



ESTUARIES

OFFSHORE WIND FARM

FIVE ESTUARIES OFFSHORE WIND FARM

10.59.1 APPLICANT'S COMMENTS ON NATURAL ENGLAND'S DEADLINE 6 SUBMISSIONS

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DEFINITION OF ACRONYMS

Term	Definition
ANS	Artificial Nesting Structure
AEO	Alde Ore Estuary
AONB	Area of Outstanding Natural Beauty
CRM	Collision Risk Modelling
CSIP	Cable Specification and Installation Plan
DBS	Dogger Bank South
DCO	Development Consent Order
DESNZ	Department of Energy Security and Net Zero
ECC	Export Cable Corridor
EIA	Environmental Impact Assessment
ES	Environmental Statement
FFC	Flamborough and Filey Coast
GBS	Gravity Base Foundation
HRA	Habitats Regulations Assessment
IPMP	In Principle Monitoring Plan
ISH	Issue Specific Hearing
KIMP	Kittiwake Implementation and Monitoring Plan
LAT	Lowest Astronomical Tide
LBBG	Lesser Black Backed Gull
MDS	Maximum Design Scenario
MLS	Margate and Long Sands
MMMP	Marine Mammal Mitigation Protocol



Term	Definition
MMO	Marine Management Organisation
MPA	Marine Protected Area
MRF	Marine Recovery Fund
NAS	Noise Abatement System
NE	Natural England
OTB	Outer Trail Bank
OWF	Offshore Wind Farm
PVA	Population Viability Analysis
RIAA	Report to Inform Appropriate Assessment
SAC	Special Area of Conservation
SIP	Site Integrity Plan
SLVIA	Seascape, Landscape and Visual Impact Assessment
SNCB	Statutory Nature Conservation Body
SNS	Southern North Sea
SPA	Special Protected Area
SSC	Suspended Sediment Concentration
UXO	Unexploded Ordnance
VE	Five Estuaries Offshore Wind Farm
WCS	Worst Case Scenario



1. COVER LETTER [REP6-006]

Summary of Deadline 6 submission OR Excerpt of Deadline 6 submission	Applicant's Response
<p>Updated Draft Development Consent Order (DCO)</p> <p>Natural England has reviewed the Schedule of Changes Revision F submitted at Deadline 5. The comments raised on our Deadline 5 cover letter [REP5-094] and within our relevant representations Appendix A [RR-081] remain as per our updated Risks and Issues log Appendix L6.</p>	<p>This is noted by the Applicant</p>
<p>With regard to document 10.38 Without Prejudice HRA DCO Schedules, Natural England has reviewed and noted the wording and conditions used within match those used within the draft DCO Schedule XX for the compensation of Lesser Black Backed Gulls. Therefore, we advise that issues A18-A22 of the Risks and Issues log Appendix L6 should also be considered to apply to these in-principle schedules, with exception to issue A21 and the Margate and Long sands compensation schedule. This schedule does not secure a requirement for the compensation to be undertaken prior to works, as the Marine Recovery Fund will address any time lags in the delivery. Please see Point 5 below on this matter and we refer the ExA to issue A19 of Appendix A of our Relevant Representations [RR-081] and highlight that the draft provisions at Annex A within the document provides a draft compensation schedule for benthic including provisions for strategic compensation and advise that this wording be considered for inclusion.</p>	<p>Regarding the draft condition proposed by Natural England, the Applicant does not consider this fit for purpose. It is not agreed that a steering group is required for the strategic compensation measure, which will simply result in the Applicant paying an agreed sum into the Marine Recovery Fund. The appropriate trigger for benthic mitigation is the use of cable protection, given that this is the impact that Natural England propose would lead to an AEol.</p>
<p>Through discussions with the Marine Management Organisation on standard approaches to DCOs a new issue has been brought to our attention. We have agreed with the MMO that the relevant statutory nature conservation body should be named as consultee on relevant deemed marine licence conditions to reduce potential misunderstandings in the post consent phase. Natural England will provide a list of these conditions at Deadline 6A.</p>	<p>The Applicant would query the need for this given the MMO would consult with Natural England as a matter of course on all such conditions.</p>
<p>Onshore Ecology Surveys for the Proposed Compensation Site (PCS) for Lesser Black Backed Gull (LBBG) at Orford Ness</p> <p>Natural England has recently discussed the requirement and timing of further onshore ecology surveys with the Applicant to complete their baseline characterisation. We have advised the Applicant that the need remains to complete this baseline characterisation to close the evidence gap and inform mitigation measures, and also that surveys should be undertaken at the optimum times of year. Whilst we appreciate the Applicant's consideration and efforts to close this evidence gap before the end of Examination, we do not feel that their proposal to carry out further surveys at sub-optimal times would sufficiently address the evidence gaps and address the concerns we have highlighted in our advice to the [REP5-094] and in our Risk and Issues Log (see Appendix L6 to this Deadline 6 submission).</p> <p>However, we note that determination for this project is not due until September 2025, and therefore it may still be beneficial for the Applicant to undertake surveys in summer 2025 to provide the necessary comfort to the Secretary of State that suitable mitigation measures can be adopted to ensure that an AEol of the Orfordness-Shingle Street SAC is unlikely to occur from the proposed compensation activities.</p> <p>Alternatively, our advice is that the Secretary of State could potentially adopt a risk-based decision-making approach based on the surveys provided thus far, and secure a requirement within the DCO to carry out pre-construction surveys to validate the predictions and inferences made regarding the Orford Ness LBBG PCS HRA, EIA, and EclA. If the pre-construction survey</p>	<p>The Applicant agrees to carry out additional onshore ecology surveys at the appropriate time/season, to validate the existing assessment, and will confirm the mitigation requirements or present updated mitigation proposals for the SAC/SSSI/Ramsar Site.</p> <p>Depending on the availability of access to the compensation site, the surveys will either be completed in summer 2025 or undertaken as pre-construction surveys. The mitigation requirements will be reviewed when the surveys are completed.</p>



<p>data indicates the need for further mitigation, then this could be agreed with the relevant SNCB and regulator prior to the commencement of any works by the Applicant.</p> <p>The requirement to confirm adequacy of the mitigation should also be secured within the DCO. If the Applicant agrees to this approach, commits to carrying out the necessary onshore ecology pre-construction surveys at the appropriate time/season, and present updated mitigation proposals for the SAC/SSSI/Ramsar Site then we would be able to support a conclusion of no adverse effect on site integrity.</p>	
<p>Margate and Long Sands Special Area of Conservation (MLS SAC) Updated Condition Assessment</p> <p>Further to Natural England’s response (10 January 2025) to the Examining Authority’s Rule 17 Letter (issued on 23 December 2025) [PD-023], requesting an update on the MLS SAC condition assessment, we wish to inform the Examining Authority that the condition assessment has now been updated (31 January 2025). The condition assessment of the marine feature (H1110 Sandbanks which are slightly covered by sea water all the time) of the site shows it is now in unfavourable declining condition. The updated condition assessment can be viewed at: Designated Sites View.</p>	<p>This is noted by the Applicant.</p>
<p>Strategic Compensation Measures for Offshore Wind Farm Activities</p> <p>Natural England draws the attention of the ExA and the Applicant to the Ministerial Statement issued on 29th January 2025 which confirmed Defra’s support for delivery of strategic benthic compensation, making wider compensation measures available and delivery of compensation through the Marine Recovery Fund.</p> <p>Written statements - Written questions, answers and statements - UK Parliament</p> <p>DESNZ also issued interim guidance on the Marine Recovery Fund. The guidance will provide developers a means to access MPA designation as a compensation measure, prior to the launch of the MRF. The interim guidance also provides advice to developers in planning who are developing their own avian compensation packages on how to ensure that their consent documents include the option to switch to sourcing their avian compensation through the Marine Recovery Fund when it is in place. Strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance - GOV.UK</p> <p>Natural England will provide further, more detailed advice, on an ongoing basis for this project during Examination.</p>	<p>The Applicant is aware of this advice and reiterates that the projects preference is to deliver any potential benthic compensation measures via the Marine Recovery Fund, whilst requiring the need to deliver project-level compensation should the MRF not proceed for any reason.</p>
<p>Defra Marine Noise Package</p> <p>Further to Natural England’s response (03 December 2024) to the recent Examining Authority’s Written Question 2 (ME. 2.15) [PD-014], we wish to provide an update to the ExA on the Defra Marine Noise Policy paper.</p> <p>Defra have recently published their Marine Noise package, which provides a suite of new and updated policy and guidance relating to the reduction and mitigation of underwater noise. This package includes the following documents;</p> <ul style="list-style-type: none"> > Marine Noise Policy paper, which can be found here - Reducing marine noise GOV.UK. 	<p>The Applicant is aware of the recent publication of the Defra Marine Noise Package which includes the publication documents related to piling and UXO clearance policy and guidance.</p> <p>The Applicant has updated both the Outline MMMP - Piling at Deadline 7 and Outline Southern North Sea Special Area of Conservation Site Integrity Plan [REP6-022] at Deadline 6 to reflect the Defra (2025) policy. The Applicant will demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise reduction methods for piling activity.</p> <p>The Applicant has updated the Outline MMMP – UXO at Deadline 7 to reflect the Joint Position Statement (UK Government, 2025) as low order is now the default method for UXO clearance. The updated Outline MMMP – UXO also references the updated JNCC (2025) guidelines.</p>



<p>> An updated Unexploded Ordnance (UXO) Joint Position Statement, which can be found here - Marine environment: unexploded ordnance clearance Joint Position Statement - GOV.UK</p> <p>> UXO clearance supporting guidance providing more detail for Supporting minimising environmental impacts from unexploded ordnance clearance GOV.UK</p> <p>Alongside these documents, JNCC have also published new mitigation guidelines for UXO clearance, which can be found here - JNCC guidelines for minimising the risk of injury to marine mammals from unexploded ordnance (UXO) clearance in the marine environment JNCC Resource Hub, and a joint statement from science and nature conservation advisors (Cefas, JNCC and NE) on the use of noise reduction methods when piling, which can be found here - JNCC, Natural England and Cefas position on the use of quieter piling methods and noise abatement systems when installing offshore wind turbine foundations JNCC Resource Hub. The statement is supported by a CEFAS evidence review of noise reduction methods, which can be viewed here - Evidence on the efficacy of underwater noise abatement.</p> <p>Together, these documents set out the expectation that from January 2025., 'all offshore wind pile driving activity across all English waters will be required to demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise reduction methods in the first instance' and that low order UXO clearance should now be the default clearance method, with high-order detonations restricted to extraordinary circumstances. They also provide updated advice regarding mitigation of UXO clearance activities. Natural England advises that the Applicant should review the content of these documents and ensure their assessment and mitigation measures are aligned. Natural England will provide further, more detailed advice as required.</p>	
<p>Levelling Up and Regeneration Act 2023 (LURA)</p> <p>As highlighted in Natural England's Relevant Representations [PD2-011], Section 245 (Protected Landscapes) of the Levelling Up and Regeneration Act 2023 places a duty on relevant authorities in exercising or performing any functions in relation to, or so as to affect, land in a National Park, the Broads or an Area of Outstanding Natural Beauty ("National Landscape") in England, to seek to further the statutory purposes of the area. The duty applies to local planning authorities and other decision makers in preparing development plans, making planning decisions on development and infrastructure proposals, as well as to other public bodies and statutory undertakers in undertaking their functions.</p> <p>We highlight that Defra have released 'Guidance for relevant authorities on seeking to further the purposes of Protected Landscapes' (December 2024) and, in accordance with that guidance, we advise that the Applicant needs to demonstrate how the project proposes to enable the decision-maker to further the purposes of the Suffolk Coast and Heaths National Landscape (SCHNL). Any opportunities for enhancement in line with the Protected Landscapes Management Plan should also be explored and secured as part of the Development Consent Order.</p>	<p>With regards the application of section 85 of the Countryside and Rights of Way Act 2000, the Applicant refers the ExA to its position as set out in its Deadline 6 submission [REP6-048], supported by the opinion of King's Counsel [REP6-050] and its submission at Deadline 6A [REP6A-002] in response to Suffolk County Council's D6 submission [REP6-074].</p>
<p>Examining Authority Rule 8(3) Letter – Variation of Examination timetable (dated 29 January 2025)</p> <p>Natural England notes the Examining Authority's Rule 8(3) Letter and decision to add two new deadlines (and make other minor changes) to the Five Estuaries Examination Timetable. With regards to Deadline 6A, added to enable the Applicant and other Interested Parties to respond to any submissions made at Deadline 6 further to Issue Specific Hearing 6's (ISH 6) Action Point 9 (discharging the duty under Section 85 of the Countryside and Rights of Way Act 2000, as amended by the Section 245(6) of the Levelling Up and Regeneration Act 2023 etc), Natural</p>	<p>This is noted by the Applicant.</p>



England is unlikely to have any comments to submissions made regarding ISH 6 Action Point 9. However, we may take the opportunity to use Deadline 6A to make other submissions.

With regards to new Deadline 8A, Natural England wishes to inform the Examining Authority that owing to the short timeframe between Deadlines 8 and 8A (i.e. four days), that we are unlikely to be able to review and respond to any new information submitted at Deadline 8, nor any subsequent Rule 17 letter that seeks advice on that new information.



2. APPENDIX B6 NATURAL ENGLAND'S MARINE PROCESSES ADVICE ON THE APPLICANT'S DEADLINE 4 DOCUMENTS [REP6-067]

Ref	Natural England Key Concern	Natural England's Advice to Resolve Issue	Applicant's Response
1	Natural England notes that the Maximum Design Scenario (MDS) volumes of disposal material have been based on the seabed preparation requirement for Gravity Based Structures (GBSs) as a worst case. However, GBS have been removed from the draft DCO. This means that the WCS array disposal volume will be considerably less than that assessed. This is also the case for the worst-case scenario (WCS) total volume of material that may require disposal in 9.8 Dredge Disposal Site Characterisation Report [REP4-018].	We advise that the WCS array sediment disposal volume should be based on the most realistic WCS foundation structures in the array i.e. not GBS. The MDS volumes for sediment disposal should be updated based on the most realistic WCS foundation structures.	As the conclusion of the ES (that there would be no significant effects as a result of sediment disposal) has not changed with the removal of GBS from the MDS, and the ability to use or not use GBS was always considered in the design envelope, the Applicant maintains the current MDS for sediment disposal.
2	Natural England has identified that there are 3 disposal areas, namely Array (North and South), Export Cable outside of MLS SAC, Export cable within MLS SAC	We suggest that a further breakdown of the disposal locations is considered as there are different requirements within the SAC.	Controls relating to the disposal of material in the Margate and Long Sands SAC are secured through Benthic Mitigation Plan []. It is not considered that this requires subdividing the ECC disposal area.
3	We note there are a number of constraints that limit the distribution of material across the Project's disposal sites. How will these constraints affect the distribution of disposed sediment across the project area? Will there be greater thicknesses of deposited sediments in certain areas owing to these constraints?	Natural England advises that the Applicant provides/signposts a map showing the WCS disposal distribution, taking into account the different constraints described.	<p>The Applicant's considers it has provided significant detail regarding sediment disposal distribution within 6.2.2 Marine Geology, Oceanography and Physical Processes [APP-071] and most recently within 10.14 Marine Geology, Oceanography and Physical Processes Sediment Plume Modelling [REP1-057] which was originally in response to a Natural England comment in the relevant representations requesting further detail relating to SSC and sediment deposition.</p> <p>The updated modelling referenced above confirmed, with associated figures, that the changes in SSC and deposition in within designated areas of seabed, including SACs and MCZs, are limited. Notably, the predicted changes in SSC and sediment deposition are largely confined to the vicinity of construction activities, with minimal overlap into designated conservation areas.</p>
4	Whilst there is a focus on sandwave levelling mitigation there is no inclusion within the text of mitigation measures in relation to the deposition of boulders.	Natural England advises that the text is updated with a protocol of how boulders will be deposited to ensure that wider impacts are avoided such as loss of other habitats, changes in bed load transport etc., especially in MLS SAC.	Boulder clearance will be as set out in the Offshore Project Description and as assessed in the ES. It is not considered that boulder clearance represents the MDS for any potential impact. A note is included in 10.30 Outline Sediment Disposal Plan-Revision C regarding boulders.
5	Natural England notes that the material removed from MLS SAC will be placed within the Export Cable Corridor (ECC) within the SAC to ensure that sediment is retained in the same sedimentary system and not removed, only redistributed.	Natural England advises that in order to maximise the potential for seabed morphological recovery and limit the effects on the wider sediment transport processes in the SAC, dredged material should be deposited updrift of levelling/seabed preparation and cable trenching operations within same sediment types to encourage natural backfill and reworking of material (except where an upstream deposition may have an adverse impact on another feature).	The Applicant does not consider this a realistic proposal. Firstly, depending on the location of the cables within the SAC, depositing updrift may require activities outside of the order limits, secondly this level of precision is likely unachievable, thirdly there may be considerable time between these operations, and natural processes will then render any limited benefit of this approach null.



Ref	Natural England Key Concern	Natural England's Advice to Resolve Issue	Applicant's Response
6	It is stated that material removed from MLS SAC will be placed within the offshore ECC via a discharge pipe/downpipe within MLS SAC to ensure that sediment remains within the same sedimentary cell and no sediment is removed from the local sediment transport system.	Natural England advises that in order to maximise the potential for seabed morphological recovery and limit the effects on the wider sediment transport processes in the SAC, that commitments are also made to deposited dredged material updrift of levelling/seabed preparation and cable trenching operations and within same sediment type, to encourage natural backfill and reworking of material (except where an upstream deposition may have an adverse impact on another feature).	This has been responded to in the row above (Response 5).
7	Cable Crossings Natural England notes that [REP4-035] discusses the MDS for cable crossings within the array areas and offshore export cable corridor. However, there are no details regarding the proximity of cable crossings to Margate and Long Sands Special Area of Conservation (MLS SAC) and Annex I sandbanks.	Natural England advises that the Applicant should provide distances between proposed cable crossing locations and MLS SAC and Annex I sandbanks.	The Applicant has committed to locating cable crossings of known projects (Sealink and North Falls) to the east of the Margate and Long Sands SAC. The exact crossing locations are not yet determined, however they will be in deeper water and therefore away from the SAC.
8	Natural England disagrees with the Applicant in relation to their assessment of sediment infilling within rock protection. In particular within MLS SAC. We also note that the Applicant has provided a numerical based estimate rather than site specific data.	Natural England advises that empirical evidence is utilised where possible within the SAC, namely London Array OWF.	<p>The Applicant has provided a quantitative assessment of sediment infilling within rock protection that includes fully conservative assumptions of: the MDS berm dimensions; that the rock berm does contain voids; and that the full volume of the voids might become infilled with sediment. Any real world examples can only be less conservative.</p> <p>Site specific observations of sand infilling a rock berm on the seabed are not generally available and direct quantitative measures would be impracticable (nearly impossible) to make. To make such measurements would require careful excavation (complete removal) of the berm whilst maintaining separation of the sand contained within the berm from that in the surrounding seabed. It is not possible to scan or image the inside of a rock berm. Geophysical surveys are not of high enough resolution to image the gaps between rocks on the surface of a berm. Video or still images showing sediment infilling (or not) on the surface of a berm do not provide evidence of sediment infilling (or not) within the berm.</p>
9	Percentage Material Ejected During Trenching The Applicant has provided further information in [REP4-035] on the MDS volume of sediment disturbed during trenching. However, it remains unclear whether the MDS is based on the 50% or 100% assumption for material ejected during trenching.	Natural England advises that further clarification on which percentage has been used to calculate the MDS volume of material ejected during trenching before we can advise further on this issue.	The final conclusions of the assessments relating to any type of sediment disturbance, and the sediment plume numerical modelling undertaken, are based on an MDS of 100% ejection during trenching.
10	Cable Protection Effects on the Sediment Transport Regime on/near MLS SAC We welcome the Applicant's further consideration of cable protection effects on the sediment transport regime at the northern tip of MLS SAC. The Applicant states that only 'very	Natural England advises that further evidence is needed to support the conclusion that only very minor changes are expected to the sediment transport regime due to the presence of cable protection measures across MLS SAC.	The Applicant can confirm the conclusion that only 'very minor changes' to the sediment transport regime are expected due to the presence of cable protection measures at the northern tip of MLS SAC.



Ref	Natural England Key Concern	Natural England's Advice to Resolve Issue	Applicant's Response
	<p>minor changes' to the sediment transport regime are expected due to the presence of cable protection measures at the northern tip of MLS SAC. However, in [APP-071] the Applicant stated that "At the regional scale, sediment transport is broadly in a southerly direction along the offshore ECC although superimposed on this are highly complex localised patterns of sediment circulation around banks and other topographic features." Currently, there is insufficient information to assess the impact of cable protection measures on these complex patterns of sediment circulation around the northern tip of MLS SAC and, in turn, seabed morphology and sediment composition.</p>		<p>Statements about the presence of "localised patterns of sediment circulation around banks and other topographic features" apply within or near to other parts of the cable route, e.g. the northern end of Galloper Bank, and also more generally to larger sandbank size features that are present within the wider study area but that are distant from the Project Boundary.</p> <p>Around the northern tip of MLS SAC and the cable route in this area is in an area of sediment transport direction convergence. However, any complexity is at a length scale in the order of kilometres, which is much larger than the very localised potential effect of any cable protection (length scales in the order of metres during operation), and is therefore insensitive to any such changes.</p>
11	<p>Export and Array Cable Repair/Replacement Events During the Lifetime of the Project</p> <p>The Applicant has provided further information regarding the MDS for export and array cable repair/replacements over the lifetime of the project. MDS for export cable repair/replacement has been based on 9 x jointed export cables with a sediment disturbance volume based on a 1km export cable x 18m wide corridor, 3.5m deep V-shaped trench plus additional anchor-related seabed disturbance. MDS for array cable repair/replacement has been based on 8 x 2.52km whole array cable length x 18m wide corridor x 3.5m deep V-shaped trench.</p>	<p>We welcome the Applicant's further information and rationale for lifetime array and export cable repair/replacement events. We advise that if over the lifetime of the project a benthic MPA is likely to be impacted directly or indirectly then the WCS needs to be established (in terms of frequency, maximum number of events, duration of event, total area of impact) at the time of consent. Affected features, pressures, and sensitivity will need to be identified. The WCS impact on each affected feature will also need to be established. It is also important for there be a requirement to consult the regulator (and the relevant SNCB) to determine if a new marine licence will be required before the O&M activities commence.</p>	<p>The Applicant is aware of the requirement to consult with the regulator (and the relevant SNCB) to determine if a new marine licence will be required before O&M activities commence within the M&LS SAC.</p> <p>It is not possible to determine if export cable repairs will be required within the M&LS SAC at this stage, although given the very short distance the cable passes through the SAC it is considered highly unlikely. Should cable repair be required within M&LS SAC, the regulators and relevant SNCB will be consulted.</p>
12	<p>We welcome the additional information included in the Outline Cable Specification and Installation Plan – Rev B. We appreciate that the precise location of cable crossings in the export cable corridor (ECC) is not known at present and that the "cable crossings of North Falls and Sealink (should they be required) will occur to the east of the Margate and Long Sands SAC..." However, there is insufficient information to gauge the proximity of cable crossings to MLS SAC and Annex I sandbanks.</p>	<p>Natural England advises that further information is provided by the Applicant on the likely proximity of cable crossings to MLS SAC and Annex I sandbanks and orientation across the study area.</p>	<p>Please see response 7.</p>
13	<p>Natural England suggests that there are in fact 3 disposal areas namely, Array (North and South), ECC outside SAC and ECC within SAC</p>	<p>Natural England suggests this, and other documents are updated to ensure that there are no ambiguities of what is proposed where.</p>	<p>See response to 5</p>
14	<p>Natural England advises that clarification is required within updated text to confirm that only a fall/down pipe will be used in MLS SAC</p>	<p>Natural England advises that tracked change text includes '...but only a fall/down pipe will be used in MLS SAC'</p>	<p>See response to 11.</p>



3. APPENDIX E6 – NATURAL ENGLAND’S BENTHIC ECOLOGY ADVICE ON THE APPLICANT’S DEADLINE 4 DOCUMENTS [REP6-068]

Ref	Natural England Key Concern	Natural England’s Advice to Resolve Issue	Applicant’s Response
9.8 Dredge Disposal Site Characterisation Report – Revision B (Tracked)			
1	Natural England suggests that there are in fact 3 disposal areas namely, Array (North and South), ECC outside SAC and ECC within SAC	Natural England suggests this, and other documents are updated to ensure that there are no ambiguities of what is proposed where	<p>The Applicant considers the current naming of disposal sites i.e. Disposal Site 1 (Array Areas) and Disposal Site 2 (Offshore ECC) to be sufficient and correct.</p> <p>As highlighted in responses below, 10.13 Outline Sediment Disposal Management Plan – Revisions C and 9.13 Margate and Long Sands SAC Benthic Mitigation Plan - Revision E have been updated with further commitments to minimise impact upon Margate and Long Sands SAC.</p>
2	The commitments for sediment disposal activities outlined within this document are not fully aligned with those listed in other documents such as the [REP4-041] 10.30 Outline Sediment Disposal Management Plan (which Natural England also advise should be updated – see other comments).	Natural England are aware that this document signposts to [REP4-041] 10.30 Outline Sediment Disposal Management Plan for specific commitments associated with sediment disposal. However, to ensure consistency and remove any ambiguity, all mitigation commitments listed within this document should be updated to align with those within [REP4-041].	<p>The Applicant considers that the appropriate place to outline specific commitments is within 10.30 Outline Sediment Disposal Management Plan – Revision C, which has been updated at Deadline 7.</p> <p>Although both documents do concern sediment disposal, the characterisation report (also updated at Deadline 7) describes the process whereby a proposed marine disposal site for spoil material and drill arisings generated by construction activities is described in terms of the existing environment. The Disposal Management Plan however, deals with the practical management for disposal of sediments and specifically details what measures will be undertaken in relation to constrained seabed areas, such as shipping routes or Margate and Long Sands SAC.</p>
3	Natural England advises that clarification is required within updated text to confirm that only a fall/down pipe will be used in MLS SAC	Natural England advises that tracked change text includes ‘...but only a fall/down pipe will be used in MLS SAC’	10.30 Outline Sediment Disposal Management Plan- Revision C has been updated to note the discharge pipe (or down pipe) will be used within the M&LS SAC. The same commitment is also included within Section 7 of the Margate and Long Sands SAC Benthic Mitigation Plan (Revision E).
10.30 Outline Sediment Disposal Management Plan			
4	Natural England notes that in [REP4-018] the use of gravity base foundations have been removed therefore the worst-case scenario presented is not the realistic worst-scenario for the project.	Natural England advises that any commitment to remove the most environmentally impactful foundations should be followed through in each of the assessments and documents to ensure that impacts will be minimised, and a realistic worst-case scenario is assessed and consented.	<p>The Applicant notes that reference to gravity base foundations has been fully removed from the DCO. The DCO states foundation “means any of a monopile, multi-leg pin-piled jacket, mono suction caisson, multi-leg suction caisson jacket”, and as such, impacts will be minimised as the gravity base foundations are no longer allowed.</p> <p>The Applicant has considered the reduction in MDS as a result of the removal of gravity base foundations and can confirm that there would be no change to the assessment in terms of significance of impact. As such, the Applicant is not planning to update all documents to reference this lower MDS.</p>



Ref	Natural England Key Concern	Natural England's Advice to Resolve Issue	Applicant's Response
6	Natural England notes that impacts to priority habitats will be avoided where possible. However, there are no agreed restrictions to ensure this is likely to be achieved	Natural England advises that disposal should be in like for like sediment areas to minimise impacts to priority habitats. In addition, we advise a 50m exclusion zone is included around Sabellaria spinulosa reef as per the requirements for the Aggregates industry	<p>The Applicant would like to restate that no Annex I <i>Sabellaria spinulosa</i> reef has been found during any site-specific surveys. However, should any Annex I <i>Sabellaria spinulosa</i> reef subsequently be identified, a note has been added to the document to state that sediment disposal will avoid these areas by 50 m.</p> <p>The applicant does not consider that disposal in like-for-like sediment areas is a realistic proposal. Differences between surface and sub-surface sediment types would mean that this requirement would not be practically feasible. The Outline Sediment Disposal Management Plan will be updated and agreed with regulators post consent.</p>
7	Whilst there is a focus on sandwave levelling mitigation there is no inclusion within the text of mitigation measures in relation to the deposition of boulders	Natural England advises that the text is updated with a protocol of how boulders will be deposited to ensure that wider impacts are avoided such as loss of other habitats, changes in bed load transport etc., especially in MLS SAC	<p>The Applicant would like to note that the Outline Sediment Disposal Management Plan has been produced in relation to all sediment disposal associated with construction (see Section 2).</p> <p>The plan (as it is a sediment disposal plan) did not originally include information on the deposition of, or relocation of boulders. However, a section has now been added in the outline plan for the consideration of boulder deposits (Section 3.8), both inside and outside of the M&LS SAC.</p>
8	The Applicant has committed to using a 'downpipe' 'where possible' when disposing of sediments.	Natural England advises that this commitment is not sufficient to address our concerns relating to the need to mitigate impacts upon Annex I sandbanks with M&LS SAC. We advise that that the use of a downpipe should be committed to in all instances, and upstream of the sandwave and in the same sediment type, unless otherwise agreed with the MMO in consultation with the relevant SNCB.	<p>The Outline Sediment Disposal Management Plan (Revision C) has been updated to note the discharge pipe (or down pipe) will be used within the M&LS SAC. The same commitment is also included within Section 7 of 9.13 Margate and Long Sands SAC Benthic Mitigation Plan -Revision E.</p> <p>See Ref 5 for response regarding disposal of sediment upstream.</p>
9	3.7.6 The text within this paragraph is ambiguous.	To remove any ambiguity in mitigation measures being proposed, Natural England requires the Applicant to provide spatial context to the commitment to 'dispose of material within the vicinity of the M&LS SAC'	An additional note has been added to updated Outline Sediment Disposal Management Plan (Revision C) in Section 3.7. to define the areas that are considered to be 'within the vicinity' of the M&LS SAC. This is defined as 500 m wide areas running immediately adjacent to the SAC boundary, within the Offshore ECC
10	Not all dredge disposal criteria listed within the EIA and HRA documents have been included within this document.	Natural England advise that mitigation commitments to dispose of sediment within the same sediment type both within and outside of the M&LS SAC should also be included within the [REP4-041] 10.30 Outline Sediment Disposal Management Plan.	<p>The commitment to deposit sediment in the same sediment cell within M&LS SAC is already included in 9.13 Margate and Long Sands SAC Benthic Mitigation Plan - Revision E.</p> <p>For depositing sediments outside of M&LS SAC in the same sediment type, see response to Ref 4.6.</p>
9.13 Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan - Revision C (Tracked)			
11	3.2.1 There is currently ambiguity within the mitigation commitments relating to sediment disposal within the SAC.	Natural England advises that current mitigation commitments relating to sediment disposal are not sufficient to address our concerns relating to the need to mitigate impacts upon Annex	9.13 Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan – Revision E has been submitted at Deadline 7. The use of a downpipe within the M&LS SAC was



Ref	Natural England Key Concern	Natural England's Advice to Resolve Issue	Applicant's Response
		I sandbanks with M&LS SAC. We advise that that the use of a downpipe should be clearly committed to in all instances, unless otherwise agreed with the MMO in consultation with the relevant SNCB.	already included but this has been now added to Section 7 as a specific mitigation commitment.
10.20.1 Technical Note - Methodology for Determining MDS (Offshore) - Revision B (Tracked)			
12	Natural England disagrees with the Applicant in relation to their assessment of sediment infill of rock protection. In particular within MLS SAC. We also note that the Applicant has provided a numerical based estimate rather than site specific data.	Natural England advises that empirical evidence is utilised where possible within the SAC, namely London Array OWF.	<p>The Applicant has provided a quantitative assessment of sediment infilling within rock protection that includes fully conservative assumptions of: the MDS berm dimensions; that the rock berm does contain voids; and that the full volume of the voids might become infilled with sediment. Any real world examples can only be less conservative.</p> <p>Site specific observations of sand infilling a rock berm on the seabed are not generally available and direct quantitative measures would be impracticable (nearly impossible) to make. To make such measurements would require careful excavation (complete removal) of the berm whilst maintaining separation of the sand contained within the berm from that in the surrounding seabed. It is not possible to scan or image the inside of a rock berm. Geophysical surveys are not of high enough resolution to image the gaps between rocks on the surface of a berm. Video or still images showing sediment infilling (or not) on the surface of a berm do not provide evidence of sediment infilling (or not) within the berm.</p>
13	3.1.5 and 3.3.2 The text within these paragraphs is ambiguous. The 5,400m ² figures being quoted are misleading, as the total area of Annex I sandbank feature impacted will be double this figure owing to the need to route two cables through the SAC.	Natural England advises that the figures are updated to 10,800 m ² to make clear the area of feature potentially being lost.	<p>The Methodology for Determining MDS was updated subsequently - Revision C [REP6-037] to correct an earlier error.</p> <p>The MDS of 5,400 m² of cable protection is the total maximum within the M&LS SAC. It is not per-cable, but a total figure. This was updated and submitted at Deadline 6.</p>
14	4.1.2 It remains unclear how the MDS for rock replenishment has been determined. The Applicant states that "The 20% replacement of cable or scour protection is within the assessed MDS for total habitat loss, i.e. would occupy the same area is not additional to it." However, detail on scenarios in which protection replenishment may be required has not been provided and therefore it is not possible to determine whether the MDS for cable protection replenishment is realistic. For example, it is not clear whether the original cable protection could lose integrity but remain within the M&LS SAC and therefore continue to contribute to habitat loss and/or present other impact pathways (such as changes to physical processes) if buried or dispersed. Consequently, Natural England are not confident that rock replenishment will not result in further habitat loss of Annex I sandbank over and above that predicted within the MDS. Of particular concern is the	Natural England advises that further information is required on the likely instances for rock protection replenishment. Without further detail on such scenarios, we are unable to advise on the appropriateness of the MDS values presented.	The Applicant has committed in the Margate and Long Sands SAC Benthic Mitigation Plan to seek a further marine licence for any post-construction cable protection. It is not agreed that rock replenishment would necessarily result in further habitat loss, and replenishment (whether within the MDS or not) would require further consent.



Ref	Natural England Key Concern	Natural England's Advice to Resolve Issue	Applicant's Response
	<p>Applicants claims that replenishment would occupy the same footprint as the original rock protection. However, if rock protection became dispersed or lost integrity, Natural England considers it likely that the footprint of habitat loss and/or impacts to the structure and/or function of the Annex I feature will increase. And we query if the replenishment protection would suffer the same fate.</p>		



4. APPENDIX I6 – NATURAL ENGLANDS’S COMMENTS ON 10.29 APPLICANT’S COMMENTS ON DEADLINE 3 SUBMISSIONS [REP6-069]

Ref	Summary of Deadline 6 submission OR Excerpt of Deadline 6 submission	Applicant’s Response
1	<p>Natural England notes the Applicant’s request in [REP4-040] for Natural England to provide an update to Table 1 of Appendix I to the Relevant Representations of Natural England [PD2-011] (showing apparent heights of the closest WTG from selected viewpoints) to reflect the reduced maximum turbine blade tip of 370m LAT.</p> <p>Please see the revised Table 1 below which provides indicative apparent heights in degrees for the 370m MDS scenario in an additional column, which is shaded orange. We highlight that for five viewpoints the apparent heights remain above 0.4 degrees i.e. above a level that Natural England considered to be potentially significant.</p> <p>The Natural England’s advice on the significance of impacts to the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (now Suffolk Coast and Heaths National Landscape) remains as described within in our Relevant Representations [PD2-011].</p>	<p>The Applicant notes and welcomes Natural England’s revision to Table 1 of its Relevant Representation, providing indicative apparent heights in degrees for the 370m MDS in an additional column.</p> <p>The Applicant highlights that in this MDS, the table clearly demonstrates that the apparent height of the WTGs will be reduced in all views. The Applicant considers that based on the WTG height parameters that have been reduced, the magnitude of change arising from the VE array areas is likely to reduce (even if it doesn’t for example, reduce from low to negligible across an EIA threshold, the magnitude will still reduce) and the adversity of any effects will be lower than originally assessed in the ES.</p> <p>The Applicant also notes that based on Natural England’s apparent height approach, 370m high WTGs viewed from Dunwich Heath (0.416) and Sizewell (0.417) now become very close to the 0.4 degrees threshold of significance; and that it is really only the Orford Ness viewpoint (0.485) that remains at any notable amount above the 0.4 degrees threshold referred to by Natural England.</p> <p>As per the Applicant’s response to Natural England’s relevant representation, taking a purely quantitative approach to assessing landscape impact is not advised by any guidance and the Applicant is unaware of how Natural England have reached the conclusion that a 0.4 degree level equates to a potentially significant impact.</p>
2	<p>Table 1 (Updated) Apparent heights of select viewpoints for illustrative purposes given the WTG maximum height parameters presented in the Five Estuaries Preliminary Environmental Information Report and Environmental Statement, in comparison to the apparent heights of Greater Gabbard and Galloper from Orford Ness.</p> <p>Natural England consider apparent heights of above 0.4 degrees as being potentially significant. Apparent heights which Natural England considers to be significant are shown in bold.</p> <p>In particular, we draw the Examiners’ attention to the value for the viewpoint located on Orford Ness, which should be considered in the context of the highly sensitive nature of this location, principally in terms of potential for significant adverse effects to the SCHAONB (now SCHNL) wildness and tranquillity special qualities.</p>	<p>The Applicant notes that Natural England highlight the value at Orford Ness in particular, and has responded to this point in the Applicant’s comments on Natural England’s Deadline 4 submissions [REP5-074] Deadline 5 Submission (P18). The Applicant notes that this narrow strip of coast forms the closest point of the Suffolk Coast to the VE arrays but is not representative of the impacts from other locations set further back from Orford Ness or at longer distances to the north and south of the SCHAONB, and it is a location with limited public access. Wider views of Orford Ness also include other development influences, including structures associated with the former military use, tall communications masts and bleak, austere, foreboding character associated with its remoteness and years of military testing, bombing and disposal. The Applicant considers that these special qualities would still be appreciated by visitors, even with the addition of the further VE WTGs on the visible seaward horizon. The potential for a curtaining effect also diminishes from Orford Ness (VP9 [REP2-037]) where the visual gap between VE and EA2 is clearly appreciable and almost all of the VE array is located behind the Galloper and Greater Gabbard wind farms.</p>



Viewpoint	Apparent height of closest WTG for ~420m scenario (PEIR)	Apparent height of closest WTG for 399m MDS scenario (ES)	Apparent height of closest WTG for 370m further updated MDS scenario (ES)*	Apparent height of closest WTG for ~320m scenario (PEIR)	Apparent height of closest WTG for 324m MDS scenario (ES)	Greater Gabbard consented array	Galloper consented array
Southwold (Gun Hill)	0.398	0.367	0.332	0.271	0.276		
Dunwich Beach	0.404	0.372	0.336	0.273	0.278		
Dunwich Heath	0.487	0.454	0.416	0.351	0.356		
Sizewell Beach	0.493	0.458	0.417	0.347	0.353		
Thorpeness	0.512	0.475	0.433	0.360	0.366		
Aldeburgh	0.515	0.478	0.435	0.362	0.368		
Orford Ness	0.566	0.529	0.485	0.410	0.416	0.268	0.300

*Note the orange shaded column provides an update to Table 1 as presented in Appendix I to the Natural England [PD2-011] (showing apparent heights of the closest wind turbines from selected viewpoints) to reflect the reduced maximum turbine blade tip of 370m LAT.



5. NATURAL ENGLAND'S RISK AND ISSUES LOG [REP6-070]

NE Ref	The principal issue in question	The concern held by Natural England	What actions have been taken and what still needs to change to overcome the disagreement since D4	Likelihood of the concern being addressed during examination	RAG rating at D6	Applicant's position
Development Consent Order (DCO)						
P1	The during construction monitoring conditions within the deemed Marine Licences (dML) Schedules 10 and 11 <u>do not</u> secure that piling must cease in the event the monitoring highlights the noise impact is significantly in excess of the predicted impacts assessed.	This is a key mitigation for marine mammals and has been included in previous DCOs for various offshore wind farms, such as the recent East Anglia One North project or the Sheringham and Dudgeon Extension Project.	Natural England notes new wording has been included in the updated DCO submitted at Deadline 4 which partially addresses our concerns. We have outstanding concerns relating to the timing of the reports and the wording used to trigger a stop of works.	Potential resolution.		The Applicant has amended the dML to address the trigger of a stop to works. The timing proposed by the Applicant is considered appropriate.
P2	Margate and Long Sands Special Area of Conservation (MLS SAC) Benthic Mitigation Plan is not secured within the transmission deemed Marine Licence (dML).	This plan includes key mitigation for the SAC which needs to be updated to include relevant up-to-date information on the final designs and up to date mitigation techniques.	Natural England met with the Applicant on 9 December and has subsequently provided a written response to the Applicant's comments on the DCO, including this provision. We await any further update from the Applicant before providing further advice into examination.	Potential resolution.		The Margate and Long Sands SAC Benthic Mitigation Plan is secured to the dML through Schedule 11 condition 13(g), requiring that the CSIP reflects the commitments on cable protection in the mitigation plan. The Applicant has reviewed this condition and added 'cable laying methodology' to ensure that the CSIP accords with all aspects the Benthic Mitigation Plan. This is also reflected in the outline CSIP.
P3	Schedule 14 includes only impacts to Alde-Ore Estuary Special Protection Area (SPA) Lesser Black Backed Gull (LBBG), but not affected features of MLS SAC or Flamborough and Filey Coast (FFC) SPA.	We cannot rule out Adverse Effect on Integrity (AEoI) on MLS SAC and FFC SPA and advise that compensation may be required for these sites, if the Secretary of State (SoS) determines that it is required.	Natural England met with the Applicant on 9 December and has subsequently provided a written response to the Applicant's comments on the DCO, including this provision. We await any further update from the Applicant before providing further advice into examination.	Potential resolution.		The Applicant provided without prejudice schedules at Deadline 5 and awaits Natural England's comments.
Marine Geology, oceanography and Physical Processes						
P4	Disruption of sediment transport processes at MLS SAC due to the placement of cable protection	Insufficient information to assess the magnitude and significance of potential impacts to sediment transport processes within MLS SAC.	No change. Previous advice remains unchanged and additionally further evidence is needed to support the conclusion that only very minor changes are expected to the sediment transport regime due to the presence of cable protection measures across MLS SAC.	Potential resolution.		The Applicant can confirm the conclusion that only very minor changes to the sediment transport regime are expected due to the presence of MDS cable protection measures at the northern tip of MLS SAC. Around the northern tip of MLS SAC and the cable route in this area, sediment transport processes and pathways are at a length scale in the order of kilometres, which is much larger than the very localised potential effect of any cable protection (length scales in the order of metres) during operation. The Applicant therefore concludes that no measurable change will



NE Ref	The principal issue in question	The concern held by Natural England	What actions have been taken and what still needs to change to overcome the disagreement since D4	Likelihood of the concern being addressed during examination	RAG rating at D6	Applicant's position
						<p>occur to the magnitude or pattern of natural processes and bedforms that are active within the MLS SAC.</p> <p>It is possible to confidently assess and conclude that any effects of cable protection near to the MLS SAC will be of small magnitude and localised extent. On this basis, it is not necessary (nor practicable) to assess the effect of an immeasurably small change on an energetic natural sediment transport regime, at more distant locations.</p>
P5	Construction and Operation and Maintenance Impacts to SPA/SAC supporting habitats, and priority habitats	Incomplete consideration of potential impacts to seabed morphology and magnitude and significance of their effect.	We advise that uncertainty remains regarding the factors that influence the rate of sandwave/sandbank mobility and, in turn, cable burial success and scour at WTG foundations. This includes the assessment of long-term morphological change of the seabed and larger sandbank features, assessment of static vs mobile seabed areas, identification of erosional and accretional areas, assessment of the impact of normal and extreme wave conditions on seabed level, and thickness of the mobile sediment layer. Updated assessments will be needed pre-construction to inform detailed engineering and design and validate ES predictions and conclusions regarding impacts to seabed morphology. These should be carried out following completion of further geophysical and geotechnical surveys.	Potential resolution.		<p>To inform the Environmental Impact Assessments, the Applicant has considered the presence and mobility of seabed sediments and bedforms over a range of sizes, e.g. ripples, sandwaves and sandbanks, and the processes controlling the historic, present day and future evolution of these features. The Applicant has already conducted geophysical surveys of mobile sediment thickness (presented in the Environmental Statement).</p> <p>The natural rate and timescale for migration or evolution of larger features is found to be typically very slow, relative to the lifetime of the wind farm. The expected magnitude and extent of any effects from the MDS infrastructure is typically very small, relative to the scale of the natural processes controlling the behaviour of the natural environment at wider local to regional scale. As such, the processes and features present in the natural system are simply expected to continue to occur and evolve, not measurably affected by the construction or presence of the wind farm. Additional studies will be used to inform the final engineering design of the wind farm infrastructure, in conjunction with any relevant survey data. The assessments already consider the MDS and so any update based on a lesser design would result in a smaller potential impact conclusion.</p>
Offshore Ornithology						
P6	Potential incorrect estimates for Alde-Ore Estuary (AOE) SPA lesser black backed gull (LBBG) mortalities.	At present, the estimates for mortalities due to collision at both the north and south VE arrays appear incorrect.	Resolved. The Applicant has stated that PVA could not be run with burn-in for LBBG due to issues with the PVA tool and the available data. This is acceptable to NE [REP4-040].	This issue has been resolved.		The Applicant welcomes this position from Natural England.
P7	Apportioning of adults (other than AOE SPA LBBG) during the breeding season based on generic	We advise that the evidence used to inform adult apportioning is not sufficient. The data on the number of adult- or adult-type birds	This issue has been resolved.	This issue has been resolved.		The Applicant welcomes this position from Natural England.



NE Ref	The principal issue in question	The concern held by Natural England	What actions have been taken and what still needs to change to overcome the disagreement since D4	Likelihood of the concern being addressed during examination	RAG rating at D6	Applicant's position
	data rather than site-specific data.	present is generic. Seasonal variations should also be considered.				
P8	In-combination impacts on the FFC SPA populations of guillemot and razorbill are at a level where adverse effects cannot be ruled out and VE will be adding to this.	The Applicant has applied their preferred displacement (50%) and mortality (1%) rates to the guillemot and razorbill populations at risk at each offshore wind farm (OWF) project included in the in-combination assessment for the FFC SPA. As well as departing from Natural England advice on this matter, in so doing the Applicant disregards the in-combination values that have been used by DESNZ for recent consents.	The in-combination assessment of impacts on guillemot and razorbill at FFC SPA have received no further updates since deadline 1. The need to update the in-combination assessment remains a live issue and should include the latest figures from recent projects key to the assessment e.g. Outer Dowsing, SADEP, Rampion 2, DBS and North Falls OWFs.	Potential resolution. This should be submitted into the Examination to resolve this issue.		The Applicant has updated the in-combination assessment for guillemot and razorbill at FFC SPA in the updated 5.4 RIAA – Revision C.
Ornithology Compensation						
P9	AOE SPA LBBG - concerns regarding the suitable level of compensation and the effectiveness of measures proposed at the two sites.	As well as the above issue regarding the impact calculation for AOE SPA LBBG, the compensation requirement is based on the mean number of mortalities rather than the 95% upper confidence interval (UCI) value. The proposed compensatory measures have potential merit, however further information is needed to provide sufficient confidence that the measures can be secured and will be effective.	The compensation quantum needs to be calculated in line with Natural England's advice. Further information on the proposed compensation sites needs to be provided, particularly with respect to survey visits in summer 2024 as regards avoiding impacts on other designated sites (Orford Ness) and the likely drivers of population decline (Outer Trial Bank). No change. We note that landowner support for the proposed location on Orfordness is not available. Impacts are presented based on SNCB and Applicant approaches, but compensation is based only on the Applicant's approach. Nevertheless, the scale of compensation is sufficient if the	Uncertain. If the assessment is updated and the compensation based on the 95% UCI, the compensation requirements issue may be resolved. However, unless findings are presented promptly following the 2024 breeding season, the uncertainties around the proposed compensation are unlikely to be resolved during Examination.		The compensation quantum has been calculated using both the Applicants preferred approach and Natural England's preferred approach in 5.5.3 Lesser Black Backed Gull Compensation - Evidence, Site Selection and Roadmap - Revision C (Clean) [REP5-015]. With regards to further surveys, and as highlighted above in Section 2 in response to Natural England's cover letter, the Applicant has agreed to carry out additional onshore ecology surveys at the appropriate time/season, to validate the existing assessment, and will confirm the mitigation requirements or present updated mitigation proposals for the SAC/SSSI/Ramsar Site. With regards to OTB further surveys were carried out during the 2024 breeding season by Natural England at the Outer Trial Bank and signs of rat predation were discovered again during the surveys. The full results were submitted in 10.49 Natural England Outer Trial Bank Survey Report 2024 [REP6-053]. The Applicant has also submitted further evidence in 10.27 Digital Aerial Surveys - Outer Trials Bank [REP3-026]. The Applicant has provided further consolidated evidence of the differences between its approach and Natural England's approach to calculating the quantum of compensation in 10.20.12 Methodological Differences Between the Applicant and Natural England on Ornithology Matters at Deadline 7.



NE Ref	The principal issue in question	The concern held by Natural England	What actions have been taken and what still needs to change to overcome the disagreement since D4	Likelihood of the concern being addressed during examination	RAG rating at D6	Applicant's position
			two site option is brought forward and agreed.			<p>Using the NE approach for Lesser Black Backed Gull requires over 1200 pairs for an impact of 11 birds (using NE's own methods), noting the Applicant's preferred method calculates the impact as 5 birds. This is especially true as the measure is being implemented at the impacted site. The Applicant does not agree that a provision of >1,200 breeding pairs is under any circumstances proportionate to the impact, and that either site is more than capable of securing sufficient capacity for compensation.</p> <p>The Orford Ness compensation site has been included within the Order Limits (a first for any offshore wind project) to provide a high security of deliverability, and the Applicant has provided a letter of comfort from The Crown Estate relating to the Outer Trial Bank (OTB) site, and notes that two consecutive years of surveys indicated a population significantly declined from its historic peak, and clear evidence of rat predation. Whilst further survey work would be benefit prior to implementing a measure at OTB, the Applicant considers this measure would likely have a high degree of success.</p> <p>In summary, the Applicant has proposed two mutually exclusive measures, either of which have the capacity to full compensate (using the Applicant's preferred methods), are secured or evidently securable, and are clearly deliverable.</p>
P10	Uncertainty regarding adequacy of implementing disturbance management at southwest colonies for FFC SPA guillemot and razorbill.	Whilst we consider this measure to be technically feasible, candidate locations have been identified but not secured. Impact levels are also still to be agreed.	<p>We welcome the provision of breeding season surveys, which indicate potential issues with recreational disturbance which could be addressed. However, several important elements still require further investigation or detail - please see Appendix M2 for more detail.</p> <p>Progress continues. There is the potential for a possible collaboration with a local consortium and other OWFs, although limited information on these are available at this stage.</p>	<p>Uncertain</p> <p>Monitoring will take time so unless findings are presented promptly following the 2024 breeding season, this issue is unlikely to be resolved during Examination.</p>		<p>The monitoring from the 2024 breeding season was presented in the [REP1-054] 10.11 Guillemot and Razorbill – Surveys Report at Deadline 1.</p> <p>Discussions are ongoing with a proposed delivery partner in the South West and the Applicant will provide an update once this is available. Nonetheless these measures are also deliverable by the Applicant alone or in collaboration with other developers.</p>
P11	FFC SPA kittiwake Artificial Nesting Structure (ANS).	As with LBBG above, the compensation requirements are to be calculated using	Progressed but not resolved. Information on the sharing arrangement and apportioning of	Potential to Resolve.		The differences in impact numbers, which Natural England refer to here, has been discussed in 10.34.1 Applicant's Comments On Natural England's Deadline 4 Submissions and



NE Ref	The principal issue in question	The concern held by Natural England	What actions have been taken and what still needs to change to overcome the disagreement since D4	Likelihood of the concern being addressed during examination	RAG rating at D6	Applicant's position
		the central impact value. There is also some uncertainty regarding the nature of the sharing agreement with DBS OWF for their ANS at Gateshead.	<p>benefits for the Gateshead ANS has now been provided. However whilst the roadmap presents calculations regarding the 95% UCI, these relate to outputs using the lower of the two Nocturnal Activity Factors (NAF), whereas the higher one should be used.</p> <p>Progressed but not resolved. We consider that the Applicant has addressed the 'division of benefits' approach, and they have presented the 95% UCI values which we welcome (albeit still arguing for use of the Central Impact Value and a 1:1 ration). However, the issue of using the lower of the two NAFs remains outstanding - NE considers the central impact value should be 1.1 not 0.82.</p> <p>The Applicant is still using 0.82 birds as the central impact value, rather than the 1.1 based on Natural England's advice. The compensation quantum is based on this impact and have been presented using the HOW4 (their preference) and HOW3 stage methods (our preference).</p>	If further details can be provided, then it is likely that this issue can be resolved.		<p>the confusion regarding the impact numbers were addressed there.</p> <p>The mean collision estimate of 0.82 has always been in the RIAA and KIMP. The differences in the numbers between the Applicant and NE are not due to updated nocturnal activity factor (NAF) values, the 0.82 number has been derived using the StochLab methods in the CRM report [APP-110] where a NAF of 37.5% was used not the lower value as assumed by Natural England.</p> <p>Therefore, the Applicant still considers 0.82 mortalities to be the correct figure and considers that this matter is resolved.</p>
Benthic Ecology						
P12	AEol on Annex I sandbank feature of Margate and Long Sands Special Area of Conservation (MLS SAC).	We disagree with the Applicant on the scale and significance of the impact.	Further reduction of impacts through adoption of robust mitigation measures.	Unlikely		The Applicant maintains its position that the very small amount of potential cable protection within the M&LS SAC would not constitute an AEol for the site. However, should the SoS disagree, a 'without prejudice' derogation case has been developed and submitted for this site – Benthic Compensation Strategy Roadmap – Revision B. The Applicant has committed to all reasonable and practical mitigation methods, and is not clear what else Natural England consider 'robust mitigation measures' that are within the bounds of what is technically feasible.
P13	Mitigation measures fail to consider potential presence	The Applicant has failed to consider Section 41 NERC	Progressed but not resolved as there is no firm commitment to avoid and inclusion of a decision	Potential resolution		Prior to any construction works commencing, geophysical and geotechnical surveys will be carried out to further understand the seabed characteristics. Following these surveys, should



NE Ref	The principal issue in question	The concern held by Natural England	What actions have been taken and what still needs to change to overcome the disagreement since D4	Likelihood of the concern being addressed during examination	RAG rating at D6	Applicant's position
	of Section 41 NERC Act habitats.	Act habitats in their assessment.	tree to minimise impacts where avoidance is not possible. Whilst the Applicant has attempted to address our concerns, without further commitments as per our response at Deadline 4 [REP4-059], our advice remains unchanged.			there be any identification of potential Annex I reef habitats, further surveys will be undertaken as set out in the 9.32 Offshore IPMP – Revision D, which aim to determine if the reef is classified as Annex I reef. Piddock communities are found in one discrete section of the offshore ECC. There is a commitment to not dispose of any dredge material within this area identified to contain piddock communities. Information is provided in 10.30 Outline Sediment Disposal Management Plan [REP4-041] Section 3.6). Due to the scarcity of other NERC habitats identified within the site, no other commitments are considered necessary for Section 41 NERC Act habitats.
P14	Methods and evidence used to determine MDS for cable protection within MLS SAC and WCS potentially not realistic.	Natural England is unable to advise on the scale and significance of the impacts and therefore compensatory requirements.	No change (there remain inconsistencies in MDS between the [REP2-027] 10.20.1 Technical note - Methodology for Determining MDS (Offshore) and the [REP2-021] 9.13 Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan - Revision B (Tracked) i.e. 900 m per cable vs 900 m in total) No change. Whilst the Applicant has provided an updated Technical Note - Methodology for Determining MDS (Offshore) Rev B [REP4-034], the MDS/WCS for cable protection is still not clear. This should be clarified and all relevant documents updated. No change. See updated advice within Appendix E6 Natural England Deadline 6 response.	Potential resolution		The MDS for cable protection in the M&LS SAC is 5,400 m ² . This is the total for <u>all</u> cable protection within the SAC site (not an area per cable). See response to comment Ref 13.
P15	“Without Prejudice” Benthic Compensation	Further progress is required on each measure to have confidence that they are achievable and would deliver effective compensation for project impacts.	Natural England advised in ExQ1 ME.1.10 [REP-059] that at this stage, we do not believe that there is merit in progressing and/or placing reliance upon project specific benthic compensation measures namely, Anthropogenic Pressure removal (Redundant infrastructure or aggregates) and Sea Grass Habitat Creation/Restoration. Therefore,	Uncertain. Further review is likely to be undertaken during examination and with no guarantee this issue will be resolved within the examination timeframe.		The Applicant is in agreement with Natural England, that the strategic compensation measure is the preferred compensation option, should compensation ultimately be required. The Benthic Strategy Compensation Roadmap (Revision B) has been updated to provide further information regarding the Marine Recovery Fund following the Ministerial Statement (29th January 2025) and restating that this option is the Applicants (and Natural England's) preferred route should compensation be required.



NE Ref	The principal issue in question	The concern held by Natural England	What actions have been taken and what still needs to change to overcome the disagreement since D4	Likelihood of the concern being addressed during examination	RAG rating at D6	Applicant's position
			<p>we advise that once DEFRA's guidance on, and assurances in relation to the delivery of strategic benthic compensation (including timings etc.) become available, every effort is made by the Applicant to update the examination on Five Estuaries commitments to Strategic Benthic Compensation measures i.e. Marine Protected Area designation/extension.</p> <p>No Change. However, further advice has been included within our Deadline 6 cover letter in relation to strategic benthic compensation.</p>			<p>However, if for whatever reason strategic compensation was not ultimately possible, information is provided within the Roadmap for other project alone measures that could be implemented, should compensation ultimately be required.</p> <p>To note, the 'removal of aggregate pressure' option has been removed from the list of potential project alone options in Revision B.</p> <p>Information is included in the Roadmap on discussions with BT regarding potential removal of redundant telecom cables. A letter of support is also included as an Appendix to the Roadmap.</p>
Marine Mammal Ecology						
P16	Southern North Sea Special Area of Conservation (SNS SAC) – harbour porpoise underwater noise impacts - Outline Site Integrity Plan (SIP)	<p>Current approach to SIP implementation is unlikely to prevent impact thresholds from being exceeded in the SNS SAC.</p> <p>The Applicant has not committed to using Noise Abatement Systems (NAS) at this stage, increasing the risk that an adverse effect on site integrity (AEoI) cannot be avoided.</p>	<p>No change. Natural England understands that the Defra Marine Noise Policy paper is currently due to be published in the next few weeks. See Appendix M4 for further information.</p> <p>No Change. We note the Defra Marine Noise Police paper was published in January.</p>	<p>Potential Resolution.</p> <p>If changes can be made to the Outline MMMP, it is likely this issue can be resolved</p>		<p>The Applicant is aware of the Defra (2025) Policy Paper: Reducing Marine Noise and has updated both the Outline MMMP - Piling at Deadline 7 and Outline Southern North Sea Special Area of Conservation Site Integrity Plan (REP6-022) at Deadline 6 to reflect the policy. The Applicant will demonstrate that they have utilised best endeavours to deliver noise reductions through approval of the MMMP and SIP in line with the policy paper.</p> <p>It is noted however that the policy paper does not require or recommend up-front (pre-consent) commitment to the NAS as Natural England have previously recommended. The use and benefit of any noise abatement or noise reduction technology is site specific, requires detailed technical consideration, and is not without other environmental effects, all of which must be considered carefully at the time. As such the Applicant maintains that the SIP is the appropriate and accepted approach to mitigating impacts to the SNS SAC and this will be now be done under the guidance of the policy paper.</p>
P17	EIA/HRA Conclusions	Lack of robust evidence supporting the conclusions made.	We welcome the iPCoD modelling carried out by the Applicant. However, we have concerns with the approach taken and results. Please refer to Appendix M3 of our Deadline 4 Examiners Question response.	<p>Potential Resolution.</p> <p>If the Applicant carries out population modelling and</p>		We note Natural England are reviewing information submitted at Deadline 5. We hope this principal issue can be resolved following this.



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			Natural England are reviewing information submitted by the Applicant at Deadline 5, we will respond at Deadline 7.	updates their EIA/HRA assessment it may be possible to resolve this issue.		
Seascape, Landscape and Visual						
P18	Suffolk and Essex Coast & Heaths National Landscape/AONB and Suffolk Heritage Coast (SHC) – seascape impacts.	The special qualities of the National Landscape/AONB and the SHC will be affected by the proposed development. This is of particular concern at Orford Ness. We are concerned that the most northerly 8 WTGs will 'close the gap' and create a distinct grouping between the existing Galloper and Greater Gabbard OWF arrays, and the to be built EA2 array. In addition, the size difference between the VE and other WTGs in the area will result in a visually jarring 'cluttering' effect.	<p>The SLVIA needs to be updated to properly assess the potential impacts on the AONB and SHC, particularly with respect to the most northerly WTG and the potential for the array to cause 'curtaining' and 'cluttering' effects. Once the assessment is updated, further consideration of NE advice on embedded mitigation is required, drawing on our three proposed design principles.</p> <p>No change. The Applicant needs to provide an updated assessment.</p>	<p>Uncertain.</p> <p>There is potential for the applicant to update the assessments during the examination. However, it is likely that the issues raised will not be resolved through assessment alone and will require design changes in line with our proposed principles to be addressed.</p>		See previous response from the Applicant at P18 within 10.34.1 Applicant's Comments on Natural England's Deadline 4 Submissions [REP5-074].
Onshore Ecology						
P19	Potential impacts to designated sites and features at the proposed LBBG compensation site on Orford Ness.	Insufficient baseline data on the saline lagoon, shingle vegetation shingle sediment structure and morphology to advise on potential impacts.	<p>Uncertainty now over acquisition of Cobra Mist land. Baseline survey data remains incomplete. Need to see appropriate survey data to support assessment conclusions, including to confirm current sensitivity of shingle morphology and habitats.</p> <p>Whilst the Applicant has carried out invertebrate and vegetation surveys at Orford Ness [REP4-042], the surveyed area does not overlap the proposed compensation site. Therefore, our earlier concerns regarding an incomplete baseline remain.</p>	<p>Uncertain.</p> <p>If the Applicant can commit to carrying out pre-determination surveys and providing further information, as required, then this issue could be resolved during Examination</p>		<p>The Applicant agrees to carry out additional onshore ecology surveys at the appropriate time/season, to validate the existing assessment, and will confirm the mitigation requirements or present updated mitigation proposals for the SAC/SSSI/Ramsar Site.</p> <p>Depending on the availability of access to the compensation site, the surveys will either be completed in summer 2025 or undertaken as pre-construction surveys. The mitigation requirements will be reviewed when the surveys are completed with further information being provided as required.</p>
P20	Operational and maintenance facility	No consideration has been given to the potential	Natural England advises that impacts from the operation port	Uncertain.		The Applicant has not included an O&M port in the assessments as the port has not been identified. This will be



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	impacts have not been considered.	impacts from the operational port on the environment.	should be assessed as part of the DCO at the consenting phase to ensure that a Holistic approach can be taken to the HRA.	The Applicant needs to include the O&M port in its EIA/HRA to resolve this issue during Examination.		part of the supply chain process that will take place post consent, with any necessary consents secured at the time.



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