to REP3-090.90.

2.1.4 Physical Processes

Table 2.4: REP3-090 – Natural Resource Wales Advisory – Physical Processes

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.103	1.4 Physical Processes 100. **REP2-080; para REP1-056.13:** NRW (A) previously advised that no assessment had been carried out by the Applicant to determine how the potential placement of cable protection in the shallow nearshore environment would impact on coastal and physical processes. The Applicant notes at REP1-056.13 that the best form of cable protection is achieved through cable burial to the required depth and that it is not the Applicant's intention to place cable protection in shallow water but to avoid this where possible.	The Applicant understands that NRW (A)'s concerns relate to shallow water in particular. For that reason the Applicant can point to the Marine Licence Principles Document (Document reference J9-F04), in particular the row relating to the Cable Specification Installation Plan (CSIP) and how it is the Applicant's expectation that a condition will be imposed within the standalone NRW marine licence securing the commitment to limit changes in water depth to 5%. Where that restriction is anticipated to be exceeded, the Applicant anticipates NRW (A) will be a consultee in respect of agreeing an alternative position. This discussion will involve consideration of whether further physical processes assessment in the shallow nearshore area would be required, and if so on what terms that assessment would be undertaken. The Applicant welcomes NRW (A) agreement to this approach and will continue to engage with NRW (A) on the offshore Construction Method Statement (oCMS) and the CSIP in this regard.
REP3-090.104	101. The Applicant has also reaffirmed its commitment to ensuring that no more than a 5% reduction in water depth (referenced to Chart Datum) will occur at any point along the Mona offshore cable corridor without prior written approval from the Licensing Authority in consultation with the MCA [REP2-030], and that the height of the cable protection above the seabed may be altered in relation to the given water depth at any point along the export cable corridor in order to adhere to the commitment, ensuring that any cable protection is sufficiently low profile to cause minimal changes to wave, tide and sediment transport. The Applicant goes on to state that implicitly, the detailed design (either by location, installation methodology or type of cable protection) will ensure there are no significant impacts.	
REP3-090.105	102. NRW (A) note and welcome the intention of the Applicant to try and avoid cable protection in shallow water. We advise that providing the proposed mitigation measure is strictly adhered to - i.e. no more than a 5% reduction in water depth at any point where cable protection is placed - we are satisfied that there should be no significant impacts to the physical processes in the shallow nearshore environment. We agree that this commitment should be captured in *both* the DCO dML and the TA ML via the offshore Construction Method Statement (oCMS) and the Cable Specification Installation Plan (CSIP). We advise that NRW (A) are consulted in writing on these documents. However, we note that in relation to the CSIP, REP2-028 states that "*The assessment should identify any cable protection that exceeds 5% of navigable depth referenced to chart datum"* and that "… *in the event that any area of cable protection exceeding 5 percent of navigable depth is identified, details of any steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised or similar such assessment to ascertain suitable burial depths and cable laying techniques, including cable protection*". We advise that should the 5% threshold be breached, then NRW (A) would require that the Applicant conduct a further physical processes assessment in the shallow nearshore environment just seawards of MLWS over the exit pits.	
REP3-090.106	103. **REP2-080; para REP1-056.15:** In its Written Representations [REP1-056], NRW (A) noted that it was unable to advise on the need for monitoring provisions in respect of landfall cables due to beach profile change, erosion of the backshore and short-term beach draw-down during storms until further assessment is undertaken. The Applicant has responded by reconfirming its commitment to trenchless techniques in the intertidal area and noting that further detailed onshore and offshore geotechnical investigations will be conducted at the landfall, including establishing the depth of burial requirements to avoid the risk of exposure. This would be included within the final Landfall Construction Method Statement submitted to the relevant planning authority for approval in consultation with NRW as secured in Schedule 2, Requirement 9(2) of the draft DCO (C1 Draft Development Consent Order F04). We agree with this commitment regarding trenchless techniques.	The Applicant reiterates that further detailed onshore and offshore geotechnical investigations will be conducted at the landfall to assess the suitability of the ground in relation to the trenchless technique that is to be adopted. This will include consideration of the natural envelope of beach profile change over time to inform the final detailed design of the duct profile to avoid the risk of cable exposure. This information has been included in the updated Landfall Construction Method Statement (J26.14 F03) submitted at Deadline 4. Details of the final design will be included within the final Landfall Construction Method Statement submitted to the relevant planning authority for approval in consultation with NRW as secured in Schedule 2, Requirement 9(2) of the draft DCO (Document Reference C1 draft development consent order F05).
REP3-090.107	104. We continue to advise that, if cables are not buried to a depth which is below the natural envelope of beach profile change, then the risk of exposure of landfall cables will be of concern for NRW (A). In order to determine the natural envelope of beach profile change over time, then NRW (A) advise that, if available, the Applicant reviews historical beach profiles. This would allow the Applicant to determine the depth at which the cable should be buried in order to avoid exposure following a major storm event.	
REP3-090.108	105. For the avoidance of doubt, the points that were raised by NRW (A) in REP1-056 were not linked to any potential impact to the intertidal beach profile caused by potential cable protection in the nearshore environment.	
REP3-090.109	106. **REP2-080; para REP1-056.16:** Our Relevant Representations [RR-011] and Written Representations (para 54 and 222 of REP1-056) recommended that the Applicant considers future sandwave recovery	

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	monitoring. In addition to helping inform future strategic work, this, we argued, would support the statements that the Applicant has made that sandbanks will recover in the short-term.	The Applicant's approach to sandwave recovery monitoring was provided in response to ExQ1.14.4 and is set out in the Applicant's Response to Examining Authority's Written Questions (REP3-062) submitted at Deadline 3. This information has also been provided here for clarity. The Offshore in-principle monitoring plan (J15 F02), section 1.5.2.1, outlines the approach to geophysical and geotechnical surveys for engineering and design-related studies. This monitoring will be undertaken to observe the effect of sediment transport and sediment transport pathways on cable burial with specific reference to physical processes. The primary function of this monitoring is to examine changes to the seabed post-construction, and the surveys will be expected to focus on areas where active mobile seabed features, such as sandwaves, have been identified (e.g. those areas that underwent sandwave clearance during the construction phase). The Applicant has already included a commitment to pre- and post-construction geomorphological surveys in Condition 24(4) and 26(3) of Schedule 14 of the draft DCO (C1 draft development consent order F05), and this is also expected to be secured within the standalone NRW Marine Licence. The commitment to develop a monitoring plan in accordance with the Offshore in-principle monitoring plan (J15 F02) is secured under condition 18(1)(c) in Schedule 14 of the draft development consent order (DCO) (C1 draft development consent order F05), and will be submitted to NRW Marine Licencing Team for approval, in consultation with NRW (A), in writing prior to commencement of construction of the authorised scheme.t. This data is collected for the purpose of observing the effect of sediment transport and sediment transport pathways on cable burial. While the Mona Offshore Wind Project application did not identify any potential significant effects on physical processes and, it is therefore the Applicant's position that monitoring to test the predictions of the impact assessment is not required (as outlined in section 1.9.7 of Volume 2, Chapter 1 Physical processes (APP-053)). The Applicant confirms that the hydrographic and side scan sonar surveys are already committed to and the relevant data gathered which will be considered in the context of sandwave recovery, particularly in relation to the Constable Bank, for information purposes. The Applicant has no objections to sharing this information with the relevant statutory bodies as part of the post-consent offshore monitoring plan. The surveys already committed to by the Applicant will highlight any morphological changes to the seabed, improving the evidence base for future mitigation in accordance with NPS EN-3 paragraphs 2.8.83 and 2.8.85 and best practice guidance and principles outlined in section 1.3 of the Offshore in-principle monitoring plan (J15 F02).
REP3-090.110	107. We acknowledge the Applicant's position on this matter that given no significant effects on physical process receptors were predicted in the ES, then then no specific monitoring is required to test the predictions of the EIA. The Applicant has however noted that in line with the Offshore in-principle monitoring plan [J15 F02], monitoring will be undertaken to observe the effect of sediment transport and sediment transport pathways on cable burial (to be secured under condition 18 in Schedule 14 of the draft DCO (C1 Draft Development Consent Order F04)).	
REP3-090.111	108. Whilst we continue to acknowledge the Applicant's position on our request, we maintain that sandwave recovery monitoring will help to build on the strategic evidence required to understand the regional impacts to sediment transport processes and physical processes caused by the installation of large-scale wind farm developments into the future. We further reiterate (as noted at para 222 of REP1-056) that sandwave recovery monitoring, particularly on Constable Bank (where sediment will be removed off the bank), will validate the assumptions made in the ES. Recovery monitoring of sandbanks will support statements made in the submitted documentation that sandbanks will recover in the short-term and will also help to inform future work. We suggest that any agreed monitoring could be secured within the TA ML and dML where appropriate. NRW (A) would wish to be consulted in writing.	
REP3-090.112	109. With respect to the Offshore In-Principle Monitoring plan; NRW (A) note the content of J15 F02 and the content of the DCO dML [REP2-004] (see Schedule 14 condition 18 section (c)), but request clarity from the Applicant regarding the ability of this condition to actually "*observe the effect of sediment transport and sediment transport pathways on cable burial*…", given that sand wave mobility will directly affect the burial status of the cables. NRW (A) acknowledge that Schedule 14 condition 18 of REP2-004 is only applicable to the offshore Array (Generation Asset) and note that there is a commitment that the same condition as outlined in the Offshore In-Principle monitoring plan [J15 F02] and REP2-028 / REP2-030 will be carried through as a condition in the stand alone marine licence for the transmission asset. We agree that the offshore In-Principle monitoring plan is secured by both the DCO dML and the TA ML, and request that NRW (A) are consulted in writing on the plans and the aspects noted above.	
REP3-090.113	110. We also note the ExA questions on this matter (questions issued 13 September 2024). We will review the Applicant's responses to these questions once submitted into the examination at Deadline 3.	The Applicant's approach to sandwave recovery monitoring was provided in response to ExQ1.14.4 and is set out in the Applicant's Response to Examining Authority's Written Questions (REP3-062) submitted at Deadline 3. Please see the Applicant's response to NRW (A)'s related comment at REP3-090.112 above.
REP3-090.114	111. **REP2-080; para REP1-056.176 to REP1-056.177**: No further comments – matters are closed.	The Applicant welcomes this response from NRW (A) and notes that this matter is now closed.
REP3-090.115	112. **REP2-080; para REP1-056.178:** We welcome the ongoing commitment by the Applicant to consult with NRW (including NRW (A) with regard the oCMS.	NRW(A) will be a consultee on the offshore oCMS through the draft development consent order (DCO) (REP2-004), Condition 18(1)(d), Part 2, Schedule 14 of the dDCO (C1 draft development consent order F05) requires the Applicant to submit an oCMS to NRW for approval in writing prior to commencement of construction of the authorised scheme. .
REP3-090.116	113. We acknowledge the Applicant's position with respect to the specific inclusion of NRW (A) as a named consultee in the DCO dML. Please see further advice on this matter from NRW MLT in section 3.	
REP3-090.117	114. **REP2-080; para REP1-056.179:** No further comments – matters are closed.	The Applicant welcomes this response from NRW (A) and notes that this matter is now closed.
REP3-090.118	115. **REP2-080; para REP1-056.180:** Please see comments in para 100-102 above (in relation to REP1-056.13).	Please see the Applicant's response to NRW (A)'s comments at REP3-090.103-105 above.
REP3-090.119	116. **REP2-080; para REP1-056.181:** We note and acknowledge the explanation provided here by the Applicant with respect to why shallow water cable protection was not included in the numerical model. This, the Applicant asserts is because *"…this is both far less likely and changes in bed level to a maximum of 5% of water depth would be indistinguishable from the natural seabed variation within the context of model discretisation in these areas*". As noted in paras 100-102 REP1-056.13 above, we advise that provided that the proposed mitigation measure is strictly adhered to (i.e. no more than a 5% reduction in water depth at any point where cable protection is placed) and secured appropriately in the oCMS and CSIP, then we can be satisfied that there should be no significant impacts to the physical processes in the shallow nearshore environment. However, should the 5% threshold be breached, then NRW (A) would require that the Applicant conduct a	Please see the Applicant's response to NRW (A)'s comments at REP3-090.103-105 above.

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
	further physical processes assessment in the shallow nearshore environment just seawards of MLWS over the exit pits.	
REP3-090.120	117. **REP2-080; para REP1-056.182:** Please see our comments above at paras 100-102 and 116 in relation to REP1-056.13 and REP1-056.180-181 and the assessment of cable protection in the nearshore environment and at the exit pits.	Please see the corresponding responses provided at REP3-090.103-105 and REP3-090.119 above.
REP3-090.121	118. **REP2-080; para REP1-056.183:** We note the Applicant's position. No have further comments to make and this matter can be considered closed.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.
REP3-090.122	119. **REP2-080; para REP1-056.184:** We welcome confirmation that the Applicant will continue to engage with NRW (A) on the CSIP. No further comments – this matter can be closed.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.
REP3-090.123	120. **REP2-080; para REP1-056.185:** Please see our comments at paras 106-110 above regarding sand-wave recovery monitoring.	Please see the Applicant's response at paras REP3-090.109-113 above.
REP3-090.124	121. **REP2-080; para REP1-056.186:** This section refers to our comments with respect to sediment removal for the purposes of ballast for gravity-based foundations. We have no further comments on this matter – this matter is now closed.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.

2.1.5 Benthic Subtidal and Intertidal Ecology

Table 2.5: REP3-090 – Natural Resource Wales Advisory – Benthic Subtidal and Intertidal Ecology

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.125	1.5 Benthic Subtidal and Intertidal Ecology 122. **REP2-080; para REP1-056.17:** NRW (A) notes the Applicant's commitment to avoid, where possible, laying any cable protection in shallow nearshore waters. We also note the Applicant's commitment to ensuring that where cable protection is adopted that there will be no more than a 5% reduction in water depth at any point where cable protection is placed and that this commitment will be secured through the oCMS and CSIP. As noted in paras 100-102 (relating to REP1-056.13) above, we advise that provided that this mitigation measure is strictly adhered to, and we are consulted in writing on the oCMS and CSIP, then we are satisfied that there should be no significant impacts to the benthic and intertidal ecology in the shallow nearshore environment. However, we agree with the advice at 100-102 above regarding the requirement for further assessments should cable protection greater than the 5% depth threshold be placed in the shallow nearshore environment just seawards of MLWS over the exit pits [REP1-056.13].	The Applicant welcomes the agreement from NRW (A) that, with the relevant commitments in place (i.e. no more than a 5% reduction in water depth at any point where cable protection is placed secured through the Outline Construction Method Statement (CMS) and Cable Specification and Installation Plan (CSIP)) there will be no significant impacts to the benthic and intertidal ecology in the shallow nearshore environment. The Applicant therefore considers this matter to be closed with respect to benthic ecology. With respect to the requirement for further assessments for physical processes should cable protection greater than the 5% depth threshold be placed in the shallow nearshore environment, the Applicant notes this point and has responded to this in their response to comments REP3-090.103-105 from NRW (A).
REP3-090.126	123. **REP2-080; para REP1-056.18**: NRW (A) notes the Applicant's response regarding the need for monitoring provisions in respect of cable exposure. We defer to the advice above at paras 103-105 regarding REP1-056.15. We have no further comments from a benthic and intertidal ecology perspective.	The Applicant welcomes that NRW (A) have no further comments from a benthic subtidal and intertidal ecology perspective and has responded to the comments from NRW (A) on physical processes REP3-090.106-108 above.
REP3-090.127	124. **REP2-080; REP1-056.19**: NRW (A) notes the Applicant's response regarding sandwave recovery monitoring. We defer to the advice above at paras 106-109 regarding REP1-056.16. We have no further comments from a benthic and intertidal ecology perspective.	The Applicant welcomes that NRW (A) have no further comments with regards to monitoring for benthic subtidal and intertidal ecology and has responded to the comments from NRW (A) on physical processes monitoring (REP3-090.109-112) above.
REP3-090.128	125. **REP2-080; para REP1-056.20**: We note the Applicant's response on biosecurity measures to control the potential spread of invasive non-native species, including the highly invasive seasquirt *Didemnun vexillum*. As previously noted, we welcome the commitment to securing a standalone marine biosecurity plan within the DCO dML and agree that this should also be secured in the TA ML. The plan will need to be agreed in writing with NRW. We have no further comments and this matter can now be closed.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.
REP3-090.129	126. **REP2-080; para REP1-056.189:** NRW (A) notes the Applicant's response with respect to the revision of Table 1.220 and impacts from Electromagnetic Fields (EMF) in APP-032. We welcome the clarification and amendments made within the errata document [REP2-090]. We have no further comment on this matter and this matter can now be closed.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.
REP3-090.130	127. **REP2-080; para REP1-056.190:** Please see our advice at REP1-056.17 para and REP1-056.13 paras 122 and 102 above.	Please see the Applicant's response to NRW (A) comments REP3-090.125 and REP3-090.105 above.
REP3-090.131	128. **REP2-080; para REP1-056.191:** NRW (A) notes the Applicant's response with respect to consultation with NRW (A) on the oCMS and the Landfall Construction Method Statement (LCMS). We have no further comments.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.
REP3-090.132	129. **REP2-080; para REP1-056.192:** NRW (A) notes the Applicant's response and welcome the commitment to continue to engage with us on the LCMS. We have no further comments on this matter.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.
REP3-090.133	130. **REP2-080; para REP1-056.193:** NRW (A) notes the Applicant's response and has no further comments from a benthic and intertidal perspective. We defer to the advice above in the physical processes section regarding REP1-056.15 (see para 103-104) and also refer to our response to REP1-056.190 at para 127.	The Applicant welcomes the response from NRW (A) and considers that this matter is now closed with respect to benthic subtidal and intertidal ecology. The Applicant has responded to the comments from NRW (A) on physical processes (REP3-090.106-107 and REP3-090.123) above.
REP3-090.134	131. **REP2-080; para REP1-056.194:** NRW (A) notes the Applicant's response with respect to sandwave recovery monitoring and has no further comments from a benthic and intertidal perspective. We defer to the advice in the physical processes section above regarding REP1-056.16 and REP1-056.185 at paras 106-109 and 120 respectively.	The Applicant welcomes that NRW (A) have no further comments with regards to monitoring for benthic subtidal and intertidal ecology and has responded to the comments from NRW (A) on physical processes monitoring (REP3-090.109-112 and REP3-090.123) above.
REP3-090.135	132. **REP2-080; para REP1-056.196:** NRW (A) notes the Applicant's response and has no further comments. Please also see our comments at para 125 above with respect to INNS and the biosecurity plan.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.

2.1.6 Marine Water and Sediment Quality (MW&SQ)

Table 2.6 REP3-090 – Natural Resource Wales Advisory – Marine Water and Sediment Quality (MW&SQ)

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.136	1.6 Marine Water and Sediment Quality (MW&SQ) 133. **REP2-080; para REP1-056.22:** Please refer to our comments to REP1-056.199 at para 139 in the Water Framework Directive section (section 1.7) below regarding assessment at the nearshore environment.	Please see the Applicant's response to paragraph REP3-090.142.
REP3-090.137	134. **REP2-080; para REP1-056.23:** Please refer to our response to REP1-056.206 at paras 151-155 in section 1.7 below with respect to further assessment for the biological quality and supporting elements.	Please see the Applicant's response to REP3-090.154-158.
REP3-090.138	135. **REP2-080; para REP1-056.24 to REP1-056.25**: We now consider these issues to be closed.	The Applicant notes the response from NRW (A) and welcomes the resolution of these matters.
REP3-090.139	136. **REP2-080; para REP1-056.26:** Please refer to our response at paras 143-144 and 145-147 in section 1.7 with respect to the Applicants position on to REP1-056.202 and REP1-056.203.	The Applicant notes NRW (A)'s response and welcomes the opportunity to engage with NRW (A) in preparation of an updated Statement of Common Ground. To this end, the Applicant draws attention to the WFD Coastal Waters Assessment supporting information submitted at Deadline 3 (REP3-045). This supporting information note provides further assessment of chemical contaminants out to 12 nm and assessment in relation to a zone of influence (ZoI) consistent with the spatial extent of the numerical modelling presented in Volume 6, Annex 1.1 Physical processes technical report (APP-086). This information was prepared in line with feedback received from NRW (A) via email on 20 September 2024. This additional information does not alter the conclusions of the assessments presented in Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088).
REP3-090.140	137. **REP2-080; para REP1-056.198:** Please note that NRW (A) maintain functional separation from NRW's permitting services. We reiterate our request to be consulted, in writing, on the suitability of the OEMP and the Marine Pollution Contingency Plan (MPCP) prior to commencement of activities.	The Applicant notes the responses from NRW (A) and NRW-MLT. NRW-A will be consulted on the details of the OEMP and MPCP in accordance with the provisions of the dML.
REP3-090.141	138. Please also see comments at para 160 (REP1-056.218) below and from NRW MLT in section 3.	
REP3-090.142	139. **REP2-080; para REP1-056.199:** We note the Applicant's commitment to the development of CMS and CSIP. We note the Applicant's intention to avoid cable protection if possible and their assertion that if protection is used, measures will be put in place to "*ensure that sediment transport continues unhindered and the wave climate is not notably altered*".	The Applicant notes NRW (A)'s response with regards to cable protection and understands that the term 'water quality' in the context of sediment disturbance has been used by NRW (A) to refer to potential increases in suspended sediment concentration (SSC) and potential mobilisation of sediment-bound contaminants. The Applicant would clarify, however, that an assessment of the potential for disturbance of sediment-bound contaminants during all construction related activities, as is being requested by NRW (A) has already been undertaken in section 2.9.4 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (F2.2), and the WFD Coastal Waters Assessment supporting information (F01) (REP3-045) submitted at Deadline 3. These assessments maintain that the site-specific surveys only identified low levels of sediment contamination. Should sediment be disturbed as a result of the installation of cable protection the sediment and any associated contaminants would be rapidly dispersed and therefore would not be produce adverse effects on water quality. Please see the Applicant's response to NRW (A)'s comments at REP3-090.103-105 above in relation to cable protection in the nearshore area.
REP3-090.143	140. We maintain our position that should cable protection be required, the changes in water quality resulting from disturbance to the sediment are assessed alongside other environmental parameters / receptors.	
REP3-090.144	141. Please also see comments above regarding cable protection in the nearshore environment.	

2.1.7 WFD: Coastal and Transitional Water Bodies – Offshore works

Table 2.7 REP3-090 – Natural Resource Wales Advisory – WFD: Coastal and Transitional Water Bodies – Offshore works

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.145	1.7 WFD: Coastal and Transitional Water Bodies – Offshore works 142. **REP2-080; para REP1-056.200 to REP1-056.201:** We now consider these issues to be closed.	The Applicant notes NRW (A)'s response and welcomes the resolution of this matter.
REP3-090.146	143. **REP2-080; para REP1-056.202:** This response refers to NRW (A)'s representation about the assessment of chemical contaminants. We note the Applicant's response at REP1-056.202. We advise that whilst there is no requirement for the Applicant to ascertain the status of waterbodies out to 12 nm (this is the role of the competent authority), there is a requirement for the Applicant to assess activities (linked to their proposal) for their impact on the chemical elements of water quality out to 12 nm (or in to 12 nm for activities beyond this boundary). The chemical status of WFD waterbodies will be classified through assessment out to 12 nm and so any activity proposed by the Applicant that has the potential to impact this status must be assessed.	The Applicant notes NRW (A)'s response and welcomes the opportunity to engage with NRW (A) in preparation of an updated Statement of Common Ground. To this end, the Applicant draws attention to section 1.2 of the WFD Coastal Waters Assessment Supporting Information note (REP3-045) submitted at Deadline 3 in which the Applicant has presented its consideration of the point raised by NRW (A) and the outcomes of that consideration. This supporting information note provides further assessment of chemical contaminants out to 12 nm and was prepared in line with feedback received from NRW (A) via email on 20 September 2024. Consideration of the results of sediment chemical analysis out to 12 nm resulted in no change to the outcome of the assessment presented in Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088).
REP3-090.147	144. We welcome the Applicant's commitment to engage with NRW in preparation of a Statement of Common Ground (SoCG).	
REP3-090.148	145. **REP2-080; para REP1-056.203:** We are unclear on the reasons why the Zone of Influence (ZoI) use for WFD Compliance Assessment (CA) would be different to the ZoI deemed appropriate for other legislative regimes. We request clarity is provided and included in the ES documentation.	The Applicant notes NRW (A)'s response and welcomes the opportunity to engage with NRW (A) in preparation of an updated Statement of Common Ground. To this end, the Applicant draws attention to section 1.3 of the WFD Coastal Waters Assessment Supporting Information note (REP3-045) submitted at Deadline 3 in which the Applicant has presented its consideration of the point raised by NRW (A) and the outcomes of that consideration. This supporting information note provides further assessment with respect to the spatial extent of the zone of influence (ZoI) and was prepared in line with feedback received via email on 20 September 2024. Consideration of a ZoI which aligns with the spatial extent of numerical modelling presented in Volume 6, Annex 1.1 Physical processes technical report (APP-086), out to 12 nm, resulted in no change to the outcome of the assessment presented in Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088).
REP3-090.149	146. We refer the Applicant to their acknowledgment of advice from NRW (A) [APP-088; para 1.3.2.6]: *"… the assessment of deterioration should be extended further than 1 nm where an effect pathway may be present for any WFD element in any water body*."	
REP3-090.150	147. We welcome the Applicant's commitment to engage with NRW in preparation of a SoCG. We also welcome the recent email engagement from the Applicant on 18 September 2024 in attempt to resolve this matter. NRW (A) provided further advice to the Applicant on 20 September 2024 and understand that that advice was being considered for Deadline 3. We will review any further information submitted into the examination as appropriate.	
REP3-090.151	148. **REP2-080; para REP1-056.204:** We welcome the changes made, and the information provided, in the errata document [REP2-090], specifically with respect to the typographical errors and ZoIs. We consider this issue to now be closed.	The Applicant notes NRW (A)'s response and welcomes the resolution of this matter.
REP3-090.152	149. **REP2-080; para REP1-056.205:** We acknowledge the Applicant's statement that the spatial extent assessed for WFD compliance does not coincide with the entire benthic subtidal and intertidal ecology study area.	The Applicant notes NRW (A)'s response and welcomes the opportunity to engage with NRW (A) in preparation of an updated Statement of Common Ground. To this end, the Applicant draws attention to section 1.2 of the WFD Coastal Waters Assessment Supporting Information note (REP3-045) submitted at Deadline 3 in which the Applicant has presented its consideration of the point raised by NRW (A) and the outcomes of that consideration. This supporting information note considers the results of chemical analysis of sediment-bound contaminants at all sampling sites out to 12 nm, taking into account all available data, and was prepared in line with feedback received via email on 20 September 2024. Consideration of the results of sediment chemical analysis out to 12 nm resulted in no change to the outcome of the assessment presented in Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088).
REP3-090.153	150. We note the Applicant's statement that no sediment samples collected within the North Wales waterbody returned results showing exceedance of contaminants above CEFAS Action Level 1. We refer the Applicant to their assessment of sediment contamination (APP-087 figure 1.12 and para 1.7.3.27) showing exceedance of arsenic in two sediment samples collected within the cable corridor (and within 12 nm of the MHWS mark). This area (out to 12 nm) is subject to assessment of chemical contaminants for WFD classification purposes. The results of the sediment contamination sampling out to 12 nm must be used to determine the impact of the proposed activities on the water quality of the waterbodies scoped in for assessment. We advise that all available data should be used in WFD compliance assessment, and not only those data from sampling stations that show contaminants to be below threshold levels. We recommend the Applicant to include (through reference) the full assessment of the data presented in document APP-087 in their WFD compliance assessment; to acknowledge the exceedance above CEFAS AL1 of arsenic at two sampling stations; to note that the concentration of this contaminant is below the Canadian PEL; to note the [as modelled] temporary resuspension of this contaminant; and to conclude that the proposed activity is unlikely to impact the water quality status of the assessed WFD waterbodies.	
REP3-090.154	151. **REP2-080; para REP1-056.206:** NRW (A) advise that the ES information is updated to remove what appears to be a statement made in error by the Applicant. The statement serves only to obscure the justification for the assessment that has been correctly undertaken by the Applicant.	The Applicant welcomes the statement from NRW (A) that there is no disagreement between the parties on this matter. The required assessments have been undertaken and presented, and these have been acknowledged by NRW (A) to have been undertaken correctly. The Applicant has made no statement within Volume 6, Annex 2.2:

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.155	152. We recommend that the statement "*no further assessment is required for biological quality elements and supporting elements due to the proximity to the supporting habitats*" is removed from the ES and the references provided here in the response to REP2-080 are used to update the ES.	Water Framework Directive Coastal Waters Assessment (APP-088) to contradict the need for, or presence of, the assessment of sensitive habitats. The Applicant therefore does not consider that an update to the Environmental Statement is necessary, and considers this matter to be resolved,
REP3-090.156	153. In concord with the Applicant, we conclude that assessment is required. The Applicant has completed the assessment in compliance with the WFD regulations, and we advise the wording they use in their compliance assessment should reflect this as it currently does not.	
REP3-090.157	154. Our advice is given here to aid the Applicant in ensuring the information they have provided is consistent throughout their ES and their justification for providing their information is clear.	
REP3-090.158	155. We emphasise further that there is no disagreement between parties for the need for assessment. We maintain our position that there was a need for further assessment and that the statements made in the Applicant's WFD compliance assessment should simply reflect the assessments that they have undertaken.	

2.1.8 Biodiversity Benefit

Table 2.8 REP3-090 – Natural Resource Wales Advisory – Biodiversity Benefit

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.159	1.8 Biodiversity Benefit 156. **REP2-080; para REP1-056.207 – REP1-056.211**: We welcome the Applicant's ongoing commitment to engage with NRW (A) on these matters via dialogue and the SoCG.	The Applicant welcomes the response from NRW (A) and will continue to engage with NRW (A) on biodiversity benefit.
REP3-090.160	157. **REP2-080; para REP1-056.210.** We welcome the detail provided by the Applicant in PDA-019 which outlines the proposed onshore ecology mitigation and biodiversity enhancements for the project. We will continue to work with the Applicant to understand and develop these proposals.	

2.1.9 Decommissioning - Offshore

Table 2.9 REP3-090 – Natural Resource Wales Advisory – Decommissioning – Offshore

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.161	1.9 Decommissioning – Offshore 158. **REP2-080; para REP1-056.213 to REP1-056.214:** We note and welcome the Applicant's response on this matter. We have no further comments to make.	The Applicant notes NRW (A)'s response.

2.1.10 Mitigation and Monitoring Schedule; Marine Licence Principles and the Development Consent Order

Table 2.10 REP3-090 – Natural Resource Wales Advisory – Mitigation and Monitoring Schedule; Marine Licence Principles and the Development Consent Order

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.162	1.10 Mitigation and Monitoring Schedule; Marine License Principles and the Development Consent Order 159. **REP2-080; para REP1-056.215 to REP1-056.217:** NRW (A) welcome the Applicant's response. We welcome the provision of an updated Mitigation and Monitoring Schedule [REP2-030] and Marine Licence Principles document [REP2-028]. From an initial review of these revised documents, we consider that the documents are now better aligned. Nonetheless, we encourage the Applicant to continue to check the documents for consistency.	The Applicant has provided an updated Mitigation and Monitoring Schedule (Document Reference J10 F04) and Marine Licence Principles document (Document Reference J9 F04) at Deadline 4. The Applicant will keep these documents under review and make updates as required in relation to consistency and clarity.
REP3-090.163	160. **REP2-080; para REP1-056.218:** In our Written Representations [REP1-056], we noted that NRW (A) are not included as an ANCB in the requirements / conditions of the DCO and dML. The Applicant has responded that the JNCC is the statutory nature conservation body for the purposes of the deemed marine licence (and is, therefore, the body listed as a consultee for the purposes of the Conditions in Schedule 14 of the draft development consent order (C1 F04)), and NRW (A) do not therefore need to be listed, and no further changes are proposed. The Applicant further notes that NRW MLT is not restricted to only consulting with listed bodies, nor is it restricted from consulting with NRW (A). Please note the response of NRW MLT in section 3 below.	The Applicant has reinstated a definition for "statutory nature conservation body" in the deemed marine licence at Schedule 14 of the Draft DCO (Document reference C1 F05), albeit with square brackets still included. The Applicant has sought input from NRW in respect of the drafting of this definition and is still awaiting confirmation from NRW on this matter. The Applicant would welcome feedback from NRW Advisory or Marine Licencing team in order to provide a suitable update at Deadline 5. In the alternative, the Applicant can reinstate the drafting which was included in the application version of the Draft DCO (APP-023).
REP3-090.164	161. **REP2-080; para REP1-056.219:** We note the response made by the Applicant with respect to the interchangeability of the terminology relating to MLW/MHW cf. MLWS/ MHWS respectively. Please see comments from NRW MLT in section 3.	See response to REP3-090.230.

2.2 Onshore

2.2.1 Designated Landscapes

Table 2.11 REP3-090 – Natural Resource Wales Advisory – Designated Landscapes

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.165	2. Onshore Designated Landscapes 162.The Applicant's comments provided in REP2-080 unfortunately do not change our previous advice. We have sought not to repeat the advice contained in our written representations [REP1-056] and have only commented on matters where we consider additional context or clarifications will be useful to the Inspectors.	The Applicant notes NRW (A)'s comment.
REP3-090.166	163. REP2-080; para REP1-056.225: We welcome confirmation that the Applicant will submit additional cumulative wirelines showing both the Mona Array Area and the Awel-y-Môr Array together, at Deadline 3.	The Applicant provided the cumulative wirelines at Deadline 3 (REP3-046).
REP3-090.167	164. REP2-080; para REP1-056.226: The Applicant's response focuses on the impacts of Awel-y-Môr (if constructed) and considers the Mona Array would be a '*subsidiary and not clearly perceivable distant feature in comparison with the dominating Awel-y-Môr development*'. We advise that at certain locations, such as at Viewpoint (VP) 2: Llanlleiana Head, turbines within the Mona Array would be closer to the viewer, than turbines within the Awel-y-Môr Array i.e. the latter would not be more dominant than the Mona Array at all locations. Further, the Mona Array would result in adverse impacts of its own, introducing large scale wind turbine development into an area of sea unaffected by development, at locations where views out to sea contribute to qualities sought to be protected by e.g. the Isle of Anglesey (IoA) National Landscape (NL) designation. Although the Zones of Theoretical Visibility (ZTV) mapping presented within the Seascape, Landscape and Visual Impact Assessment (SLVIA) is too small to be clearly legible, it appears the Mona Array would be visible at locations where the Awel-y-Môr would not (Figure A.10). Clarity on this matter is restricted by the Applicant's decision not to provide cumulative visualisations from all SLVIA viewpoints and to present the results of the ZTV at a small scale within the SLVIA report.	**<u>Viewpoint 2 – Mona Array Area on its own and together with Awel y Môr</u>** The effects of the Mona Array Area on representative viewpoint 2 (VP2) and other representative viewpoints are assessed in section 8.8.4 of APP-060, Volume 2, Chapter 8: Seascape and visual resources (APP-060). Paragraphs 8.8.4.18 and 8.8.4.19 identify that adverse, albeit not significant (minor to moderate adverse), effects would be experienced by people at VP2 with the change in view being noted as *"Fieldwork and analysis of the visualisation indicates distant visibility of the offshore elements of the Mona Offshore Wind Project occupying approximately 36% (32°) of the 90° HFoV* [less than 10% of the 360° panoramic views available at this viewpoint]*. The wind turbines would be seen at 33.8 km on the horizon as part of the coastal panorama set within a seascape animated by commercial shipping/ferries.* *At this distance the offshore elements of the Mona Offshore Wind Project would be visible in favourable conditions (i.e. very good visibility 20 to 40 km approximately 40%* [see REP3-075] *of the year). The turbines would be difficult to discern (or not visible) at other times of the year."* It should be noted that 33.8 km is the distance to the closest point of the Mona Array Area. The orientation of the Mona Array Area, when viewed from this location is the point of one corner, rather than the widest part the Mona Array Area so much of the infrastructure will be further from the viewer than this single point. The Mona Array would not be a dominant or prominent element when viewed from this location. The Mona Array Area would not be the only offshore wind farm seen on its own from VP2, even if Awel y Môr was not constructed. The existing wind farms further along the coast would be visible in the view, see cumulative wirelines and visualisations submitted at Deadline 3 (REP3-046, REP3-047, REP3-047 and REP3-048). As the Mona Array Area is located in the open sea, it is unscalable, whereas the Awel y Môr turbines are seen in proximity to other turbines and the coast and so would be directly comparable to the existing turbines and scalable, Note: The baseline photography for VP2 (as well as VPs 1, 3, 4, 26 and 55) was retaken on the 19 October 2024, following the ISH3. New photomontages have been produced using this photography and have been submitted at Deadline 4 (Appendix to HAP ISH3_20: Updated Visualisations S_D4_6.2). These new photomontages do not change the assessment of effects for these viewpoints, as the assessment was based on MetOffice 'Excellent' visibility (40 + km) as evidenced by the Applicant finding adverse effects, although not significant, to 50 + km. The character of the seascape within which the Mona Array is located and visible through is not unaffected by development. As well as the existing offshore wind farms there are other developments and dynamic elements in these seas, as noted below. **<u>Zone of Theoretical Visibility</u>** In response to NRW's request, the Applicant has reproduced the Zone of Theoretical Visibility (ZTV) of the Mona Array Area, on a 1:50,000 OS base (S_D4_15) at Deadline 4. Printed copies have been sent out to both NRW and the Examining Authority.

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
		Cumulative Wirelines In response to NRW's request, printed cumulative wirelines were provided to NRW and the Examining Authority at Deadline 3 (Landscape and Visual Resources – Cumulative Visualisations Part 1 to 3 REP3-047, REP3-047 and REP3-048). **Seascape character** In relation to NRW's comment "*Further, the Mona Array would result in adverse impacts of its own, introducing large scale wind turbine development into an area of sea unaffected by development, at locations where views out to sea contribute to qualities sought to be protected by e.g. the Isle of Anglesey (IoA) National Landscape (NL) designation*", it is the Applicant's position that the character of the seascapes in which the Mona Array Area is located/viewed through are not areas of the sea unaffected by development. The full description of the seascapes in which the Mona Array Area is located is set out in APP-100, Annex 8.2: Seascape and landscape character baseline technical report. The following sections provides an overview of the seascape character areas of relevance to the Mona Array Area, see Figure 6.1 in Annex C to this response. The Isle of Anglesey and Eryri Seascape Character Assessment The Mona Array Area lies beyond The Isle of Anglesey and Eryri Seascape Character Assessment (Fiona Fyfe Associates, 2013) Seascape Character Areas (SCA), which only extend to 12 nautical miles (nm) (22.2 km). The closest SCA to the Mona Array Area is SCA28: North-east of Anglesey, which is 6.6 km from the Mona Array Area. The summary description of SCA28 provides information on its character and visibility: *"The SCA is used for commercial fishing including scallop dredging and trawling, and also as a waiting area for large vessels waiting for pilot boats into Liverpool ports. These large vessels are a characteristic feature of this SCA. There are also many wrecks, including wartime losses.* *"Moving northwards* [within SCA 28]*, the coastline of Anglesey becomes difficult to see, but the mountains of Snowdonia remain visible on the southern horizon. The Isle of Man is visible northwards in clear conditions, and the Cumbrian Fells may also be seen to the north-east."* (Fiona Fyfe Associates, 2013). The relevant key characteristics of SCA28 are: *"Commercial shipping seen offshore, including large vessels waiting for Liverpool Pilots.* *Large fishing boats target demersal fish and scallops offshore with smaller potting boats seen closer to the coast.* *Recreational boats seen particularly in the south east of the SCA during the warmer months.* *A number of wrecks can be found in the SCA, including wartime losses.* *The landscape view changes considerably throughout the SCA, with rocky headlands, islets and large bays found to the west and the large shallow opening of Conwy Bay to the east, with a backdrop of the mountains of Snowdonia. Further out to sea the land becomes barely visible but commercial ships are a common sight." (FF 2013, page 136).* The perceptual qualities of SCA28 are: *"The boundary of this SCA comes close to the shore in three places, near the Great Orme, Puffin Island and Points Lynas. These distinctive landmarks (including Point Lynas lighthouse) provide good reference points for orientation.* *The majority of the SCA is open water, with little to no view of land. Large cargo ships and tankers are seen throughout the SCA.* *Large commercial ships and trawlers are present in the offshore areas, with recreational boats and smaller fishing boats more common close to the shore.* *The mountains of Snowdonia are visible in the south east of the SCA as you look into Conwy Bay, bounded by the prominent features of the Great Orme to the east and Puffin Island to the west. In the south west of the SCA the Anglesey shoreline is visible, composed mostly of rocky cliffs and islets broken up by the large bays of Red Wharf Bay, Lligwy Bay and Dulas Bay.* *Mainland barely visible from northern part of SCA, but Isle of Man and Cumbrian Fells can be seen in clear conditions. In the south east of the SCA offshore wind farms can be seen when looking east into Colwyn Bay."* (FF 2013, page 138).

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		'Islands' are not noted as a special quality under pressure for offshore energy or minerals, in 'Forces for Change' (Fiona Fyfe Associates, 2013, page 139), although 'Diversity of landscapes, including coastal landscape features and expansive views' and 'Remoteness, tranquillity and wildness' are. Welsh National Marine Character Areas The Mona Array Area lies beyond The Wales National Marine Character Areas (MCA), which only extend to 12 nm (22.2 km). The closest MCA to the Mona Array Area is MCA04: North Wales Open Waters, 6.6 km beyond. The relevant key characteristics of MCA04 include: *"Dominant maritime character is one of transit: recreational vessels entering or leaving the Menai Strait/Conwy Bay, or commercial vessels passing east and west to and from the Mersey and Dee* *Gwynt y Môr offshore wind farm dominates the east of the MCA, and to the north – access is restricted around the Douglas oil field (marked by a series of lit buoys and shipping lanes depicted on marine charts).* *Commercial shipping seen offshore, including large vessels waiting for Liverpool Pilots to guide them safely into port* *Recreational boats are a feature particularly in the southeast of the MCA during the warmer months"* (APP-100, paragraph 1.3.3.6). The relevant key characteristics of Welsh Marine Character Area MC05: North West Anglesey Open Waters Seascape, 19.8 km from the Mona Array Area, include: *"Glimpses of ferries and the Holyhead harbour breakwater are signs of significant human activity in adjacent MCA 24, while commercial shipping can be seen passing further offshore* *Recreational boats can also be seen in coastal waters during the warmer months* *The box-like form of Wylfa Power Station forms a prominent man-made feature in views to the coast, standing out against a rugged and open coastal scene"* (APP-100, paragraph 1.3.3.6). Seascape Sensitivity Zones The Mona Array Area lies within SSZ 2 and SSZ5. Seascape Sensitivity Zone 2: North East Wales Offshore, description from White 2019, Stage 3 report: *"The zone lies in open sea with the north edge of Gwynt y Môr offshore wind farm located on its south margins and the Douglas oil and gas complex nearby. Beyond this to the south are further offshore wind farms and the northeast Wales coast which has large scale open, relatively straight coastline to the east and embayed coastline with headlands and the distinctive landform of Great Orme to the west. The coast has a high proportion of urban settlement focused on residential and tourism, with caravan and beach holidays to the east and Victorian resorts with associated promenades mainly to the west"* (APP-100, paragraph 1.3.4.5) Seascape Sensitivity Zone 5: North Wales and Anglesey Outer Offshore, description from White 2019, Stage 3 report: *"The area lies in open sea at least 44km offshore from the Anglesey, North Wales and Llŷn peninsula coasts although the zone's northern edge is located around 22 km from the Isle of Man. To the southeast there are the existing arrays at Gwynt y Môr and further arrays lie to the northeast including Walney and West of Duddon Sands. Anglesey predominantly has a low plateau topography and rocky coastline with a distinctive high point at Holyhead Mountain. Development out to sea would be largely unscaled in views. More elevated views are possible north from the north Wales coast at Great Orme and Conwy Mountain...The sea is open and exposed with commercial vessels running inshore from this zone to and from the Mersey ports, and ferries issue from Holyhead's busy harbour"* (APP-100, paragraphs 1.3.4.12 and 1.3.4.13). In summary, the views from the north coast of Wales are views of a sea which is both affected by static development as well as dynamic marine vessels. Both SSZs in which the Mona Array Area is located are noted as having low/medium sensitivity to offshore wind development. As described above and in the Applicant's earlier responses, the Mona Array Area is in an area of open sea, away from the coast, in offshore and outer offshore waters, not seen in relation to scalable development/objects. The Awel y Môr turbines (if constructed) will lie in inshore waters, adjacent to the coast and are easily scalable.

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		Although the closest point of the Mona Array Area is closer to the viewer than the closest Awel y Môr turbines at this viewpoint, the 'point' of the Array faces this viewpoint, rather than the wider 'side' of the array (as described above).
REP3-090.168	165. Whilst we are not clear on what the Applicant means by '*clearly perceivable'*, we advise people at the viewpoints referred to in our previous advice (e.g. VP 2: Llanlleiana Head, VP 3: Mynydd Eilian, VP 24: Bull Bay, Amlwch, VP 25: Moelfre Headland, VP 28: Penmon Point, VP 55: Trwyn Eilian, will be able to see the Mona Array and will be aware of its impact on their views. Visibility is addressed in more detail in response to other comments below.	The Applicant agrees that the Mona Array Area will be visible from all the representative viewpoints. The Applicant has made an assessment based on a realistic worst-case, i.e. the MetOffice 'Excellent' visibility conditions (40+ km) this is evidenced by the Applicant finding adverse effects out to 50+ km (although not significant). The effects of the Mona Array Area on people using the Wales Coast Path are set out in paragraph 8.8.3.2 *et seq.* of Volume 2, Chapter 8: Seascape and visual resources (APP-060) which includes those viewpoints (VPs, 2, 25, 28, 9, 40 and 34) referred to by NRW in their response, and acknowledges that people at these locations will have views of the Mona Array Area. In describing the effects, paragraph 8.8.3.8 of APP-060 finds that *"At approximate distances of 30 km (and up to 40 km) the offshore elements of the Mona Offshore Wind Project would be visible in favourable conditions (i.e. very good visibility 20 km to 40 km approximately 40%* [see REP3-075] *of the year)."* Paragraph 8.8.3.9 of Volume 2, Chapter 8: Seascape and visual resources (APP-060) finds that *"At distances over approximately 40 km, the offshore elements of the Mona Offshore Wind Project would only be visible in the most favourable conditions (i.e. excellent visibility >40 km approx. 28% of the year). The wind turbines would be difficult to discern (or not visible) at other times of the year."* The significance of the visual effects of the Mona Array Area at the representative viewpoints along the Wales Coast Path vary between negligible to minor, and minor to moderate, depending on context and the overall evaluation of the LANDMAP Visual and Sensory Aspect Area they are passing through. While visible from some directions, the Mona Array Area would not be a prominent element in views gained from the Wales Coast Path. These effects are not significant. The overall significance of effect for people using the Wales Coast Path is minor to moderate adverse (Volume 2, Chapter 8: Seascape and visual resources (APP-060), paragraph 8.8.3.14). The Applicant highlights that minor to moderate adverse effects are considered not to be significant as discussed during ISH2 and subsequently agreed with NRW in a recent SoCG meeting (8 October 2024).
REP3-090.169	166. Regarding views from the Wales Coast Path, the Applicant implies that views would be unaffected if the viewpoint is located beyond 30km from the Array. We disagree, and advise it does not correspond with the statement made throughout the SLVIA that '*At an approximate distance of 35-40 km the offshore elements of the Mona Offshore Wind Project would be visible, near the coast, in favourable conditions (i.e. very good visibility 20 to 40 km approx. 70% of the year).*'[1]. Offshore wind turbines with a maximum blade tip height of 364m would be visible and recognisable at viewpoints located at distances of 30km and beyond. Additionally, it is reasonable to assume that more people would be visiting the Anglesey coast and walking on the Wales Coast Path during periods of settled weather when visibility is likely to be at its best.	
REP3-090.170	167. REP2-080; para REP1-056.228: We advise the low visibility areas referred to by the Applicant relate to visibility of the surface of the sea, not of structures above the surface of the sea. The proposed wind turbines would have a maximum blade tip height of 364m above the surface of the sea at lowest astronomical tide.	Visibility of the sea The Mona Array Area is in an area of the sea with the lowest visibility, as shown on Figure 4.4: Viewshed intervisibility of the sea from land (White Consultants, 2020) which illustrates the degree of sea viewed from land. This figure (as well as Figure 4.3 and Figure 4.5 in White Consultants, 2020) *"help inform the relationship between land and sea and the description of the seascape/marine character areas."* (White Consultants, 2020; paragraph 4.17). The Mona Array Area is located in an area of the sea that has the lowest visibility of all the Welsh territorial waters, it follows that it is also an area of the sea where the wind turbines are viewed from the least places along the coast. The Applicant does not seek to infer from Figure 4.4 (of White 2020) that the Mona wind turbines cannot be seen, simply that were the wind turbines located elsewhere, e.g. between headlands or in a bay, they would be visible from more locations along the coast.
REP3-090.171	168. We disagree the Mona Array Area would occupy only a limited field of view at all viewpoints within the IoA NL and Eryri National Park (ENP). For example, at Viewpoint (VP) 55 Trwyn Eilian (Point Lynas) the SLVIA reports the Array would occupy a horizontal field of view (HFoV) of 35° which we do not consider to be 'limited'. It would occupy over 30° within the HFoV at other viewpoints within the IoA NL including, for example, at VP2 Llanlleiana Head, VP3 Mynydd Eilian, VP24 Bull Bay, VP25 Moelfre Headland, and VP26 Yr Arwydd Tri Point.	<u>Available views</u> All the representative viewpoints in the IoA NL and the Eryri NP, and agreed with statutory consultees, are 360° panoramas. The Mona Array takes up less than 10% of these views. People at these locations will not only be looking in the direction of the Mona Array Area.
REP3-090.172	169. In relation to the Applicant's comments on aspects of the landscape which attract attention, we advise the rotation of turbine blades and the location of a large scale wind turbine development visible on the horizon in an area of sea which is or would otherwise be empty, will also attract attention and draw the eye.	<u>Turbine movement</u> The Applicant notes that published characterisations for the seascape sensitivity zones and intervening marine character areas/seascape character areas (refer to the Applicant's response to REP3-090.167 above for a summary description of these) include descriptions of marine vessels/traffic and other developments, including offshore wind farms. The Applicant also notes that one of the studies that comments on the visibility of blade movement is Sullivan *et al* (2013), which states that turbine blade movement can be visible with concentrated viewing at distances of up to 39 km. In addition, as noted above, at the locations of the agreed representative viewpoints in the IoA NL and Eryri NP, 360° views are available. The Mona wind turbines will be seen in the context of other moving elements, as well as the natural movement of the viewers' immediate surroundings, including the sea and (in most weather conditions) sky, therefore rotation of wind turbine blades will not be the only movement in the view.

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REP3-090.173	170. REP2-080; para REP1-056.230: It is not clear why the Applicant considers that, in the case of the Mona Array, there is 'no appropriate and reliable visualisation technique available to illustrate accurately the proposed development alongside the existing and consented cumulative context'. We advise cumulative wireframes do this, and relevant guidance on visualisation techniques is provided in the NatureScot guidance on the Visual Representation of Wind Farms[2].	The Applicant notes that all visualisation techniques have their limitations and should be used bearing these limitations in mind. NatureScot's Visual Representation of Wind Farm Guidance Version 2.2, (NatureScot, 2017) acknowledges these limitations. The Mona visualisations have been produced in line with this guidance. Additional cumulative wirelines have been provided at Deadline 3 (REP3-046). Hard copies have also been sent to the ExA and NRW (A).
REP3-090.174	171. The Applicant's reference to the NatureScot guidance (regarding the distance of 20km) omits the qualification contained in that guidance that this distance only relates to '*turbines up to 150 metres high to blade tip*'[3]. The proposed turbines are more than twice this height and therefore the point made in the guidance regarding 20km is not applicable to the Mona Array. The guidance states that '*For turbines larger than 150m the distances should be discussed with SNH*'[4].	The Applicant notes that although both visualisation techniques (photomontages and wirelines) have their limitations (see Volume 6, Annex 8.4: Seascape, landscape and visual resources impact assessment methodology (APP-104), section A.1.6), they remain the main illustrative tools (Landscape Institute and Institute of Environmental Management and Assessment, 2013) used in SLVIA. The Applicant has followed the current available NatureScot guidance in the production of visualisations. However, all visualisations (both wirelines and photomontages) should be used bearing in mind their limitations. The Applicant notes, taking into account the distance factor, the NatureScot guidance that visualisation production is most effective within 20 km of the development. Photomontages are 2D images and when depicting development beyond this distance, the loss of depth / perspective, limit the judgement of distance. A wind farm consists of turbines at different distances but on a wireline the closest and the furthest turbine are shown in the same intensity of colour which is not how they would be perceived by the human eye. The use of wirelines in flat landscapes, especially in relation to open sea plains, has one particular disadvantage, which is the lack of reference features, which would provide the viewer with a sense of distance or scale of the development. In addition, the scale of the seascape and the depth of the view is lost by the cropped foreground and sky on these 2D images. The Applicant agrees that some of the photography is not up to the highest standard, despite visiting representative viewpoints on several occasions, however, this is a small number of images out of a large number of viewpoints and this has not affected the assessment process, as verification in the field was undertaken, over a period of two years, in different seasons and different weather conditions, i.e. the SLVIA is not only based on the representative viewpoints. Further photography was taken on 19 October 2024, following Issue Specific Hearing 3, at offshore VPs 1, 2, 3, 4, 26 and 55. Photomontages from these representative viewpoints have been undertaken and are included in Visualisations for Viewpoints 1, 2, 3, 4, 26 and 55 (Appendix to HAP_ISH3_20: Updated Visualisations S_D4_6.2 and 6.3).
REP3-090.175	172. The Applicant states that '*NatureScot admits that wirelines may be relatively unhelpful in flat landscapes*'. We advise the paragraph and text the Applicant is referring to is irrelevant to the Mona Array because it relates to '*Smaller scale wind farm proposals (up to 3 turbines) and single turbine applications*'[5]. Furthermore, the relevant section of that guidance titled '*Wirelines for offshore wind farms*' states '*The use of wirelines is especially useful in offshore visualisation where producing photomontages may be very difficult, and these will replace photomontages in some instances*'[6] (our emphasis). In relation to our written submission comment (REP1-056.230), we advise that as set out in the NatureScot guidance, 'Practitioners should aim to prepare visualisations representing the specific time of day and season when there is optimum visibility and clarity'[7] (our emphasis). This is not the case with the Applicant's photomontages from, for example, VP 55 Trwyn Eilian (Point Lynas), where the images are adversely affected by mist. As also set out in that guidance, 'A key factor is achieving sufficient contrast between the sky and the sea so that the horizon is clear'[8]. This is not the case with a number of the Applicant's photomontages, including VP 55. Therefore, a number of photomontages submitted by the Applicant downplay the effects of the development compared to optimum conditions.	
REP3-090.176	173. We do not agree with the Applicant's statement that there is no visualisation guidance for offshore developments at considerable distance from the coast. The NatureScot guidance on the Visual Representation of Wind Farms is applicable to this development proposal. It contains a chapter specifically on offshore wind farms (Chapter 5) and separately recognises that 'Wind turbines can be visible at considerably greater distances than 30km'[9].	
REP3-090.177	174. REP2-080; para REP1-056.231: The Applicant's comment does not correspond with their comments under REP1-056.225, where they state they will be providing further cumulative visualisations which show the Mona Array and Awel-y-Môr Array.	Additional cumulative wirelines have been provided at Deadline 3 (REP3-046). Hard copies have also been sent to the ExA and NRW (A).
REP3-090.178	175. REP2-080; para REP1-056.232: It is not clear what the Applicant means by 'association' but we advise the development would be seen in the same views as the coastline and coastal features, including from locations within the IoA NL e.g. VP 1. Furthermore, a seascape is not experienced through static or fixed views, but rather from a combination of views over time. For example at VP 2 Llanlleiana Head, dramatic cliffs are viewed in the wider context of distant views out to sea. Both aspects contribute to the experience of the seascape, and the outstanding scenic and perceptual qualities at this location within the IoA NL.	The focus point in sea views is explained in Guide to Best Practice in Seascape Assessment (Hill *et al*., 2001; Figure 2.2 and Figure 2.3). While many parts of the sea may be part of the view, the focus point is where the land and sea horizons join and therefore is the more visually sensitive part of the view. The location of the Mona Array Area in the open sea plain (sited in Seascape Sensitivity Zones 2 and 5), does not compromise this focus point in any of the agreed representative viewpoints.
REP3-090.179	176. It is not clear from the Applicant's submission what they consider to be the 'limit of negligible effects'. It would be helpful if this could be confirmed.	The definitions of significance of seascape/landscape and visual effects are set out in Table 1.15 of Volume 6, Annex 8.4: Seascape, landscape and visual impact assessment methodology (APP-104).
REP3-090.180	177. REP2-080; para REP1-056.233: The Applicant states the Mona Array Area 'adheres to following good design principles which are set out in the Stage 2 report of Seascape and visual sensitivity to offshore wind farms in Wales (White Consultants, 2019)' and they list the headline principle of it being 'located far away from the coastline/ landscape designations'. This is a fundamental principal for the mitigation of offshore wind turbines.	The Applicant refers to its position outlined in Hearing Summary (ISH3): Environmental Matters item 73 (S_D4_2) regarding the siting of the Mona Array Area.
REP3-090.181	178. We advise the Mona Array does not adhere to the third principle outlined in the Stage 2 Guidance on Siting Offshore Windfarms [10] which states '*Locate development particularly away from coastal landscape designations*' and that development should be located '*beyond the limit of negligible visual effects, particularly for the highest sensitivity National Parks/AONBs overlaid with Heritage Coasts*'. The north coast of the IoA NL is one such high sensitivity receptor, being a National Landscape overlaid with Heritage Coast. With regard to	The Applicant refers to its positioned outlined in Hearing Summary (ISH3): Environmental Matters (S_D4_2) item 73 regarding the siting of the Mona Array Area. The Applicant also notes the advice given by CCW (now NRW) in Welsh seascapes and their sensitivity to offshore developments (Briggs and White, 2009; Appendix 1, page 252). *"It is a false concept to take a set distance as a cut off point for visual significance, as this can imply a step change in significance between just short and just beyond the set distance. Observation of offshore wind farms that have*

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	the Stage 1 Guidance on Siting Offshore Windfarms, we advise the buffer distances for a low magnitude of effect for turbines between 300-350m tall (the tallest considered in the study) is 44km[11]. The Mona Array is located closer to the IoA NL than 44km, and at its closest is 29km. It therefore fails to adhere to the third principle aforementioned. The Guidance explains that '*Low magnitude buffer distances are an indication that there is a likelihood that there are no significant effects on a high sensitivity receptor for the size of wind turbine at, or beyond, the distance stated.*' [12] i.e. beyond 44km.	*been built in recent years around the UK show how perspective can shorten our perception of distance, so that a turbine say 10 km away and another, say 12 km away, may in some views appear only a short distance apart."* *"Instead, a more sophisticated approach would be a relative lowering of visual significance with increasing distance. With this, the exact distance at the outer limit can only ever be a general line, and siting and design issues based on moving a development just a short distance are somewhat academic."*
REP3-090.182	179. REP2-080; para REP1-056.234: For the reasons states in our written representations, we disagree with the Applicant's position that the Mona Array would not affect special qualities of designated landscapes or visual amenity.	The Applicant is currently in discussions with NRW on the Statement of Common Ground (SoCG) on SLVIA matters and notes that this matter is not currently agreed between the Applicant and NRW.
REP3-090.183	180. In relation to designated landscapes, the Applicant states the effects would be '*indirect and only perceptual*'. The receptors being assessed are a National Landscape with Heritage Coast and National Park, where perceptual qualities relate to the reason for these landscapes being protected, i.e. their outstanding natural beauty and the importance nationally of this being conserved. Effects on perceptual qualities are no less important than effects on other valued aspects of a designated landscape, and should not be dismissed.	The special qualities, including those that are perceptual qualities, of the nationally designated landscapes have been assessed, see Applicant's response to NRWs in row REP3-090.179, above.
REP3-090.184	181. REP2-080; para REP1-056.322: The Applicant quotes from the Offshore Energy SEA 4: Environmental Report[13] (shortened to OESEA4), listing factors which may limit visual perception from the coast including atmospheric / meteorological conditions (haze, precipitation, fog). However, the quotation is incomplete and omits the critical text which states these factors should be taken '*as context only*' and that '*Project level assessments are required to take a precautionary approach, and therefore base conclusions on the maximum possibly visibility*'[14] (Our emphasis). Elsewhere, the Offshore Energy SEA 4: Environmental Report states that '*impact assessments relating to visibility must assume conditions free from meteorological factors that could limit visibility, even if these are on the majority of days per year, to reflect a worst case impact*'[15] (Our emphasis). It appears from the Applicant's comments that the SLVIA has not done this because they state the '*magnitude of impact from the Mona Array on the IoA NL took account of the following factors*' inter alia 'atmospheric conditions' including '*air clarity, air humidity, the background cloud cover, haze*' which vary over time and can reduce visibility compared with a maximum visibility scenario.	The Applicant is currently in discussions with NRW on the Statement of Common Ground (SoCG) on SLVIA matters and notes that this matter is not currently agreed between the Applicant and NRW.
REP3-090.185	182. The Applicant states 'Seascapes are hugely altered by weather conditions, to a far greater extent than any terrestrial, rural or urban environment'. It is not clear what the Applicant means, but we assume they mean that, 'light quality and weather conditions change more rapidly and are more variable than onshore'[16], as explained in the NatureScot guidance on Visual Representation of Wind Farms. We also advise that the NatureScot guidance states that 'In general terms, given good meteorological conditions, visibility is higher on the coast than inland'[17] (Our emphasis).	The Applicant refers to Hill *et al*. (2001); section 2.3 *"In these latitudes* [the seas around Wales and Ireland] *seascapes are altered hugely by the weather to a far greater extent than any terrestrial, rural or urban environment."*
REP3-090.186	183. In relation to the specific bullet points made by the Applicant referring to OESEA4, we advise: The visibility referred to relates to the surface of the sea, not of objects above the surface of the sea. The study specifically recommends that Met Office data is used. Further, the Stage 1 Guidance on Siting Offshore Windfarms, states that the Husar and Husar, 1998 Study '*appears to be countered by published Meteorological Office data below which indicate that visibility can exceed 35 km, albeit on limited days of the year*'.[18] On our own site visit we were able to see and distinguish 150m tall wind turbines within the Gwynt y Môr Array from Penmon Point at a distance of approximately 29km, and therefore we do not accept that 26km is the 'maximum visual range'. Furthermore, the Husar and Husar study noted the number and form of objects inter alia will vary the distance quoted. See further evidence on this matter below under our comments in relation to the research carried out by Sullivan et al. As highlighted by the Applicant, based on the meteorological data collected at Rhyl (for the period between 2008-2017) referred to in the Offshore Energy SEA 4: Environmental Report, turbines are expected to be visible from viewpoints along the north coast of the IoA NL for a significant number of days each year with the distance of visibility being '*26 to 30 km for 47.9% of days, and at 35 km for 27.9% of days*'. Further, we note the more recent meteorological data collected at Rhyl for the period between Jan 2012 to Dec 2021 (appended to the Applicant's SLVIA[19]) shows visibility at Rhyl was greater than 26km almost 60% of the time and greater than 35km approximately 40% of the time.	The Applicant refers to its response to NRW in row REP3-090.167, above. The SLVIA is not based on a distance of visibility of 26 km. The assessment has been undertaken on a realistic worst-case (i.e. the MetOffice's definition of 'Excellent' visibility, which is 40+ km). This is evidenced by the Applicant finding adverse, but not significant effects out to 50+ km, barring one significant cumulative effect. However, the Applicant considers that at this distance the wind turbines would not be clearly distinguishable objects (see CCW, 2009; Appendix 1, page 253 and 254).

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.187	184. We also advise that other guidance prepared by NatureScot, namely 'Siting and Designing Wind Farms in the Landscape', explains that '*Wind turbines of between 100 – 150m can be visible at distances of up to 40 or 50km in some conditions*'[20]. NatureScot guidance on the Visual Representation of Wind Farms also states that '*Wind turbines can be visible at considerably greater distances than 30km*'[21].	The NatureScot guidance on visibility relates to conditions in Scotland, which many sources including CCW (2009; Appendix 1, page 254) and White Consultants (2020; paragraph 9.5), agree has higher air quality (clearer conditions) than that of England and Wales.
REP3-090.188	185. The Applicant's comment regarding 'very good visibility 20km to 40km' occurring on approximately 40% of the year does not correspond with the SLVIA, which repeatedly states in relation to visibility of the Mona Array from the coast, that it would be visible during very good visibility of between 20km to 40km, and that this would occur 70% of the year[22].	The Applicant refers to the Mona Errata (S_PD_1 F04) for Volume 2, Chapter 8: Seascape and visual resources (APP-060)) which has corrected the % of annual visibility to 40% of the year within the Volume 6, Chapter 8: Seascape and visual resources (APP-060).
REP3-090.189	186. The '*Review and Update of Seascape and Visual Buffer study for Offshore Wind farms*' prepared by White Consultants, 2020, refers to independent research undertaken by Argonne National Laboratory and the University of Arkansas titled: '*Offshore Wind Turbine Visibility and Visual Impact Threshold Distances*'[23]. This research was undertaken because '*Past assessments of offshore wind turbine visibility were based on smaller turbines and facilities in use at the time and underestimate visibility for current projects, which use more and larger turbines'*. It was based on a review of existing offshore wind farms in the United Kingdom, with assessments undertaken through naked-eye observations of turbines in the field. It concluded that:	The Applicant refers to its positioned outlined in Hearing Summary (ISH3): Environmental Matters item 73 (S_D4_2) item 73 regarding the siting of the Mona Array Area. The Applicant's SLVIA found that there would be adverse, not significant, effects experienced by the resources and receptors resulting from the Mona Array Area alone, to distances of 50+ km, barring one cumulative effect within the Eryri NP. In relation to thresholds, the Applicant refers to its response to REP3-090.181 above. <u>Turbines in the wider sea plain</u>The Mona Array Area is in the open sea plain, with no human-scale elements adjacent to it. The SSZ 5 description notes that within the SSZ *"Development out to sea would be largely unscaled in views."* Scalability is defined in DTI 2005 (page 26) as *"Where there is little or no indication of depth in a landscape or seascape, the properties of distance, scale and dimension may become less distinct. One of the fundamental qualities of the sea is that being devoid of 'scalable' features like buildings or trees, it is very difficult to judge distance to a point in the sea."* Hill *et al*. (2001; section 2.4) sets out the difficulties of scale and distance: *"In contrast to a landscape, a large water surface is roughly all of the same appearance. It offers few clues to help us to judge how far away a particular point in the water lies. Distances are particularly difficult to judge when looking out to sea.* *"Differing levels of visibility derived from atmospheric conditions further complicate the issue. Even in apparently clear summer conditions the atmosphere can obscure distant objects. In mist or haze their colour and sharpness is altered and this can confuse observers as to distance and scale. On indented coasts with bays and islands it may be easier to judge distance and size but only if the adjoining land offers clear clues as to scale. Typically houses and fields on the land, and boats or ships on the sea will assist, but where they are absent it can be very difficult to assess scale and distance when looking at rocks or undeveloped islands or the open sea.* *"It follows that objects of an unfamiliar appearance may be scaled incorrectly at sea. Oil or gas rigs, unusual vessels, or offshore wind turbines may fall into that category."* <u>Visual acuity</u> Hill *et al*. (2001; section 2.4) sets out the difficulties of scale and distance, one of which is visual acuity: *"It is worth bearing in mind that there is a limit to the acuity of the human eye. At a distance of 1 km, in conditions of good visibility a pole of 100mm diameter will become difficult to see, and at 2km a pole of 200mm diameter will similarly be difficult to see. In other words there will be a point where an object whilst still theoretically visible will become too small for the human eye to resolve. Mist, haze, or other atmospheric conditions may significantly exacerbate that difficulty."* Appendix 1 of CCW (2009, page 254) provides further evidence on the matter of visual acuity in a series of photographs from boat to shore, noting that at 15 km the Earth's curvature hides low-lying land leaving just hills and showing little other detail. CCW (2009; page 353) notes that *"Views from Wales to the Isle of Man, the Cumbrian Fells, Ireland's Wicklow Hills and theoretical visibility to Scotland are remarkable. However, these are land masses whose bulk is incomparably greater than even the most massive man-made structures (certainly more so than the modelled scenarios), placed at a somewhat closer distance."* A precautionary approach has been taken using a 50 km visibility range for visual receptors in non-nationally designated landscapes and a 60 km visibility range for visual receptors within nationally designated landscapes.
REP3-090.190	187. 'Results showed that small to moderately sized facilities were visible to the unaided eye at distances greater than 42 km [26 miles (mi)], with turbine blade movement visible up to 39 km (24 mi). At night, aerial hazard navigation lighting was visible at distances greater than 39 km (24 mi). The observed wind facilities were judged to be a major focus of visual attention at distances up to 16 km (10 mi), were noticeable to casual observers at distances of almost 29 km (18 mi), and were visible with extended or concentrated viewing at distances beyond 40 km (25 mi)'.	
REP3-090.191	188. It is crucial to note the above distances related to the review of existing offshore wind farms in the United Kingdom, all with significantly smaller turbines - all less than half the height - of those proposed as part of the Mona Array24, and therefore the distance at which turbines within the Mona Array would remain a focus of visual attention or be noticeable to the casual observer would be greater. Also, only 2 of the 29 assessment viewpoints used in the research were within a coastal designation (NP or AONB) where interest and attention on seascape is typically heightened.	
REP3-090.192	189. Furthermore, in the commentary on the aforementioned research, White Consultants, states that '.. the term 'noticeable' at distances up to 29km is an indicator of moderate magnitude which is likely to have a significant effect on sensitive receptors.'25 Again, this related to the examination of the impacts of significantly smaller wind turbines than proposed in the Mona Array.	
REP3-090.193	190. The Applicant characterises the turbines as '*slim vertical structures*'. Wind turbines are not only slim vertical structures. They have rotating blades, and in the case of the proposed turbines, these would have a maximum diameter of 320m. Whilst evidently different in form and character, we advise the diameter of the proposed blades is longer than the Shard building is tall (310m).	
REP3-090.194	191. REP2-080; para REP1-056.323: We understand from the Applicant's comments that judgements reached in the SLVIA are influenced by factors such as atmospheric conditions which would impact visibility at certain times, and therefore they have taken a different approach to that required by the Offshore Energy SEA 4: Environmental Report i.e. which requires assessments to take a precautionary approach and base conclusions on the maximum possibly visibility.	

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.195	192. The Applicant states 'Based on the field survey the Applicant notes that at a distance of 30 km it would be difficult to discern the blade movement of turbines'. During our site visit we were easily able to discern wind turbines within Gwynt y Môr from Penmon Point at a distance of approximately 29km. Turbines within Gwynt y Môr are significantly smaller (at 150m tip height) to those proposed as part of the Mona Array (364m tip height), and it is expected the rotation of 320m diameter blades – across multiple turbines of the Mona Array - would easily be discernible from viewpoints at 30km distance. Furthermore, research by Sullivan et al26, aforementioned, found that when existing offshore wind farms around the United Kingdom were examined with the naked eye (all of which contained substantially smaller turbines than those proposed within the Mona Array), that:	The Applicant refers to its position outlined in Hearing Summary (ISH3): Environmental Matters (S_D4_2) section 5. In addition, the Applicant is currently in discussions with NRW on the Statement of Common Ground (SoCG) on SLVIA matters and notes that this matter is not currently agreed between the Applicant and NRW.
REP3-090.196	193. 'Turbine blade movement was visible at distances as great as 42km (26 mi) in 42 of the 49 daytime observations … and was observed routinely at distances of 34 km (21 mi) or less. Contrary to expectations, lighting conditions, sun angle, and apparent contrast between the turbines and the sky backdrop did not substantially affect the likelihood of observing blade motion; blade motion was visible at distances beyond 30 km (19 mi) regardless of sun angle, lighting conditions, or contrast levels. Again, these distances are greater than those reported in previous studies'27.	
REP3-090.197	194. We disagree the Mona Array would appear as a '*barely discernible distant feature*', particularly during very good to excellent visibility when turbines along the southernmost part of the Array would be clearly visible, and would be an obvious detractor within views of the sea, particularly from the northern coastline of the IoA NL.	
REP3-090.198	195. REP2-080; para REP1-056.324: We note the Applicant's comments regarding the need to consider the relationship of the proposal to the coastline and coastal features. Also relevant is the need to consider that views out to sea are highly valued within a coastal National Landscape / AONB (also overlain by Heritage Coast), and that views out to sea provide the setting to valued coastal features. The Stage 2 Guidance on Siting Offshore Windfarms states in relation to AONBs and Heritage Coast that '*Visual receptors within these areas, such as users of the Coast Path, are likely to be particularly sensitive to views out to sea'28.* Further, it is not one view or an isolated series of views out to sea that will be affected, but views along a significant portion of the north coast of the IoA NL where the scheme would (notwithstanding other variables) become a constant feature – compounding the overall awareness and impact of the scheme, including on the perception of the character of the seascape setting to the IoA NL.	
REP3-090.199	196. REP1-056.330: We note the Applicant's response is intended to explain how the three 'White Reports'29 (commissioned by NRW) were taken into account as part of the Mona SLVIA. However, the explanatory text repeatedly refers back to the Offshore Energy SEA 4: Environmental Report, and whilst it acknowledges the buffer distances identified in the 'White Reports' (44km for turbines between 301-350m) it does not acknowledge that the Mona Array breaches those distances (at its closest it is 29km from IoA NL). Those distances are derived from an evidence based approach and inform an understanding of the likely magnitude of change that different sizes of offshore wind turbines would have. The specific purpose of which is to understand how to avoid significant adverse effects on 'high sensitivity coastal visual receptors' within National Parks and National Landscapes / AONBs.	The Applicant refers to it position outlined in Hearing Summary (ISH3): Environmental Matters (S_D4_2) regarding the siting of the Mona Array Area.
REP3-090.200	197. The distances used in the White Reports are intended as a guide. We note the Applicant does not agree with the findings of the Guidance on Siting Offshore Windfarms, preferring text within the Offshore Energy SEA 4: Environmental Report. We note the latter refers to the relevance of the distances included in the 'White Reports' for Welsh Waters, in which Mona Array is located, where it states:	
REP3-090.201	198. 'White Consultants (2020a) considered the thresholds of average low magnitude of effect detailed above to indicators for minimum thresholds as it is considered that effects could still be significant at around these distances for high sensitivity receptors. It is noted that the difference in these thresholds of effect compared to the similar exercise undertaken for Wales (NRW 2019) are due to fewer wind farms being considered and a slightly different basis for the assessment. For the purposes of OESEA4, it is considered that those values in NRW (2019) are relevant to Welsh waters and that those presented in White Consultants (2020a) are relevant to English waters. While the analysis in White Consultants (2020a) included wind farms in Scottish waters, this area is not covered by the draft plan/programme'30 (Our emphasis).	The Applicant's position on White Consultants (2019) remains as set out in its response to NRW's Relevant Representations, paragraph 1.2.3.7 of PDA-12. Please refer to Volume 7, Annex 8.4: Seascape, landscape and visual resources impact assessment methodology, paragraph 1.4.1.3 (APP-104), as well as the Applicant's response to the Ex.A Q1.20.3 in Table 2.20 Seascape and visual resources in relation to the use of thresholds set by wireline analysis and also to its response to NRW 178, above, in relation to setting thresholds per se. Please refer to the Applicant's response to NRW 186, above in relation to scalability in the open sea-plain. The Applicant is unclear why the distance thresholds for significance for the East Irish Sea in Welsh territorial waters (as set out in White Consultants (2019)) are different to those in adjacent English territorial waters in the East Irish Sea (as set out in DBEIS, 2022).

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.202	199. We note the reference to the sensitivity of seascape character areas identified in the 'Seascape and visual sensitivity assessment for offshore wind farms' study31 and specifically Zone 2 in which the Mona Array would be located, which is identified in the study as having medium/low sensitivity to wind farm developments32. We advise the analysis and evaluation of Zone 2 omitted consideration of the IoA NL (Refer to specific analysis which begins at page 40). It is based entirely on the relationship of Zone 2 to the seascape and land directly south of Zone 2, and the existing detractors within this area. In contrast, the evaluation of Zones 3 and 4 did consider the sensitivity of the IoA NL and as a consequence, found these areas have a higher sensitivity to offshore wind turbine developments (High and Medium sensitivity respectively). Moreover, receptors which are cited as being particularly sensitive within Zones 3 and 4, are the same receptors that will be impacted by the Mona Array in Zone 2 (e.g. '*Particularly sensitive receptors on Anglesey include users of Penmon Point, Red Wharf Bay and Holyhead Mountain and the coast has some tranquillity and remoteness especially towards the north*'33). In the case of Penmon Point and Red Wharf Bay, Zone 2 is the same distance from these receptors as Zone 4.	The Applicant notes that NRW is appearing to seek to correct an 'error' in its guidance (White Consultants, 2019a). The Applicant is not aware of such a correction being issued by the authors of this document. The Applicant has followed the published description of the seascape sensitivity zones, in which SSZ 2: North East Wales Offshore is a clearly defined (and named) area of the sea. Separate from SSZ 3 North Wales and North Anglesey Inshore, and SSZ 4 North Wales and North Anglesey Offshore, which are adjacent to and/or directly related to the Isle of Anglesey. SSZ 2 North East Wales Offshore, is a different part of the East Irish Sea and, as its name implies, has a closer relationship with the eastern part of north Wales. White 2019, Stage 3 Report clearly defines it from SSZ 3 and SSZ 4, as it has a different character to those SSZs, including different elements that influence that character. The Applicant's assessment of the effects of the Mona Array Area on visual receptor groups is in section 8.8.3 of Volume 2, Chapter 8: Seascape and Visual Resources (APP-060). The Applicant's assessment of the effects of individual representative viewpoints is at section 8.8.4 of Volume 2, Chapter 8: Seascape and Visual Resources (APP-060). The assessments include a summary of the visual baseline and a description of visual change. The sensitivity of seascape, landscape and visual resources and receptors vary throughout the nationally designated landscapes, see Applicant's response to NRW 166.
REP3-090.203	200. Crucially, the study considered how turbines within specific height bands may alter the level of visual susceptibility of each Zone, and in relation to Zone 2, the study notes that '*Turbines 300-350m would be likely to exceed low magnitude of effect*'34 and therefore it is implied that Zone 2 has a greater level of sensitivity to turbines in this height range than turbines in the other height ranges considered in the study (i.e. 107-145m, 146-175m, 176-225m, 226-300m, 301-350m). Noting the maximum blade tip height of turbines proposed within the Monay Array (364m) exceeds this height band.	
REP3-090.204	201. REP2-080; para REP1-056.332: The 35 km 'theoretical limit to visibility' used in the National Seascape Assessment for Wales (2015) was defined in relation to visibility of the sea surface and horizon at different elevations, and the additional computer processing required if this distance was increased above 35km. It is not intended to imply that 35km is the limit of visibility of offshore wind farms.	The Applicant recognises that 35 km is not the limit of visibility for offshore wind farms, hence the study area for the Mona Array Area is 50 km from the outer edges of the Mona Array Area and within nationally designated landscapes it is 60 km. The extended area within nationally designated landscapes is due to the potential for higher sensitivity receptors, which might result in a higher significance of effect.
REP3-090.205	202. REP2-080; para REP1-056.354 to REP1-056.360: We welcome the clarification that – in relation to the SLVIA - the Applicant considers that moderate effects could either be significant or not significant. This appears to be a change from the statement in the SLVIA methodology that only 'substantial or major' effects or 'an accumulation of moderate effects' would be deemed significant in EIA terms for the purpose of the SLVIA35. We also assume therefore the Applicant agrees that Major/moderate adverse effects are expected to be significant.	The Applicant is currently in discussions with NRW on the Statement of Common Ground (SoCG) on SLVIA matters and notes that this matter is not currently agreed between the Applicant and NRW.
REP3-090.206	203. The Applicant states 'In most cases an effect of moderate is most likely not to be significant, in accordance with GLVIA3 (Landscape Institute, 2013), DTI (2005) and White Consultants (2020)'. We are not aware of a statement in the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLIVA3) which supports the Applicant's comments. The 'Seascape and visual sensitivity to offshore wind farms in Wales: Strategic assessment and guidance' study prepared by White Consultants states that 'Research and guidance indicate that a moderate effect can potentially be significant'36. This is repeated in the 'Review and Update of Seascape and Visual Buffer study for Offshore Wind farms' prepared by White Consultants, 2020.	NRW is correct that the Guidelines for Landscape and Visual Impact Assessment: Third Edition (Landscape Institute and Institute of Environmental Management and Assessment, 2013) (GLVIA3) (Landscape Institute and IEMA, 2013) does not comment on significance. GLVIA3 concentrates on principles and process rather than providing a formulaic recipe (GLVIA3 Preface, page x). It advises against using 'thresholds of significance' such as those used in the White Consultants (2019b) and White Consultants (2020) buffer studies and promotes professional judgement (Landscape Institute and IEMA, 2013; paragraph 3.32).
REP3-090.207	204. REP2-080; para REP1-056.366 to REP1-056.367: We note confirmation that local landscape character areas have not been considered in relation to the assessment of the Mona Array Area, and we consider this to be an omission. Problems arising from omitting an assessment against local baseline studies include: Key characteristics and qualities within those areas and the impact on these are unreported. • Judgements on the geographical extent of impacts distort conclusions because they are based on the geographical extent of a national character area, which covers a substantial area drawn at a national scale.	In relation to the Mona Array Area the Applicant undertook an assessment of the highest value landscape resources – the nationally designated landscapes and visual receptors within them. The assessment of the relevant special qualities of those landscapes is at Volume 6, Annex 8.5: International and nationally designated landscape study (APP-105). No significant effects were identified. No significant effects were found on those highest sensitivity receptors. Less sensitive receptors would not experience a significance of effects greater than the most sensitive landscapes and visual receptors, so no further assessment was undertaken. However, the Applicant acknowledges NRW's response and has undertaken an assessment of the local landscape and seascape character areas (HAP_ISH3_22). The findings are in line with the Applicant's original analysis, i.e. that no effects would be greater than those experienced by the more sensitive (nationally designated) receptors.

2.2.2 WFD Compliance Assessment: Onshore Works

Table 2.12 REP3-090 – Natural Resource Wales Advisory – WFD Compliance Assessment: Onshore Works

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.208	2.2 WFD Compliance Assessment: Onshore Works 205. REP2-080; para REP1-056.240: We note and welcome the inclusion of Kinmel Bay, Rhyl and Rhyl East Bathing Waters in the assessment. We also note the potential impacts outlined and are satisfied with the mitigation measures presented and outlined in the Outline Code of Construction Practice (APP-212). We have no further comments.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.
REP3-090.209	206. REP2-080; para REP1-056.245: - We note that geomorphology still has not been assessed within this application in detail as per the other WFD elements. Elements of the proposed infrastructure may yet need to be significantly repositioned to alternative (more acceptable) locations within the catchment following receipt of adequate geomorphological field survey.	In its response to REP1-056.245 of NRW's written representation (REP2-080), the Applicant committed to collate the baseline geomorphology information used within the assessment. A Geomorphology Clarification Note (S_D4_7) has been submitted which includes both photographs and observations of the watercourses in accordance with the Modular River Survey Methodology or Ditch Condition Assessment (as appropriate). The observations of the site walkover were shared during a meeting with NRW on 9 October as part of the Statement of Common Ground process. The clarification note demonstrates that the assessment of effects undertaken within Volume 3, Chapter 2: Hydrology and flood risk (APP-065) and Volume 7, Annex 2.4: Water Framework Directive surface water and groundwater assessment (APP-120) will remain unchanged given the low sensitivity of the ordinary watercourses traversed by the onshore elements of the Mona Offshore Wind Project. The geomorphology of the watercourses does not present a constraint to the installation of the onshore export cable and haul road crossing and the proposed infrastructure locations do not require repositioning. The matter is being agreed through the SoCG process,
REP3-090.210	207. REP2-080; para REP1-056.246: We note the confirmation that 7 of the 9 crossings will be undertaken by trenchless techniques. The remaining 2 crossings "have been assessed as low sensitivity, heavily modified and incapable of supporting fish or macroinvertebrates". The details of the trenchless crossings and x2 remaining watercourse crossings will still need to be detailed at the post-consent stage.	The characteristics of the two watercourse crossing locations where trenching remains an option (as reported in REP2-080) were confirmed during the site walkover in September 2024 and reported in the geomorphology clarification note (S_D4_7). The Applicant confirms that the design of the watercourse crossings will be based on the principles as set out in the Outline Construction Method Statement (J26.15 F03). Detailed design of the watercourse crossing for each location will have regard to the NRW's National Culvert Strategy (December 2022) (see paragraph 1.1.11.3 of the Outline Construction Method Statement (J26.15 F03)). The design will be documented in the final Construction Method Statement, which forms part of the Code of Construction Practice and will be approved by the local planning authorities who in these locations are also the Local Lead Flood Authority, in consultation with NRW.
REP3-090.211	208. REP2-080; para REP1-056.247: There appears to be no further details on haul road bridges. The project should apply the flow chart process outlined in Appendix 1 NRW's evidence report (attached) and details should be submitted at post-consent stage.	The Applicant confirms that the flow chart process (as set out in NRW's National Culvert Study December 2022) will be followed to determine the design of the haul road crossings. The Outline Construction Method Statement (paragraph 1.1.11.3, J26.15 F03) has been updated to reflect this. The Applicant confirms that the design will be agreed with the Local Lead Flood Authority in consultation with NRW.
REP3-090.212	209. REP2-080; para REP1-056.249 and REP1-056.250: We note the Applicant states "The design of the watercourse crossings will ensure the depth of cover to the cable ducts is sufficient to avoid exposure of the cable over the long term. The watercourses traversed are of low sensitivity and are indicative of depositing rather than eroding channels where the risk of exposure in the long term is low". The details of where this assessment have been derived from have not been provided along with a definition of "long-term". It is noted that the project has now addressed decommissioning of the offshore elements of the project (REP1-056.213). It is unclear as to why onshore elements are being considered differently.	The detailed design of the crossings will have regard to the geomorphological characteristics of the watercourses (as documented in the geomorphology clarification note (S_D4_7) and the NRW's National Culvert Strategy (December 2022). During the call with NRW on 9 October 2024, it was discussed that each crossing would incorporate a set back from either bank of the watercourse such that the risk of cable ducts becoming exposed as a result of eroding channels would be low. The set back distance will be defined in the final Construction Method Statement, which forms part of the Code of Construction Practice and will be approved by the Local Lead Flood Authority in consultation with NRW. The Applicant advises that 'long term' refers to beyond the lifetime of the Mona Offshore Wind Project. With regards to the decommissioning of the watercourse crossings, the Applicant notes that the ducts installed for the trenchless crossings cannot be removed. During the call on 9 October 2024, NRW indicated that their concern was addressed given the geomorphological characteristics of the watercourses and the low risk of the ducts becoming exposed as a result of channel erosion.
REP3-090.213	210. Notwithstanding the above we reiterate our comments in REP1-056.251, we acknowledge that the Applicant will still need to prepare the information advised above to inform the final CoCP which is secured by Requirement 9 of the draft DCO. We note from the Applicant's Responses to our Relevant Representations [PDA-008] "A commitment to undertake these surveys will be included in an update of the Outline Onshore Construction Method Statement (APP-227) which will be submitted to the Examination. The Outline Onshore Construction Method Statement forms part of the Code of Construction Practice (CoCP). However, in deferring	Please see the Applicant's response to REP3-090.212 above.

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
	this information to the post-consent stage, the Applicant should be aware that some of the crossing methods proposed may not be appropriate, or acceptable, at certain locations if the information demonstrates there may be potential impacts on WFD waterbodies.	

2.2.3 Air Quality

Table 2.13 REP3-090 – Natural Resource Wales Advisory – Air Quality

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.214	2.3 Air Quality 211. **REP2-080; para REP1-056.252 to REP1-056. 254:** We note the Applicant's comments, we have no further comments.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.

2.2.4 Ecology (Terrestrial)

Table 2.14 REP3-090 – Natural Resource Wales Advisory – Ecology (Terrestrial)

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.215	2.4 Ecology (Terrestrial) 212. **REP2-080; para REP1-056.258:** We note and welcome the identified updates to the to the Outline LEMP.	The Applicant notes the response of NRW (A).
REP3-090.216	213. **REP2-080; para REP1-056.259**: We note and welcome the commitment to transfer the occupancy of ecology areas to a body that accords with the definition of a responsible body under Part 7 of the Environment Act 2021. We note monitoring proposals during the operational phase have not been updated. We advise that monitoring is undertaken annually.	The Applicant is reviewing the advice provided by NRW (A) will provide a full response alongside an updated Outline Landscape and Ecology Management Plan at Deadline 5.
REP3-090.217	214. We note the outline habitat management prescriptions. However, no detail is given in respect of species-specific prescriptions, e.g. if fish or invasive non-native species are recorded.	
REP3-090.218	215. Site liaison, wardening, incident reporting and response arrangements appears to have not been considered in the updated outline LEMP.	
REP3-090.219	216. Provision for periodic review mechanism for the long-term management plan appears to have not been considered in detail. We suggest every five years or timescales to be agreed by the LPA and NRW.	
REP3-090.220	217. Contingency measures – the updated OLEMP does not appear to have considered this component requirement in any detail.	
REP3-090.221	218. We welcome confirmation of the updated tenure proposals for the ecology areas. We advise tenure changes of the ecology areas (i.e. to a body that accords with the definition of a responsible body under Part 7 of the Environment Act 2021) is completed prior to the commencement of the operational phase of the proposals.	The Applicant notes the response of NRW (A).
REP3-090.222	219. No details are provided in respect of skills, competencies and licences for (a) surveillance and (b) management works.	The Applicant is reviewing the advice provided by NRW (A) will provide a full response alongside an updated Outline Landscape and Ecology Management Plan (LEMP) at Deadline 5.
REP3-090.223	220. Limited detail is provided in respect of reporting of management and surveillance. We advise that surveillance results are uploaded annually into the Wales GCN Monitoring Scheme. We welcome proposals to report on management and surveillance to the St Asaph GCN Working Group.	
REP3-090.224	221. Further advice is provided below in Annex B in regard to the updated Outline Landscape and Ecology Management Plan (REP2-035) and updated Outline Biosecurity Protocol (REP2-061).	The Applicant is reviewing the advice provided in Annex B and will provide a full response alongside an updated Outline LEMP at Deadline 5.

2.2.5 Water Quality (Surface and Groundwater)

Table 2.15 REP3-090 – Natural Resource Wales Advisory – Water Quality (Surface and Groundwater)

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.225	2.5 Water Quality (Surface and Groundwater) 222. REP2-080; para REP1-056.263 to REP1-056.269: We note the Applicant's comments, we reiterate our comments and note that the final Code of Construction Practice [APP-212] and the underpinning Method Statements and Management Plans must be submitted to and approved by the LPA (Requirement 9). We agree with this approach and consider that impacts on water quality (both surface and groundwater) will be appropriately managed and suitable mitigation measures will be adopted. We note that NRW (A) are listed as a consultee for the discharge of condition 9. We have no further comments.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.

2.2.6 Flood Risk

Table 2.16 REP3-090 – Natural Resource Wales Advisory – Flood Risk

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.226	2.6 Flood Risk 223. REP2-080; para REP1-056.270 to REP1-056.279: We note the Applicant's comments, we have no further comments.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.

2.2.7 Material and Waste

Table 2.17 REP3-090 – Natural Resource Wales Advisory – Materials and Waste

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.227	2.7 Materials and Waste 224. REP2-080; para REP1-056.280: We note the Applicant's comments, we have no further comments.	The Applicant welcomes the response from NRW (A) and notes that this matter is now closed.

3 Marine Licensing

Table 3.1: REP3-090 – Natural Resource Wales Advisory – Marine Licensing

Reference	Written Submission Comment	Applicant's Response
REP3-090.228	**3. Marine Licensing** **1.** Further to a request by the Examining Authority in the Hearing Action Points from Issue Specific Hearing 1 on The Scope of the Proposed Development, NRW MLT have prepared a list of Deemed Marine Licence drafting matters not yet agreed at Deadline 3. This is based the applicants Deadline 2 submission which included the Applicants response to NRW Written Representation (REP2-080) and an updated Draft Development Consent Order (REP2-004).	NRW MLT's comment is noted.
REP3-090.229	**2.** The ExA has requested a red/amber/green traffic light system to indicate the importance of each of the outstanding items. NRW MLT's position is that all of its concerns should be accommodated. The Applicant and NRW MLT have been in discussion and have made progress in narrowing and wherever possible reaching agreement on these issues. Accordingly, further to the ExA's request NRW MLT has identified below those outstanding issues. Those issues marked as yellow are ongoing points of discussion, while those marked as red are matters where both the applicant and NRW MLT remain in positions of disagreement. **Colour** / **Status** Ongoing point of discussion Not agreed	NRW MLT's comment is noted.

Reference	Reference from draft DCO Document (REP2- 004)	Position	Status	Applicant's Response
REP3-090.230	Part 1 of DCO – Interpretation Reference to Mean High Water Springs (MHWS) has been amended to Mean High Water (MHW). Work 3 and 8	As detailed within our Written Representation (REP1-056 Annex D row 2) we maintain that the correct reference is MHWS, consistent with terminology in the MACAA 2009 (see section 66(4) and s42 for the definition of Marine Licensable area). Within the Marine Licence Principles Document (REP2-028) it is proposed that the transmission asset marine licence which is currently being determined by NRW MLT consists of marine licensable activities associated with work number 2 and 3. However as currently drafted within the DCO, Mean High Water is used to define Work Number 3 and 8. This could lead to a potential discrepancy between the boundaries of works within the transmission marine licence and the DCO. Specifically, this may lead to elements of work number 8 identified in the DCO, which is located between MHW and MHWS, needing to be included in the transmission marine licence. Accordingly, we maintain that the correct reference should be MHWS not MHW. This is consistent with other recent Development Consent Orders including Awel y Mor, and Hornsea 4.		Please see Response to October Hearing Action Points (Document Reference S_D4_6), Row HAP_ISH5_03. A further response will be provided on this point at Deadline 5.
REP3-090.231	Article 7 of DCO – Benefits of the Order And also Schedule 14, para 7.	Transfer Provision NRW MLT note that the Applicant has sought to update the drafting of Article 7 of the draft DCO (REP2-004) however neither the Applicant's response to relevant representation (PDA-008 row RR-011.154- 156) or the revised drafting address our concerns surrounding the lawfulness and need for such a provision, as was detailed within our Written Representation (REP1- 056, section 4.3).		NRW MLT's comment is noted. The Applicant agrees this is a matter which the parties will be 'Not Agreed' at the end of Examination.

Reference	Reference from draft DCO Document (REP2- 004)	Position	Status	Applicant's Response
REP3-090.232	Table 1 of DCO	Co-ordinate point 8 and 9 are duplicates and one should therefore be removed.		Table 1 of the draft development consent order (Document Reference C1 F05) (Draft DCO) has been updated to remove the duplicate coordinate. The offshore order limits and grid coordinates plan (PDA-002) will be updated at Deadline 5 to reflect these changes.
REP3-090.233	Schedule 14, interpretation	We note the Applicant has made amendments to the definition of 'commence' to address comments made within our Written Representation (REP1-056, section 4.5) and has removed intrusive ground investigation. NRW MLT seek clarity if intrusive ground investigation has been removed from pre-commencement surveys what marine licensable activities remain as part of pre-commencement surveys. NRW MLT seek clarity whether intrusive ground investigation is still proposed to take place under the existing consent.		The inclusion of reference to pre-commencement surveys in the definition of "commence" in the dML, which would otherwise require a marine licence exemption, means there is no requirement to seek an exemption expressly. Taking this approach also clearly indicates that the carrying on of such activities will not trigger "commencement" for the rest of the dML.
REP3-090.234	Schedule 14, para 3	Amendments have been made in Part 1 of the DCO to activities that can be carried out in connection with Work No 1 and 2 (page 50 of the draft DCO). However corresponding amendment have not been carried to the activities carried out in connection with Work No 1 in schedule 14 para 3. This should be rectified. It would also be useful to understand why these amendments have been made.		Amendments to the list of associated development in Schedule 1 which were made at Deadline 2 (REP2-004) have been replicated in Schedule 14 so they are aligned.
REP3-090.235	Schedule 14, Table 3	Co-ordinate point 8 and 9 are duplicates and one therefore should be removed.		Table 3 of the draft development consent order (Document Reference C1 F05) (Draft DCO) has been updated to provide coordinates with 7 decimal places to demonstrate that Co-ordinate point 8 and 9 different.
REP3-090.236	Schedule 14, para 12 Para 18 (4) Para 19 (s), Para 20 (3) and Para 21 (3)	<u>Time Limits for Approval of Plans</u> The applicant provided a response to Relevant Representations (PDA-008) row RR-011.162 considering the condition necessary to assist in maintaining the project delivery programme. As detailed within our Written Representation (REP1-056, section 4.7) NRW MLT maintain our position and do not consider the condition reasonable or necessary. NRW MLT remain unclear surrounding the enforceability of the proposed condition.		NRW MLT's comment is noted. The Applicant agrees this is a matter which the parties will be 'Not Agreed' at the end of Examination.
REP3-090.237	Schedule 14, para 17 (2)	We welcome changes made to para 17 (1), however additional wording is required at the end of para 17(2) to provide that dropped objects must be recovered unless otherwise approved by the licensing authority.		The Applicant and NRW MLT have further discussed the comment raised by NRW Marine Licnecing Team in relation to Condition 17 and NRW Marine Licnecing Team have agreed to further consider this comment and whether the drafting changes made at Deadline 2 already address the concern. Further updates will be provided in relation to this comment once that position has been confirmed.
REP3-090.238	Para 18 (1)	The Applicant's response to NRW Written Representation REP2-080 row REP1-056.432 provides its rational for current drafting. As detailed within our Written Representation (REP1-056, Annex D Row 14) we maintain that we do not consider it necessary to list the consultation bodies within this condition and that reference to specific consultation bodies should be removed. As drafted, certain bodies that would be consulted on Plans have not been included, for example other relevant statutory nature conservation bodies including NRW Advisory. It is unclear why the Applicant has included reference to some consultees but not others. If reference to consultees is retained we would suggest that 18 (1) is amended so that rather than reference to JNCC reference is given wider to relevant Appropriate Nature Conservation Bodies.		NRW MLT's comment is noted. As set out in REP3-090.163, the Applicant has reinstated a definition for "statutory nature conservation body" in the deemed marine licence at Schedule 14 of the Draft DCO (Document reference C1 F05), albeit with square brackets still included. The Applicant has sought input from NRW in respect of the drafting of this definition and is still awaiting confirmation from NRW on this matter. The Applicant would welcome feedback from NRW Advisory or Marine Licencing team in order to provide a suitable update at Deadline 5. In the alternative, the Applicant can reinstate the drafting which was included in the application version of the Draft DCO (APP-023). Suitable updates to the remainder of the dML have been made to clarify when it is expected that NRW (Advisory) and/or the JNCC, as the statutory nature conservation body, will be consulted.
REP3-090.239	Para 21 (5) and Para 26 (5)	As detailed within our Written Representation (REP1-056).		Please see response to REP3-090.238.

Reference	Reference from draft DCO Document (REP2- 004)	Position	Status	Applicant's Response
		We note that reference to Statutory Nature Conservation Bodies within this condition has been amended in the most recent drafting to JNCC. We consider that the close out report and monitoring reports may be relevant to other appropriate nature conservation bodies including NRW A and NE.		
REP3-090.240	Para 21	The definition given for "commence" within the deemed marine licence, excludes unexploded ordnance surveys and clearance of unexploded ordnance. However, the term 'commence' is used in para 21 in reference to unexploded ordnance clearance. This drafting should be amended to avoid any conflict between the provisions and/or ambiguity.		The drafting of condition 21 of Schedule 14 of the Draft DCO has been updated to replace the reference to "commence" to address the comment made by NRW Marine Licnecing Team.
REP3-090.241		As detailed within our Written Representation (REP1-056) section 4.6 we maintain that we consider a Compliance Report necessary. The Applicant within their response to NRW Written Representation REP2-080 row REP1-056.432 noted they are further considering this comment and will provide an update at deadline 3.		The Applicant has updated Condition 18(1) to include reference to a compliance report to be submitted to NRW MLT for approval prior to the commencement of construction. The Marine Licence Principles document (Document Reference J9 F04) has also been updated accordingly.

Reference	Written Submission Comment		Applicant's Response
REP3-090.243	**3.**	As the sampling presented was also relevant to the determination of the transmission marine licence, we have sought independent external advice on the sufficiency of sediment sampling and whether the material is suitable for disposal at sea in line with OSPAR guidelines. This advice has now been received from CEFAS and is provided alongside our Deadline 3 submission.	NRW MLT's comment is noted.
REP3-090.244	**4.**	As detailed within REP1-056, NRW MLT sought clarity from the ExA as to whether it is their intention to seek to designate the disposal site and obtain the appropriate disposal site code from Cefas during the determination of the DCO and deemed Marine Licence.	NRW MLT's comment is noted.
REP3-090.245	**5.**	As the disposal site is also relevant to the Transmission Marine Licence, NRW MLT would be satisfied on this occasion to request a unique disposal site code for the disposal site from Cefas following the determination of the DCO by the Secretary of State.	NRW MLT's comment is noted.
REP3-090.246	**6.**	Although our established practice would usually include the disposal site code within the licence, NRW MLT are content on this occasion that as currently drafted the disposal of dredged material would be restricted to within the array area as detailed in para 3 of Schedule 14, therefore reference to the disposal site code within the licence is not needed.	NRW MLT's comment is noted.

4 Annex A – Marine Ornithology

Table 4.1 REP3-090 – Natural Resource Wales Advisory – Annex A

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.247	ANNEX A **NRW (A) comments on updated offshore ornithology related assessment documents submitted by the Applicant at Deadline 2** Documents reviewed: • Deadline 2 Submission - E1.3 HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments F02 [REP2-010/REP2-011] • Deadline 2 Submission - E1.4 HRA Stage 1 Screening Report F02 [REP2-012/REP2-013] • Deadline 2 Submission - E1.5 HRA Integrity Matrices F02 [REP2-014/REP2-015] • Deadline 2 Submission - F2.5 Environmental Statement Volume 2, Chapter 5: Offshore ornithology F02 [REP2-016/REP2-017] • Deadline 2 Submission - F6.5.2 Environmental Statement Volume 6, Annex 5.2: Offshore Ornithology Displacement Technical Report F02 [REP2-018/REP2-019] • Deadline 2 Submission - F6.5.3 Environmental Statement Volume 6, Annex 5.3: Offshore ornithology collision risk modelling technical report F02 [REP2-020/REP2-021] • Deadline 2 Submission - F6.5.5 Environmental Statement Volume 6, Annex 5.5: Offshore ornithology apportioning technical report F02 [REP2-022/REP2-023] Deadline 2 Submission - F6.5.6 Environmental Statement Volume 6, Annex 5.6: Offshore ornithology population viability analysis technical report F02 [REP2-024/REP2-025]	The Applicant notes NRW's comment.
REP3-090.248	**1. Comments on Mona Deadline 2 updated offshore ornithology assessment related documents** NRW (A) has reviewed the updated submission documents submitted by the Applicant at Deadline 2 [REP2-010 to REP2-025]. We welcome that the Applicant has corrected the many errors and discrepancies identified by interested parties, and the Applicant themselves, in these documents and has followed these corrections through to the assessments within the ES Offshore Ornithology Chapter [REP2-016/REP2-017] and HRA related documents (screening, REP2-012/REP2-013 and ISAA Part 3, REP2-010/REP2-011). However, we note there remain a couple of minor errors/discrepancies:	The Applicant notes NRW's comment and has provided specific responses below.
REP3-090.249	<u>EIA Related</u> We are unsure as to why the Applicant has updated the Manx shearwater spring migration mean peak abundance figure from 3 to 6, as based on the information presented in APP-091, we understand the figure of 3 was correct. Based on the Applicant's principle of using MRSea (model-based) estimates where available, and design-based if not, and a spring definition of March, the peak spring migration abundance in the site + 2km buffer should be 6 for year 1 (design-based estimate as MRSea estimate not available) and 0 for year 2 (design-based as MRSea estimate not available), resulting in a mean peak estimate of 3 and not 6 (see Table 1.46 of Offshore Ornithology Baseline Characterisation Technical Report, APP-091).	The Applicant thanks NRW for its comments and can confirm that these discrepancies have been addressed in Volume 6, Annex 5.2: Offshore Ornithology Displacement Technical (F6.5.2 F03) and in Volume 2, Chapter 5: Offshore Ornithology (F2.5 F03) at Deadline 4.
REP3-090.250	In the updated offshore ornithology ES Chapter [REP2-016/REP2-017], the largest BDMPS used for the annual assessment of collision risk (Tables 5.42 and 5.43) and collision risk + displacement (Table 5.48) for gannet is currently still based on the Applicant's less precautionary breeding season reference population of 682,989 birds, if the SNCB advised more precautionary EIA scale breeding season figure is used (as was agreed would be used for gannet during the EWG), then the largest BDMPS is the pre-breeding/spring migration BDMPS of 661,888 (Furness 2015).	
REP3-090.251	In the updated offshore ornithology ES Chapter [REP2-016/REP2-017], the largest BDMPS used for the annual assessment of collision risk (Tables 5.45) for Manx shearwater is currently still based on the Applicant's less precautionary breeding season reference population of 2,372,485 birds, if the SNCB advised more precautionary EIA scale breeding season figure is used (as was agreed would be used for gannet during the EWG), then the largest BDMPS is the NRW/NE calculated breeding season BDMPS of 1,821,518 as listed in the joint NRW/NE interim advice regarding demographic rates, EIA scale mortality rates and reference populations sent to the Applicant by NE on 26 March 2024.	

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.252	However, we note that these errors/discrepancies do not alter the assessment conclusions for project alone impacts at EIA scale. Therefore, following the updates made by the Applicant in their Deadline 2 submission, we are now in a position to confirm that the EIA scale impacts from the Mona project alone are predicted to be small and hence not significant at EIA scale (i.e. no greater than minor adverse significance). Further detail on the justification conclusions regarding collision and displacement impacts from the project alone is provided in Appendix 1 below.	The Applicant welcomes NRW(A)s comment that these small discrepancies do not materially change the assessment.
REP3-090.253	HRA Related Part b of paragraph 1.4.6.49 of the updated HRA Stage 1 Screening Report [REP2-012/REP2-013] states that: *'Apportioning was not done for Atlantic puffin as the mean annual mortality from disturbance and displacement before apportioning was 0.10 birds.'* This is based on the Applicant's preferred 50% displacement and 1% mortality. We note that if the SNCB advised range of displacement (30-70%) and mortality (1-10%) are considered, then the mean annual mortality from disturbance and displacement before apportioning is 3 birds.	The Applicant can confirm that the range of SNCB advised range of displacement (30-70%) and mortality (1-10%) has been considered for Atlantic puffin in the Offshore Ornithology Supporting Information in line with SNCB advice (REP3-059) submitted at Deadline 3. Following a meeting with the SNCBs on 29 October 2024, the Applicant has updated the Offshore Ornithology Supporting Information (S_D3_19 F02) at Deadline 4 to take account of the advice received at the meeting. The Applicant looks forward to receiving comments on its Deadline 4 submissions.
REP3-090.254	We note that all the apportioned figures presented for displacement impacts within the HRA Stage 1 Screening Report [REP2-012/REP2-013] and conclusions of whether likely significant effect (LSE) can or cannot be ruled out are based solely on the Applicant's preferred % displacement and % mortality rates and do not consider the full range of apportioned impacts based on the range of rates advised by NRW (A). However, we note that the Applicant intends to submit assessments following SNCB advice into the examination at Deadline 3, which we understand will include presentation of displacement impacts apportioned to designated sites for the full range of displacement and mortality rates recommended by the SNCBs. Therefore, we will provide updated advice following full review of these assessments once available.	The Applicant has submitted Offshore Ornithology Supporting Information in line with SNCB advice (REP3-059) at Deadline 3, which provides NRW with all required information required for the HRA within a single document. Following a meeting with the SNCBs on 29th October 2024, the Applicant has updated the Offshore Ornithology Supporting Information (S_D3_19 F02) at Deadline 4 to take account of the advice received at the meeting. The Applicant looks forward to receiving comments on its Deadline 4 submissions.
REP3-090.255	We suggest the Applicant checks the apportioned razorbill displacement impact figures presented in the HRA Stage 1 Screening Report [REP2-012/REP2-013] and the HRA Stage 2 ISAA Part 3 (SPAs and Ramsars) report [REP2-010/REP2-011] for Skomer, Skokholm and seas off Pembrokeshire SPA - as part b of paragraph 1.4.6.49 of the Screening Report gives the apportioned impact to the site as 0.4 razorbill from displacement, whilst Table 1.19 of the ISAA Part 3 (SPAs and Ramsars) gives the annual displacement mortality for razorbill from the site as 2.41 birds.	The Applicant thanks NRW's comments and can confirm that these discrepancies have been addressed in an errata sheet (S_PD_1 F05) submitted at Deadline 4.
REP3-090.256	We suggest the Applicant checks the text in part c of paragraph 1.4.6.49 of the HRA Stage 1 Screening Report [REP2-012/REP2-013] regarding collision risk for lesser black-backed gull and kittiwake for Skomer, Skokholm and seas off Pembrokeshire SPA as it currently is unclear/doesn't make sense. Lesser black-backed gull is only assessed for collision risk, so it is not clear why the text in this paragraph appears to suggest the 0.1 to 0.2 birds mortality for this species is for the combined impact of collision plus displacement. Additionally, we assume the 0.1-0.2 mortalities are the apportioned collision impacts for the species-specific avoidance rates (so 0.1 mortalities) and SNCB advised species-group avoidance rate (so 0.2 mortalities), but clarification is required that this is the case. Additionally, part c of this paragraph also appears to state that the collision plus displacement combined impact to kittiwake from the project alone is 0 birds annually. However, we note the text in part b of paragraph 1.4.6.49 states this impact is 0.1 kittiwake, so consistency in the text is required.	The Applicant thanks NRW for its comments and can confirm that these discrepancies have been addressed in the errata sheet (S_PD_1 F05) submitted at Deadline 4. The Applicant can confirm that the range of mortalities presented are considering the species-group and species-specific avoidance rates as presumed by NRW(A).
REP3-090.257	We understand that the Applicant intends to provide additional information in accordance with the advice provided by NRW (A) and JNCC in Relevant and Written Representations and that this will be submitted into the examination at Deadline 3. We welcome that this additional information will include presentation of displacement impacts apportioned to designated sites for the full range of displacement and mortality rates recommended by the SNCBs. Until this information is made available, we are unable to provide further advice on whether adverse effect on integrity can be ruled out for Welsh designated sites from the project alone. We will provide further comment/advice into the examination following full review of the information submitted at Deadline 3.	The Applicant thanks NRW's advice and have updated the Offshore Ornithology Supporting Information (S_D3_19 F02) and Offshore Ornithology Cumulative Effects Assessment and In-combination Gap-filling Historical Projects Technical Note (S_D3_12 F02). The Applicant looks forward to receiving comments on its Deadline 4 submissions.
REP3-090.258	<u>Cumulative and in-combination</u> We are aware that the Applicant is progressing work to gap-fill historical projects. NRW (A) is currently engaging with the Applicant regarding their proposed approach and results to the gap-filling exercise in cumulative (and in-combination) assessments, and a useful meeting was held with the Applicant, NRW (A), JNCC and NE to discuss this on 29th August 2024. Joint SNCB written comments (NRW (A), NE and JNCC) have been provided to the Applicant following this meeting (sent via email from JNCC 6th September 2024). We welcome the Applicant's intention to submit this information into the examination at Deadline 3. NRW (A) will provide further advice into the examination following review of the submitted document.	The Applicant thanks NRW's advice and have updated the Offshore Ornithology Supporting Information (S_D3_19 F02) and Offshore Ornithology Cumulative Effects Assessment and In-combination Gap-filling Historical Projects Technical Note (S_D3_12 F02). The Applicant looks forward to receiving comments on its Deadline 4 submissions.
REP3-090.259	With regard to in-combination assessments, we note that once the updated assessments covering the full range of advised rates that the Applicant has committed to undertaking/presenting have been completed, then if any potential project alone impact (including at the upper end of the advised ranges) equates to more than 0.05% of baseline	The Applicant has submitted the Offshore Ornithology Supporting Information in line with SNCB advice (REP3-059) at Deadline 3, which provides a full in-combination assessment where any potential project alone impact (including at the upper end of the advised ranges) equates to more than 0.05% of baseline mortality. Following a

<table>
<tr><th>Planning Inspectorate Ref. No.</th><th>NRW D3 Written Submission comment</th><th>Applicant’s response</th></tr>
<tr><td></td><td>mortality then this site and species combination should be taken through to a full in-combination assessment, which should take into account the issues with gaps in data for historic projects.</td><td>meeting with the SNCBs on 29 October 2024, the Applicant has updated the Offshore Ornithology Supporting Information (S_D3_19 F02) at Deadline 4 to take account of the advice received at the meeting. The Applicant looks forward to receiving comments on its Deadline 4 submissions.</td></tr>
<tr><td>REP3-090.260</td><td>Appendix 1: NRW (A) detailed comments/conclusions on Mona project alone EIA scale impacts following Applicant’s updated assessments submitted at Deadline 2
This document is a technical document submitted into the Mona project Examination to provide scientific justification for NRW (A)’s advice provided on the significance of the potential impacts at the Environmental Impact Assessment (EIA) scale from the project alone, as summarised within each section. Our advice is based on best available evidence at the time of writing and is subject to change in the future should further evidence be presented.</td><td>The Applicant notes NRW’s comment.</td></tr>
<tr><td>REP3-090.261</td><td>1.1 EIA impacts from operational collision risk from Mona alone
As shown in Table 1 below, based on the updated figures presented in the updated Offshore Ornithology ES Chapter [REP2-016/REP2-017] and the updated collision risk technical report [REP2-020/REP2-021], we agree with the Applicant that all the annual central sCRM predictions for the project alone equate to less than 1% baseline mortality of both the NRW (A) recommended and the Applicant’s largest Biologically Defined Minimum Population Scale (BDMPS) for all species assessed for collision impacts.</td><td>The Applicant notes NRW’s comment.</td></tr>
<tr><td>REP3-090.262</td><td>Whilst the Applicant has not assessed the range of collision predictions resulting from the sCRM in the assessment of impacts from the project alone in REP2-016/REP2-017, the upper and lower confidence limits (CLs) of monthly collision predictions are presented in REP2-020/REP2-021 and so the monthly figures can be calculated. We note that based on our calculations the annual collision predictions for the upper CLs of collision predictions from the sCRM also all equate to less than 1% of baseline mortality of both the NRW (A) recommended and the Applicant’s largest Biologically Defined Minimum Population Scale (BDMPS) for all species assessed for collision impacts.</td><td>The Applicant notes NRW’s comment.</td></tr>
<tr><td>REP3-090.263</td><td>Therefore, based on these figures we agree with the Applicant’s conclusions in REP2-016/REP2017 that the collision risk from the Mona project alone would have no significant adverse impact at the EIA scale for all species.</td><td>The Applicant welcomes NRW’s comment and therefore considers this matter to be closed.</td></tr>
<tr><td>REP3-090.264</td><td>Table 1 Percentage of baseline mortality for annual predicted impact levels for Mona project operational collision risk alone for EIA for NRW advised largest seasonal BDMPS and for the largest seasonal BDMPS used by the Applicant in REP2-016/REP2-017, using average across all age class mortality rates, as used by the Applicant.
<table>
<tr><th></th><th>Annual CRM prediction, Mona alone *</th><th>Largest BDMPS individuals, as advised by NRW (A)**</th><th>% baseline mortality NRW (A) largest BDMPS</th><th>Largest BDMPS individuals, as used by Applicant</th><th>% baseline mortality Applicant largest BDMPS</th></tr>
<tr><td>Gannet (no reduction for macro AR)</td><td>6 (1-16)</td><td>661,886</td><td>0.004 (0.001-0.012)</td><td>682,989***</td><td>0.004 (0.001-0.012)</td></tr>
<tr><td>Gannet (reduction for macro AR)</td><td>2 (<1-5)</td><td>661,886</td><td>0.001 (<0.001-0.004)</td><td>682,989***</td><td>0.001 (<0.001-0.004)</td></tr>
<tr><td>Kittiwake</td><td>33 (12-67)</td><td>911,586</td><td>0.02 (0.01-0.05)</td><td>911,586</td><td>0.02 (0.01-0.05)</td></tr>
<tr><td>LBBG</td><td>2 (1-4)</td><td>240,750</td><td>0.01 (0.002-0.02)</td><td>163,304</td><td>0.01 (0.003-0.02)</td></tr>
<tr><td>Herring gull</td><td>2 (1-3)</td><td>217,167</td><td>0.004 (0.001-0.009)</td><td>173,299</td><td>0.005 (0.002-0.011)</td></tr>
<tr><td>GBBG</td><td>5 (2-10)</td><td>17,742</td><td>0.29 (0.10-0.60)</td><td>17,742</td><td>0.29 (0.10-0.60)</td></tr>
<tr><td>Fulmar</td><td><1 (0-2)</td><td>828,194</td><td><0.001 (0.000 – 0.001)</td><td>828,194</td><td><0.001 (0.000 – 0.001)</td></tr>
<tr><td>Manx shearwater</td><td>0 (0-0)</td><td>1,821,518</td><td>0.00 (0.00-0.00)</td><td>2,372,485***</td><td>0.00 (0.00-0.00)</td></tr>
</table></td><td>The Applicant notes NRW’s comment.</td></tr>
</table>

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
	* Annual collision predictions using species-group avoidance rates (ARs) as advised by SNCBs to Applicant during EWG. Range in brackets based on lower and upper confidence limit results from stochastic collision risk model (sCRM). Collision predictions rounded to whole birds ** As per joint NRW/NE interim advice regarding demographic rates, EIA scale mortality rates and reference populations sent to Applicant by NE on 26th March 2024 *** As noted above, the Applicant is basing their calculations on their less precautionary breeding season reference population. However, this does not alter the overall conclusions for this species at project alone EIA scale impacts.	
REP3-090.265	**1.2 EIA impacts from displacement impacts from Mona alone** We welcome that the Applicant has considered in the updated offshore ornithology ES Chapter [REP2-016/REP2-017] the range of predicted displacement impacts based on the range of displacement and mortality rates. The ranges considered covers those recommended by NRW (A) (i.e. 30-70% displacement and 1-10% mortality for auks, 60-80% displacement and 1-10% mortality for gannet). We again note that NRW (A) does not recommend that displacement is assessed for kittiwake as we currently consider the evidence base to be insufficient (as advised to the Applicant at Preliminary Environmental Information Report (PEIR) stage and in our Relevant and Written Representations). Hence, we have not provided advice/comment on the displacement aspect of the kittiwake assessment.	The Applicant welcomes NRW's comment.
REP3-090.266	We also welcome that the Applicant has considered the impact from construction phase displacement to be 50% of operational displacement as advised by NRW (A).	The Applicant welcomes NRW's comment.
REP3-090.267	**Table 2** Percentage of baseline mortality for predicted impact levels for construction displacement for the Mona array area for the project alone at EIA scale, using average across all age class mortality rates, as used by the Applicant.	The Applicant welcomes NRW's comment.

Annual total bird abundance in site plus relevant buffer	Displacement prediction, Mona alone (from Tables in REP2-016/017)*	Largest BDMPS individuals, as advised by NRW (A)**		% baseline mortality NRW (A) largest BDMPS	Largest BDMPS individuals, as used by Applicant	% baseline mortality Applicant largest BDMPS
CONSTRUCTION						
Guillemot	7,976	12-279	1,145,528	0.01-0.18	1,139,220	0.01-0.18
Razorbill	2,519	4-88	606,915	0.004-0.08	606,915	0.004-0.08
Puffin	37	0-1	1,482,791	0.00-0.0005	304,557	0.00-0.002
Gannet	336	1-13	661,888	0.001-0.01	661,888	0.001-0.01
Manx shearwater	1,268***	2-44	1,821,518	0.001-0.02	1,821,544	0.001-0.02
OPERATION & MAINTENANCE						
Guillemot	7,976	24-558	1,145,528	0.02-0.37	1,139,220	0.02-0.37
Razorbill	2,519	8-176	606,915	0.01-0.17	606,915	0.01-0.17
Puffin	37	0-3	1,482,791	0.00-0.001	304,557	0.00-0.005
Gannet	336	2-27	661,888	0.002-0.02	661,888	0.002-0.02
Manx shearwater	1,268***	4-89	1,821,518	0.002-0.04	1,821,544	0.002-0.04

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
	*Displacement predictions based on ranges for construction of 15-30% for auks and Manx shearwater and 30-40% for gannet and for operation of 30-70% for auks and Manx shearwater and 60-80% for gannet. All based on 1-10% mortality for all species. Lower figure relates to the lower displacement and mortality rates, upper figure relates to the upper displacement and mortality rates. ** As per joint NRW/NE interim advice regarding demographic rates, EIA scale mortality rates and reference populations sent to Applicant by NE on 26th March 2024 *** Total has included the mean peak spring estimate of 3 birds rather than the 6 used by the Applicant. Note – does not alter the conclusions.	
REP3-090.268	From Table 2 above, the range of predicted displacement impacts across the full range of advised displacement and mortality rates do not exceed 1% of baseline mortality of the largest BDMPS (as advised by NRW or used by the Applicant) for any of the species considered. Based on these figures, we would agree with the Applicant's conclusions in REP2-035 **that construction and operational displacement from the Mona array alone would have no significant adverse impact at the EIA scale for guillemot, razorbill, puffin gannet or Manx shearwater.**	The Applicant acknowledges NRW's conclusion and agreement that the predicted impacts of construction and operational displacement from the Mona array alone would have no significant adverse impact at the EIA scale for guillemot, razorbill, puffin gannet or Manx shearwater.
REP3-090.269	**1.3 EIA Impacts from operational collision risk + displacement for gannet from Mona alone** The Applicant has presented gannet collision predictions based on not accounting for macro avoidance and for a reduction in density of birds in flight to account for macro avoidance.	The Applicant acknowledges NRW's comment.
REP3-090.270	<u>No account of macro avoidance in collision risk</u> The combined impact of operational collision plus displacement to gannet from Mona alone equals: 6 (range: 1-16) mortalities per annum from collisions plus up to 27 (range: 2-27) mortalities per annum from operational displacement = up to 33 (range: 3-43) mortalities. This combined impact alone equates to: • Using NRW (A)'s recommended largest BDMPS of 661,886: 0.03% (range: 0.002-0.03%) of baseline mortality of the largest BDMPS • Using the Applicant's less precautionary largest BDMPS of 682,989: 0.03% (range: 0.002-0.03%) of baseline mortality of the largest BDMPS	The Applicant acknowledges NRW's calculations of predicted impact while excluding macro avoidance in collision risk.
REP3-090.271	<u>Accounting for macro avoidance in collision risk</u> The combined impact of collision plus displacement to gannet from Mona alone equals: 2 (range: 0.4-5) mortalities per annum from collisions plus up to 27 (range: 2-47) mortalities per annum from displacement = up to 29 (range: 2.4-32) mortalities. This combined impact alone equates to: • Using NRW (A)'s recommended largest BDMPS of 661,886: 0.02% (range: 0.002-0.02%) of baseline mortality of the largest BDMPS • Using the Applicant's less precautionary largest BDMPS of 682,989: 0.02% (range: 0.002-0.02%) of baseline mortality of the largest BDMPS	The Applicant acknowledges NRW's calculations of predicted impact while accounting for macro avoidance in collision risk.
REP3-090.272	**Therefore, based on these figures we agree with the Applicant's conclusion in REP2-016/REP2-017 that the predicted impacts of operational collision combined with displacement from the Mona project alone would have no significant adverse impact at the EIA scale for gannet.**	The Applicant acknowledges NRW's conclusion and agreement that the predicted impacts of operational collision combined with displacement from the Mona project alone would have no significant adverse impact at the EIA scale for northern gannet.

5 Annex B – Outline Landscape and Ecology Management Plan

Table 5.1 REP3-090 – Natural Resource Wales Advisory – Annex B

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.273	ANNEX B NRW (A) comments on the updated Outline Landscape and Ecology Management Plan (REP2-035) and updated Outline Biosecurity Protocol (REP2-061) submitted by the Applicant at Deadline 2. Outline Biosecurity Protocol - F01_F02 (Tracked): 1. 1.4.1.4 We advise that Externally appointed Ecological Compliance Auditors assess contractor /sub-contractor compliance with biosecurity protocols. 2. 1.7 We advise Ecological Compliance Audits are also referenced in monitoring. 3. Reference to GB INNS website is advocated.	The Applicant is reviewing the advice provided in Annex B and will provide a full response alongside an updated Outline LEMP at Deadline 5.
REP3-090.274	Outline Landscape and Ecology Management Plan F01_F02 (tracked) i. habitat management prescriptions for aquatic and terrestrial habitats; 1. This has been considered in the OLEMP. However no detailed provisions concern fish or invasive plant species issues.	
REP3-090.275	ii. site liaison, wardening, incident reporting and response arrangements 1. Site liaison, wardening, incident reporting and response arrangements appears to have not been considered in the updated outline LEMP.	
REP3-090.276	iii. provision for periodic review mechanism for the long-term management plan; 1. Provision for periodic review mechanism for the long-term management plan appears to have not been considered in detail. We suggest every five years or timescales to be agreed by the LPA and NRW.	
REP3-090.277	iv. contingency measures that are capable of being implemented in the event of failure to undertake or appropriately implement management or surveillance prescriptions including any required actions arising from unforeseen situations; 1. Contingency measures – the updated OLEMP does not appear to have considered this component requirement in any detail.	
REP3-090.278	v. current and proposed changes to tenure of the ecology area to be approved by the discharging authority in consultation with NRW to ensure appropriate control 1. Section 1.6.1.13, we welcome and are pleased to note reference to the responsible body.	
REP3-090.279	Paragraph 1.7.3.2 Final LEMP. 1. We look forward to receipt of the final LEMP.	
REP3-090.280	1.5/1.8. Outline habitat maintenance and management 1. We advise that a component provision of this plan identifies: (a) ecological features (species and habitats) (b) Target for each defined ecological feature.	
REP3-090.281	1.8.1 Pond targets 1. We advise the inclusion of GCN targets. We suggest monitoring Key Performance Indicator is set at torch counts of 50 individuals in 5 or more ponds.	
REP3-090.282	1.8.3.13 Pond management 1. We advise that EPS licensing requirements are identified for pond management. Management of terrestrial habitat may also require EPS licences.	
REP3-090.283	1.9.2 Woodland 1. We advise woodland prescriptions include fallen deadwood. Studies have shown the size of GCN populations is directly proportional to the quantity of fallen deadwood.	

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
REP3-090.284	1.9.6 Ponds 1. Note potential EPS licensing requirement (This also applies to terrestrial habitat management). 2. We advise a strategically focused rotational approach to "pondscape" management. This approach aims to ensure a diversity of seral conditions within the pond network (or pondscape) at this site. 3. No reference to INNS or fish management	
REP3-090.285	Table 1.1 1. Pre-Construction Surveys are noted. (NB this is a future management plan). Advise that this should be included in the CEMP.	
REP3-090.286	Bats: - Onshore Site Preparation and Construction 1.10.2.17 – 1.10.2.39 1. Compensation for the loss of the noctule and soprano bat roosts will be required. 2. We agree proposed works will require an EPS licence. 3. Component provisions of this section should also be included in the CEMP. 4. Management and monitoring prescriptions for replacement (compensation) bat roosts will be required.	
REP3-090.287	Bats – Species Monitoring and Management 1.11.4.1 – 1.11.4.4 1. We agree with the annual post construction monitoring for bats for the initial five years. 2. We advise that periodic monitoring and bat box maintenance is carried out throughout the operation phase of the scheme where boxes are placed on land in the occupancy of the applicant or ecology body. 3. Owing to the current conservation status of noctule, we advise that monitoring of the compensation roost is carried out throughout the operational phase of the proposals	
REP3-090.288	Hazel dormouse: - Onshore Site Preparation and Construction 1.10.2.41 – 1.10.53 1. Component provisions of this section should also be included in the CEMP. 2. We agree that proposed works are subject to EPS licence. 3. Management and monitoring prescriptions for dormouse compensation habitats will be required.	
REP3-090.289	Hazel Dormouse: Species Monitoring and Management 1.11.5 – 1.11.5.4 1. We note the monitoring and management prescriptions in respect of dormouse. 2. We welcome the inclusion of the statement confirming long term monitoring of hedgerows. We advise that this prescription includes long term dormouse surveillance.	
REP3-090.290	GCN: - Onshore Site Preparation and Construction 1.10.2.54 – 1.10.2.56 1. Component provisions of this section should also be included in the CEMP. 2. We agree with the requirement for an EPS licence. 3. We note that further detail in respect of GCN is included in Appendix D of the LEMP.	
REP3-090.291	GCN Species Monitoring and Management 1.11.6 – 1.11.5.2 1. We note more details concerning GCN Monitoring are listed in Appendix D. 2. Paragraph 1.11.6.2 states duration of post development monitoring. Annual monitoring using the methodology of the Wales GCN Monitoring Scheme will be required throughout the operational phase of the proposals	
REP3-090.292	Otter: - Onshore Site Preparation and Construction 1.10.2.64-1.10.2.68 1. We note submissions in respect of otter.	
REP3-090.293	Water Vole: - Onshore Site Preparation and Construction 1.10.2.69 – 1.10.2.71 1. We note proposals in respect of water vole. 2. Note, if disturbance is predicted when occupying a place of shelter (burrows) consideration must be given to potential licensing requirements	
REP3-090.294	Appendix B	

Planning Inspectorate Ref. No.	NRW D3 Written Submission comment	Applicant's response
	1. We advise reference to The Amphibian Conservation Handbook and the Great Crested Newt Conservation Handbook	
REP3-090.295	Appendix C 1. We advise consideration of biosecurity issues informs proposed planting schemes	
REP3-090.296	Appendix D – Outline Great Crested Newt Mitigation Strategy 1. We agree with the stated baseline summary in Section 1.2.7.1	
REP3-090.297	Appendix D – Outline Great Crested Newt Mitigation Strategy 2. We note the component assessment of impacts. I agree with the conclusions in respect of 1.3.2 aquatic and 1.3.3 re terrestrial habitats	
REP3-090.298	Appendix D – Outline Great Crested Newt Mitigation Strategy 3. We note the observations concerning distances in 1.3.3.5. Please note that we consider dispersal ranges to be much larger. We therefore advise that this section is amended to include references to dispersal distances (1.6kms) cited in Section 6.2.3 of the Guidelines for the Selection of Biological SSSIs. Part 2: Chapter 18 Reptiles and Amphibians.	
REP3-090.299	Appendix D – Outline Great Crested Newt Mitigation Strategy 4. We note the fencing specification cites the depth of the furrow trench as 200mm. We advise the minimum depth of the trench to be 300-350 mm.	
REP3-090.300	Appendix D – Outline Great Crested Newt Mitigation Strategy 5. We note and welcome proposed habitat creation and enhancement proposals in Section 1.5. We welcome the inclusion of habitat loses and gains tables.	
REP3-090.301	Appendix D – Outline Great Crested Newt Mitigation Strategy 6. Biosecurity – We advise the inclusion of an additional provision concerning reviewing the need for aquatic planting schemes. This approach helps to minimize risks of invasive non-native plant species colonizing the site.	
REP3-090.302	Appendix D – Outline Great Crested Newt Mitigation Strategy 7. Monitoring during the Operational phase. We require annual surveillance throughout the operational phase of the proposals. Methodology to accord with and results reported through the Wales GCN Monitoring Scheme.	
REP3-090.303	Appendix D – Outline Great Crested Newt Mitigation Strategy 8. We welcome and support the proposal to transfer the occupancy of the GCN compensation area a body that accords with the definition of a "responsible" body under part 7 of the Environment Act 2021. We advise the proposed transfer be completed prior to the commencement of the operational phased of the proposals.	
REP3-090.304	Appendix D – Outline Great Crested Newt Mitigation Strategy 9. No consideration appears to have been given to the issues and impacts caused by the installation of surface water gully pots and amphibians.	
REP3-090.305	Appendix D – Outline Great Crested Newt Mitigation Strategy 10. We advise that subsequent revisions to the GCN Conservation strategy include (a) amphibian friendly surface water management systems, and (b) long term GCN surveillance proposals include any proposed SUDS ponds.	
REP3-090.306	Appendix D – Outline Great Crested Newt Mitigation Strategy 11. Losses and gains will need to demonstrate cumulative implications on the impacts of the development together with the Bodelwyddan (Gwynt y Mor) GCN mitigation area.	

6 ANNEX C – SEASCAPE CHARACTER AREAS AND MARINE CHARACTER AREAS OF RELEVANCE TO THE MONA ARRAY AREA

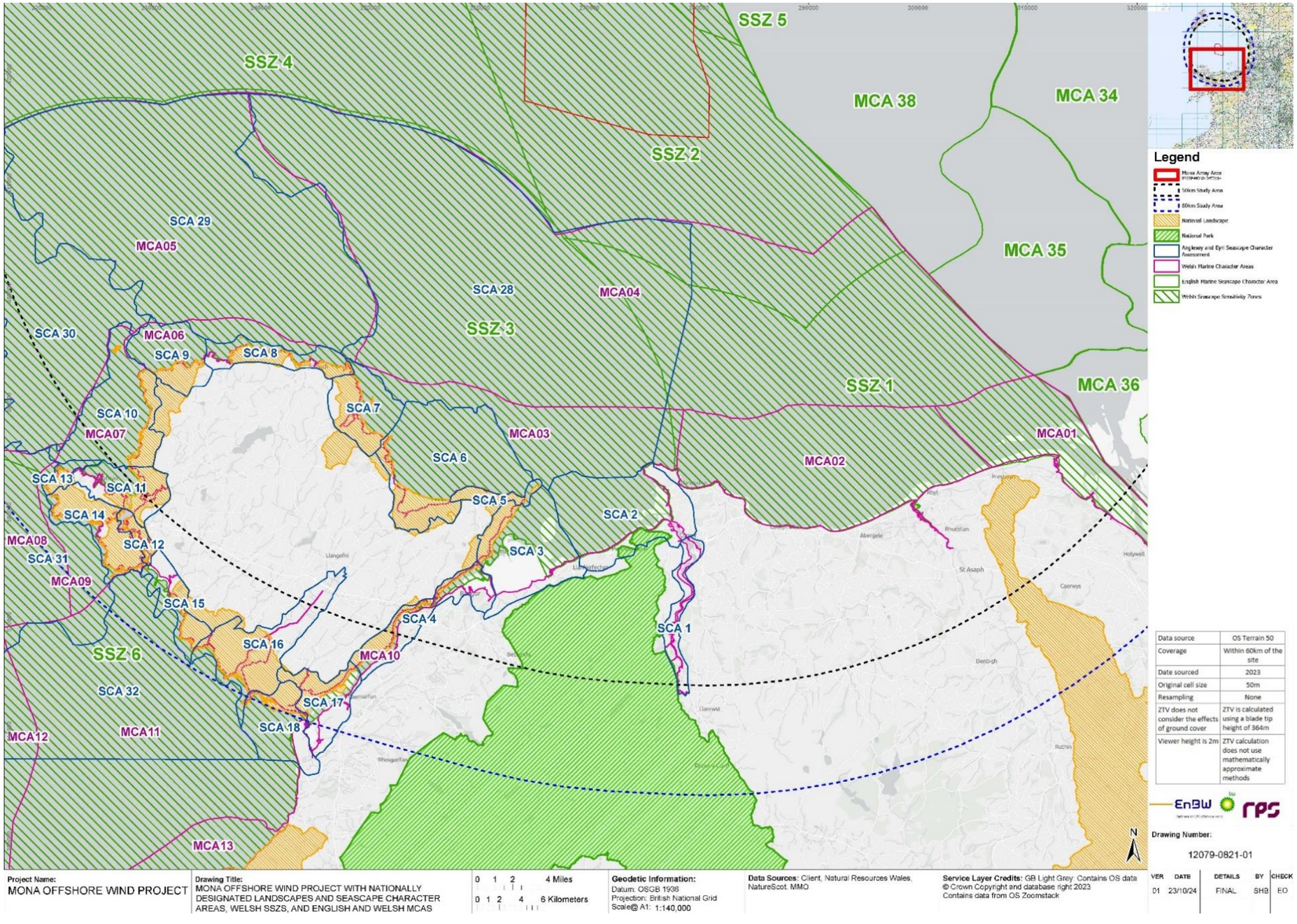

Figure 6.1: Seascape character areas and marine character areas of relevance to the Mona Array Area.

7 REFERENCES

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